1	FLORTI	BEFORE THE DA PUBLIC SERVICE COMMISSION
2		221 TODDIC BERVICE COMMISSION
3		DOCKET NO. 110009-EI
4	In the Matter of:	
5	NUCLEAR COST RECO	VERY CLAUSE.
6		/
7		VOLUME 7
8		Pages 984 through 1162
9		
10	PROCEEDINGS:	HEARING
11	COMMISSIONERS	CITATOMAN, ADD. CDAVIAM
12	PARTICIPATING:	CHAIRMAN ART GRAHAM COMMISSIONER LISA POLAK EDGAR
13		COMMISSIONER RONALD A. BRISÉ COMMISSIONER EDUARDO E. BALBIS COMMISSIONER JULIE I. BROWN
14	DATE:	Thursday, August 11, 2011
15		-
16	TIME:	Commenced at 9:33 a.m. Concluded at 11:38 p.m.
17	PLACE:	Betty Easley Conference Center Room 148
18		4075 Esplanade Way
19		Tallahassee, Florida
20	REPORTED BY:	LINDA BOLES, RPR, CRR Official FPSC Reporter
21	ADDEADANGEG	(850) 413-6734
22	APPEARANCES:	(As heretofore noted.)
23		
24		
25		DOCUMENT NUMBER-

-DATE

U 5810 AUG 16 = FLORIDA PUBLIC SERVICE COMMISSION CLERK

1 INDEX 2 WITNESSES 3 NAME: PAGE NO. 4 BRIAN D. SMITH Direct Examination by Mr. McGlothlin 5 989 Prefiled Direct Testimony Inserted 991 6 WILLIAM R. JACOBS, JR. 7 Direct Examination by Mr. McGlothlin 1003 Prefiled Direct Testimony Inserted 1006 8 Redirect Examination by Mr. McGlothlin 1078 9 DAVID RICH and LYNN FISHER (Panel) Direct Examination by Mr. Young 1067 10 Prefiled Direct Testimony Inserted 1071 Cross Examination by Ms. Kaufman 1078 Cross Examination by Mr. Anderson 11 1082 Redirect Examination by Mr. Young 1090 12 KATHY L. WELCH 13 Prefiled Direct Testimony Inserted 1093 14 ARMANDO OLIVERA Direct Examination by Mr. Anderson 1097 15 Prefiled Rebuttal Testimony Inserted 1099 Cross Examination by Mr. McGlothlin 1102 16 Cross Examination by Ms. Kaufman 1104 Redirect Examination by Mr. Anderson 1120 17 TERRY DEASON Direct Examination by Mr. Anderson 18 1123 Prefiled Rebuttal Testimony Inserted 1125 19 Cross Examination by Ms. Kaufman 1143 Cross Examination by Mr. McGlothlin 1147 20 Redirect Examination by Mr. Anderson 1156 21 22 23 24 25

1	·	EXHIBITS	
2	NUMBER:	ID.	ADMTD.
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8	105		1066
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1		EXHIBITS		
2	NUMBER:		ID.	ADMTD.
3	199	Excerpts from Kundalkar depo	1067	1067
4	200	EPU 2009 Management Change, FPSC Audit Work Paper	1084	1091
5		TIDE Addre Work Paper		
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1 PROCEEDINGS 2 (Transcript follows in sequence from 3 Volume 6.) 4 CHAIRMAN GRAHAM: Good morning, everyone. Glad to see everybody made it back here safely today. 5 We seem to be making pretty good headway, so I see no 6 7 sense in slowing the train down. Let's keep moving. We will reconvene, and this is Docket Number 8 9 110009-EI, nuclear cost recovery clause. And the date 10 is August the 11th, I believe. I say all that for the 11 record. If I remember correctly, we ended with FP&L 12 Witness Steven Sim. 13 14 MR. YOUNG: Yes, sir. 15 CHAIRMAN GRAHAM: And we dismissed him, well, 16 for the time being, and so now we're at OPC's Witness Brian Smith. 17 18 MR. McGLOTHLIN: Mr. Smith is here. He has 19 not been sworn at this point. 20 CHAIRMAN GRAHAM: Let's go ahead and swear in 21 everybody that's here that's scheduled to speak today 22 and get that done. 23 If I can get you to stand and raise your right 24 hand. 25 (Witnesses collectively sworn.)

1	MR. YOUNG: Mr. Chairman, as Mr. Smith comes
2	to the stand, I would note that Florida Power & Light
3	has passed out the complete Exhibit Number 195.
4	CHAIRMAN GRAHAM: Okay.
5	MR. YOUNG: And this is based on the rule of
6	completeness they offered yesterday.
7	CHAIRMAN GRAHAM: We've already entered
8	195 into the record?
9	MR. YOUNG: Yes, sir.
10	CHAIRMAN GRAHAM: Thank you.
11	Mr. McGlothlin.
12	BRIAN D. SMITH
13	was called as a witness on behalf of The Citizens of the
14	State of Florida and, having been duly sworn, testified
15	as follows:
16	DIRECT EXAMINATION
17	BY MR. McGLOTHLIN:
18	Q Please state your full name and business
19	address, sir.
20	A My name is Brian Smith, and my business
21	address is 1850 Parkway Place, Suite 800, Marietta,
22	Georgia, 30067.
23	Q By whom are you employed, Mr. Smith?
24	A I'm employed by GDS Associates.
25	Q At our request, did you prepare and submit

1	prefiled testimony in this proceeding?
2	A Yes, I did.
3	<b>Q</b> Do you have that document before you?
4	A I do.
5	<b>Q</b> Do you have any changes, additions or
6	corrections to make to the prefiled testimony?
7	A I do not.
8	<b>Q</b> Do you adopt the content of the prefiled
9	testimony as your testimony today?
LO	A Yes.
Lĺ	MR. McGLOTHLIN: I request that the prefiled
L2	testimony be inserted into the record at this point.
L3	CHAIRMAN GRAHAM: We will insert the prefiled
L <b>4</b>	testimony of Mr. Smith into the record as though read.
L5	BY MR. McGLOTHLIN:
16	<b>Q</b> Did you also prepare an exhibit to your
17	testimony, Mr. Smith?
18	A Yes, I did.
19	<b>Q</b> Do you have any changes or corrections to that
20	exhibit?
21	A I do not.
22	
23	
24	

$\mathbf{r}_1$		DIRECT TESTIMONY
2		Of
3		BRIAN D. SMITH
4		On Behalf of the Office of Public Counsel
5		Before the
6		Florida Public Service Commission
7		Docket No. 110009-EI
8		I. <u>INTRODUCTION</u>
9	Q.	PLEASE STATE YOUR NAME, TITLE AND BUSINESS ADDRESS.
10	A.	My name is Brian D. Smith. I am a Senior Project Manager at GDS Associates, Inc. My
11		business address is 1850 Parkway Place, Suite 800, Marietta, Georgia 30067.
<b>)</b> 2		
13	Q.	PLEASE SUMMARIZE YOUR EDUCATION AND EXPERIENCE.
14	A.	I received a Bachelor of Industrial Engineering in 1981 from the Georgia Institute of
15		Technology. I am a registered professional engineer in the state of Florida and I have
16		twenty-nine years of experience in electric utility planning activities. This includes time
17		spent working for municipal utility planning departments as well as my association with
18		GDS where I have worked as a power supply and utility system simulation consultant. I
19		have been responsible for the development and analysis of integrated resource plans and
20		for computer simulation of utility production operations and financial operations.
21		Particular emphasis has been on economic feasibility studies of alternative power supply
22		resources. My resume is included as Exhibit BDS-1.

# 1 II. <u>SUMMARY OF TESTIMONY</u>

#### Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

In my testimony, I will identify and describe a means of using the same information that FPL has presented to approximate the extent to which the uprate projects are projected to be economical or uneconomical for customers. My testimony dovetails with that of Dr. William Jacobs. In his testimony, Dr. Jacobs describes shortcomings in the methodology that FPL witness Dr. Steven Sim employs when assessing the long term economic feasibility of FPL's EPU uprate project. Dr. Jacobs makes the point that with FPL's current methodology, in which a comparison is made between revenue requirements associated with a resource plan that includes the uprates and those of a resource plan that does not include the uprates, the exclusion of amounts spent on the uprate project to date (so-called "sunk costs") from the capital costs of the 'with uprate" plan that FPL includes in the comparison--when coupled with a rapidly increasing estimate of the cost to complete the projects-- causes distortions in the exercise to determine whether the uprates are cost-effective to customers.

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# III. REVIEW OF FPL'S ANALYSIS

18 Q WHAT IS YOUR UNDERSTANDING OF THE APPROACH THAT FPL USES

#### TO EVALUATE THE FEASIBILITY OF THE EPU PROJECT?

FPL's calculations involve the use of computerized simulations to model the manner in which FPL's system would operate to meet projected customer needs under two alternative resource plans and quantify the revenue requirements of each of the plans over time. The objective of each plan is to add generating capacity when needed to maintain

FPL's targeted minimum reliability criteria over time. One resource plan incorporates the
EPU uprate projects as the means for satisfying near term increases in demand, while the
other plan does not. FPL's analyst expresses the total revenue requirements of each plan
in terms of the cumulative net present value of those costs. He then compares the
cumulative net present value figures. If the cumulative net present value of the revenue
requirements associated with the resource plan that includes the uprates is lower than the
cumulative net present value of the revenue requirements of the resource plan that does
not include the uprates, then FPL concludes the project is economically feasible.

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### Q. WHAT IS WRONG WITH THAT APPROACH?

As Dr. Jacobs describes, each time FPL has produced a comparison of revenue requirements (beginning in 2009), FPL has excluded the capital costs of the uprates that it has already spent. Presumably, for ratemaking purposes FPL will not propose to exclude this amount: instead, FPL will expect to earn a return on it. Accordingly, the comparison of resource plans that FPL performs for the long term feasibility analysis understates the revenue requirements associated with the uprates that it will seek to collect from customers.

- Q. ISN'T THIS TREATMENT OF "SUNK COSTS" AND "TO GO COSTS" AN

  ACCEPTED METHOD OF ASSESSING THE COST-EFFECTIVENESS OF A

  PROJECT?
- A. It is appropriate to exclude sunk costs in typical cost-effectiveness evaluations. In this instance, where estimated costs to complete continue to increase, excluding amounts

spent to date in each annual evaluation has the potential to distort the measurement of 2 cost-effectiveness. In his testimony, Dr. Jacobs discusses this aspect of the choice of 3 economic feasibility methodologies in more detail. 4 5 Q. WON'T FPL ASSERT THAT THE "SUNK COSTS" CAN'T BE SUBTRACTED 6 FROM THE SAVINGS, BECAUSE THEY WOULD ALSO APPEAR IN THE 7 ALTERNATIVE RESOURCE PLAN AS COSTS TO BE RECOVERED FROM 8 CUSTOMERS EVEN IF THE UPRATE PROJECT IS NOT CONSTRUCTED? 9 A. The assertion that the "sunk costs" must be excluded from the comparison because they 10 would show up in both resource plans, and therefore cancel out, is dependent on the assumption that the sunk costs would be fully recoverable—i.e., would be amortized and 11 earn a return—in the alternative plan to the same extent as they would be in the resource 13 plan that includes the uprate project. If previous costs were prudently incurred and are 14 allowed to be included in rate base, then excluding them in current and future feasibility 15 analyses is appropriate. This rationale would not hold, however, if the Commission were 16 to determine that a portion of the costs of the uprate project should be attributed to 17 imprudence and should be disallowed, because in that instance the disallowed costs (and 18 associated revenue requirements) would not appear in both resource plans. In his 19 testimony Dr. Jacobs will recommend such a disallowance and explain the basis for his 20 recommendation. However, the exclusion of "sunk costs" is only one aspect that renders

Q. WHAT IS THE OTHER FACTOR THAT AFFECTS FPL'S METHODOLOGY?

FPL's methodology inappropriate for its EPU projects.

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A. The other equally important factor is that the estimate of overall capital costs and "to go" costs have increased each time FPL has produced a feasibility analysis. It is the combination of excluding past expenditures while also increasing projected costs of completion that can result in unreliable indications of cost-effectiveness. Under FPL's approach, the faster the utility spends, the better able it is to show that a project of significantly increasing costs remains feasible. I agree with Dr. Jacobs' statement that while FPL's method of comparing the present value of revenue requirements may be suitable for a project of known and stable costs, it is a poor choice for assessing its

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# IV. <u>ALTERNATE EVALUATION METHOD</u>

volatile and uncertain EPU projects.

Q. EARLIER YOU SAID IT IS POSSIBLE TO USE THE SAME INFORMATION
THAT FPL PRESENTS TO APPROXIMATE THE TRUE COST-

EFFECTIVENESS OF THE PROJECT. PLEASE EXPLAIN HOW THIS CAN BE DONE.

FPL's Dr. Sim expressed the streams of future costs of competing resource plans in present value terms, then compared the two resulting present value figures. By "present value terms," I mean that he discounted the stream of future revenue requirements so as to measure them in 2011 dollars. The "amounts spent" that have been excluded from the comparison were expended very recently. These past spent amounts can be expressed in present value terms, such that they are quantified and measured on the same basis as are the revenue requirements of the resource plans being analyzed. To illustrate, it is possible to express the present value of the revenue requirements for the term of a

multiyear plan in 2011 dollars, then also convert amounts spent in 2009 and 2010 to 2011 dollars. Assuming that the amounts spent to date are included in rate base and allowed to earn a return over the life of the project, there would be a stream of annual capital-related revenue requirements associated with the "sunk costs." I have used FPL's response to OPC's Interrogatory No. 59 as an example of how the present value of future revenue requirements compares to the actual amounts of capital expenditures. I have included an edited version of that response as Exhibit BDS-2 to my testimony. Column 2a on the exhibit shows FPL's projection of the annual revenue requirements (in nominal dollars) associated with the EPU project capital investment. Using the discounting factors shown in column 1, I have converted the values in column 2a into 2011 dollars. These values are shown in column 6 which I added to FPL's table. Summing the annual present value amounts results in a total present value of \$2.17 billion. This present value of revenue requirements is associated with the \$1.78 billion "going forward" capital costs that FPL included in its evaluation. This demonstrates that the present value of revenue requirements associated with a capital expenditure is greater than the actual expenditure. I will conservatively assume, however, that the present value of revenue requirements equals the actual expenditure for the remainder of my testimony. To gauge whether customers are receiving a net benefit or a net cost from an overall perspective, one can approximate the effects of the present value of capital-related revenue requirements associated with the amounts previously spent by expressing the amounts previously spent in 2011 dollars and adding them to the present value of the costs of the resource plan with the uprates before comparing the costs of the two resource plans. Since FPL has already compared the costs of the two plans and concluded there is a positive benefit, one can

subtract the amounts spent to date (measured in 2011 dollars) from the present value of the claimed savings benefit (also measured in 2011 dollars) and determine whether the resulting figure is positive or negative. If it is positive, then the project is cost-effective even when both the rapidly increasing estimates of "to go" costs and the past expenditures are accounted for. If it is negative, then customers are "in the hole" by the amount of the difference.

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# Q. CAN YOU ILLUSTRATE THE ADDITIONAL STEP THAT HAVE

#### DESCRIBED?

Yes. I will use round figures to keep the explanation simple. Assume that the revenue requirements of the resource plan that includes the uprate projects over a period of 33 years have been calculated and then discounted back to a present value, in 2011 dollars, of \$100 million. Next assume the corresponding cumulative present value of the resource plan that does not include the uprate projects is \$125 million. FPL would contend that customers would save (on a net present value basis) \$25 million dollars through the uprate projects. However, pursuant to FPL's methodology, this conclusion ignores the amount of money that FPL has spent on the projects and on which it will expect a return—which will be reflected in revenue requirements. Therefore, to gauge better the cost-effectiveness of the project, one can subtract the amount spent to date from the claimed "savings" figure. If, for instance, FPL spent \$20 million in the past two years (assume the original amount has been adjusted as necessary to express the amount in 2011 dollars), the additional step I describe would be to subtract the \$20 million of "amounts previously spent" from the \$25 million of claimed net savings resulting from

the comparison of the two resource plans. The result in this example would be the indication that the projects are cost-effective, but only in the amount of approximately \$5 million. If on the other hand FPL had spent \$35 million to date, then the calculation would be to subtract the \$35 million from the \$25 million of claimed savings that resulted from FPL's "CPVRR comparison" exercise. In this example, doing so would result in the conclusion that customers are actually worse off by approximately \$10 million, in present value terms, at this stage of the project, even though FPL claims the project is economically feasible.

# Q. HAVE YOU APPLIED YOUR METHOD TO THE INFORMATION THAT FPL

HAS PROVIDED WITH ITS FEASIBILITY ANALYSIS?

A. Yes. At Exhibit SRS-8 his testimony, Dr. Sim reports the results of the comparison of the two resource plans, using medium fuel and medium environmental compliance cost assumptions to be positive for customers in the amount of \$622 million on a present value basis. At page 20, he states that he has removed \$700 million of amounts previously spent from the resource plan that includes the uprate projects. Expressed in 2011 dollars, and based on a spending profile of \$347 million in 2009 and \$353 million in 2010, the amounts already spent total \$778 million. Subtracting the already spent amount of \$778 million from the claimed savings amount of \$622 million demonstrates that the impact on customers can be conservatively estimated as a negative \$156 million for the medium fuel and medium environmental compliance cost case.

Q. DOES THIS MEAN THE UPRATE PROJECTS SHOULD NOT GO FORWARD?

No. However, it does mean that the Commission should adopt a method of viewing the project that will enable it to identify and disallow costs that exceed the maximum amount 2 that would be cost-effective for customers. 3 CAN YOU RECOMMEND A WAY IN WHICH SUCH A MAXIMUM AMOUNT 4 Q. 5 CAN BE IDENTIFIED? Yes. For its evaluation of the feasibility of Turkey Point units 6 & 7, FPL used a 6 A, 7 breakeven analysis. I suggest that a similar approach could be used to identify a maximum amount of EPU related cost that should be included in FPL's rate base. FPL 8 should be directed to produce a breakeven analysis that identifies the amount of EPU 9 investment that can be included in the "nuclear" resource plan in order to yield the same 10 Cumulative Present Value of Revenue Requirements ("CVPRR") as the "non-nuclear" 11 resource plan. For purposes of this discussion, the "nuclear" resource plan is the one in 13 which the EPU project is included. The "non-nuclear" resource plan is the one in which

the EPU project is not included and is the one against which the nuclear plan is compared. The breakeven EPU investment amount should be the maximum amount allowed to be included in rate base and should include all dollars spent beginning in 2009 for the project. This would protect FPL's rate payers from costs (associated with the plan

that FPL has identified as its least cost choice) that exceed those associated with what it

has identified as its second best choice.

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#### Q. DOES THAT CONCLUDE YOUR TESTIMONY?

22 A. Yes, it does.



#### BY MR. McGLOTHLIN:

- Q Have you prepared a summary of your testimony?
- A I have.
- Q Please proceed.
- A Thanks.

Good morning. The purpose of my testimony is to suggest a means of evaluating the total cost of Florida Power & Light's EPU project. FPL has excluded sunk costs from its annual evaluation of the project, and its witnesses have provided testimony that shows positive benefits to Florida ratepayers using that methodology.

Although I agree that sunk costs are typically excluded from feasibility analyses, I maintain that sunk costs should be included in this process in order to determine if ratepayers are better off with a resource portfolio that includes the EPU project versus a portfolio that does not include the EPU project.

The EPU project is evaluated annually and, for each evaluation, costs spent to date are excluded from the feasibility analysis. At the same time, total EPU costs have increased since the last evaluation was produced. The effect of these two things in combination is that the total cost impact of the EPU project will never be reflected in the benefit matrix, which is

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included in FPL's testimony.

I'm at this hearing on behalf of Florida ratepayers. I think it's reasonable to show how the EPU portfolio costs to the ratepayer compares to the cost to the ratepayer if the EPU project had not been pursued and an alternate resource portfolio were developed.

The valuations using that approach show that the economics have shifted during the course of project development. I think it's reasonable to ask why that has happened and to examine the causes of the changes in the projections of total costs.

My testimony shows the impact of an adjustment to FPL's medium fuel and medium environmental compliance cost benefit. If sunk costs are included in the analysis, FPL's net benefit of \$622 million for that scenario turns into a net cost of 156 million. These values relate to testimony initially filed by FPL.

Subsequent FPL testimony included a revised, slightly lower net benefit for the same case. When this revised value is adjusted to include estimated impacts of sunk costs, a slightly more negative cost results.

My testimony also contains a recommendation that FPL be required to use a breakeven approach in the evaluation of the EPU project. This would allow the determination of how much can be invested in the EPU

1	project before that investment yields a present value of
2	revenue requirements that exceeds the present value of
3	revenue requirements associated with a non-EPU
4	portfolio. This breakeven amount should be the basis
5	used to determine the maximum amount allowed in rate
6	base for the EPU project.
7	MR. McGLOTHLIN: Does that conclude your
8	summary?
9	THE WITNESS: It does.
10	MR. McGLOTHLIN: Mr. Smith is available for
11	cross-examination.
12	CHAIRMAN GRAHAM: Okay.
13	Florida Power & Light.
14	MR. ANDERSON: FPL has no cross-exam for the
15	witness, but notes that his testimony remains subject to
16	the standing objection stated in our motion to strike
17	yesterday.
18	CHAIRMAN GRAHAM: Okay. So noted.
19	Staff? Other Intervenors? No?
20	MR. YOUNG: No questions.
21	CHAIRMAN GRAHAM: Anybody from the board? .
22	Okay. Do we need to enter any exhibits into
23	the record?
24	MR. McGLOTHLIN: I move 100 and 101.
25	CHAIRMAN GRAHAM: Let's move exhibits marked

1	100 and 101 into the record.
2	(Exhibits 100 and 101 admitted into evidence.)
3	If that's then we're currently done with
4	this witness; is that correct?
5	MR. McGLOTHLIN: We have another witness.
6	CHAIRMAN GRAHAM: We're done with this
7	witness?
8	MR. McGLOTHLIN: Dr. Jacobs, yes.
9	CHAIRMAN GRAHAM: Thank you, sir.
10	THE WITNESS: Yes.
11	WILLIAM R. JACOBS, JR.
12	was called as a witness on behalf of the Citizens of the
13	State of Florida and, having been duly sworn, testified
14	as follows:
15	DIRECT EXAMINATION
16	BY MR. McGLOTHLIN:
17	Q Please state your name and business address
18	for the record, sir.
19	<b>A</b> My name is William Jacobs. My address is 1850
20	Parkway Place, Marietta, Georgia.
21	<b>Q</b> By whom are you employed, Dr. Jacobs?
22	A I'm employed by GDS Associates.
23	<b>Q</b> On behalf of OPC, did you prepare direct
24	testimony in this case?
25	A Ves I did

<b>-</b>	Ω	Do you have that document before you:
2	· A	I do.
3	Q	Do you have any changes, additions, or
4	correction	ns?
5	A	Yes, I do. I have one change. On page 16 of
6	my testimo	ony, line 6, the end of that sentence on line
7	6 stating	"90% completion of the work" should be
8	deleted.	And in place of that it should read,
9	"Completio	on of 90 design modification packages."
LO		MR. McGLOTHLIN: We're in the process of
L1	preparing	a substitute page to accomplish that change,
L2	Mr. Chair	man.
L3		CHAIRMAN GRAHAM: Okay.
14	BY MR. Mc	GLOTHLIN:
L5	Q	Do you have any additional corrections to
L6	make, Dr.	Jacobs?
L7	A	No. That's all.
L8	Q	With that correction, do you adopt the
L9	questions	and answers in your prefiled testimony as your
20	testimony	today?
21	A	Yes, I do.
22	· Q	Did you also prepare exhibits to your
23	testimony	that have since been marked as 102 through
24	114?	
25	A	Yes, that's correct.

1	Q Have you prepared a summary for the
2	Commissioners?
3	A Yes, I have.
4	MR. McGLOTHLIN: Excuse me. I ask that the
5	prefiled testimony be inserted at this point.
6	CHAIRMAN GRAHAM: We will enter Dr. Jacobs'
7	prefiled testimony as though read.
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1		DIRECT TESTIMONY
2		Of
3		WILLIAM R. JACOBS JR., Ph.D.
4		On Behalf of the Office of Public Counsel
5		Before the
6	•	Florida Public Service Commission
7		Docket No. 110009-EI
8		LINTRODUCTION
9	Q.	PLEASE STATE YOUR NAME, TITLE AND BUSINESS ADDRESS.
10	A.	My name is William R. Jacobs, Jr., Ph.D. I am a Vice President of GDS Associates,
11		Inc. My business address is 1850 Parkway Place, Suite 800, Marietta, Georgia,
12		30067.
13		
14	Q.	DR. JACOBS, PLEASE SUMMARIZE YOUR EDUCATIONAL
15		BACKGROUND AND EXPERIENCE.
16	<b>A.</b>	I received a Bachelor of Mechanical Engineering in 1968, a Master of Science in
17		Nuclear Engineering in 1969 and a Ph.D. in Nuclear Engineering in 1971, all from
18		the Georgia Institute of Technology. I am a registered professional engineer and a
19		member of the American Nuclear Society. I have more than thirty years of
20		experience in the electric power industry including more than twelve years of power
21		plant construction and start-up experience. I have participated in the construction and
22		start-up of seven power plants in this country and overseas in management positions
23		including start-up manager and site manager. As a loaned employee at the Institute of
24		Nuclear Power Operations ("INPO"), I participated in the Construction Project
25		Evaluation Program, performed operating plant evaluations and assisted in the

development of the Outage Management Evaluation Program. Since joining GDS Associates, Inc. in 1986, I have participated in rate case and litigation support activities related to power plant construction, operation and decommissioning. I have evaluated nuclear power plant outages at numerous nuclear plants throughout the United States. I am currently on the management committee of Plum Point Unit 1, a 650 MWe coal fired power plant under construction near Osceola, Arkansas. As a member of the management committee, I assist in providing oversight of the EPC contractor for this project. I am currently the Georgia Public Service Commission's (GPSC) Independent Construction Monitor for Georgia Power Vogtle 3 and 4 nuclear project. As the Independent Construction Monitor I assist the GPSC Commissioners and Staff in providing regulatory oversight of the project. My monitoring activities include regular meetings with project management personnel and regular visits to the Vogtle plant site to monitor construction activities and assess the project schedule and budget. My resume is included as Bxhibit WRJ-1.

Q.

#### WERE YOU ASSISTED BY OTHER GDS PERSONNEL IN THIS EFFORT?

Yes, I was. In addition to myself, the GDS team involved in the review and evaluation of the requests for authorization to recover costs consisted of Mr. James P. McGaughy, Jr., a former nuclear utility executive with over 37 years of experience, and Mr. Brian Smith, an expert in production cost modeling and feasibility analyses. Mr. Smith is sponsoring testimony on an aspect of our review. His qualifications are contained in his prefiled testimony. The resume of Mr. McGaughy is attached to this testimony as Exhibit WRJ-2. I have reviewed the work of Mr. McGaughy, and have incorporated and adopted it as my own in this testimony.

ı	Q.	WHAT IS THE NATURE OF TOUR DUSINESS:
2	A.	GDS Associates, Inc. ("GDS") is an engineering and consulting firm with offices in
3		Marietta, Georgia; Austin, Texas; Manchester, New Hampshire; Madison, Wisconsin;
4	٠.	and Auburn, Alabama. GDS provides a variety of services to the electric utility
5		industry including power supply planning, generation support services, rates and
6		regulatory consulting, financial analysis, load forecasting and statistical services.
7		Generation support services provided by GDS include fossil and nuclear plant
8		monitoring, plant ownership feasibility studies, plant management audits, production
9		cost modeling and expert testimony on matters relating to plant management,
10-		construction, licensing and performance issues in technical litigation and regulatory
11		proceedings.
12	•	
13	Q.	WHOM ARE YOU REPRESENTING IN THIS PROCEEDING?
14	A.	I am appearing on behalf of the Florida Office of Public Counsel ("OPC"), who
15		represents the ratepayers of Florida Power & Light Company.
16		
17	Q.	WHAT WAS YOUR ASSIGNMENT IN THIS PROCEEDING?
18	A.	I was asked to assist the Florida Office of Public Counsel to conduct a review and
19		evaluation of requests by Florida Power and Light Company (FPL) for authority to
20	•	collect historical and projected costs associated with extended power uprate ("EPU")
21		projects being pursued at the Turkey Point 3 and 4 and St. Lucie 1 and 2 nuclear
22		plants, and historical and projected costs associated with FPL's Turkey Point 6 and 7
23		new nuclear project through the capacity cost recovery clause.
24		
25	Q.	HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?

	n.	105. I testified oil beliati of the Florida Office of Lubite Counsel in the provious
2		NCRC proceedings in Dockets No. 080009-EI, 090009-EI and 100009-EI.
3	Q.	PLEASE PROVIDE A BRIEF OVERVIEW OF THE NATURE AND STATUS
4		OF FPL'S NUCLEAR PROJECTS.
5	A.	FPL currently has two major nuclear projects under way. The most active project at
6		this time is the project to increase the generating capacity of FPL's existing nuclear
7		units, Turkey Point 3 and 4 and St. Lucie 1 and 2, by a total of 450 megawatts. This
8		project is referred to as the extended power uprate or EPU project. It is currently
9.		scheduled to be completed in 2013. FPL has spent approximately \$700 million of an
10		estimated total cost of \$2.48 billion on the EPU project. The second project is the
l <b>1</b> ·		development of Turkey Point 6 and 7, a new nuclear plant consisting of two
12		.Westinghouse AP1000 reactors. This project is in the licensing stage. It is projected
13		to provide 2,200 megawatts of capacity with on line dates of 2022 and 2023. At this
14		time FPL has spent \$129 million of an estimated "overnight cost" (that excludes
15 .		carrying costs and escalation) of \$11.1 billion.
16		
17	Q.	PLEASE SUMMARIZE FPL'S REQUEST FOR COST RECOVERY IN THIS
18		DOCKET UNDER THE NUCLEAR COST RECOVERY CLAUSE.
19	A.	FPL is requesting authority to include \$196,004,292 of nuclear cost items in the 2012
20		Capacity Cost Recovery factor.
21		
22		II.METHODOLOGY
23	Q.	PLEASE DESCRIBE THE METHODOLOGY THAT YOU USED TO
24		REVIEW AND EVALUATE THE REQUESTS FOR AUTHORIZATION TO
25		COLLECT COSTS SUBMITTED BY FPL UNDER THE NUCLEAR COST
26		RECOVERY CLAUSE.
		А

I first reviewed the Company's filings in this docket and assisted in the issuance of numerous interrogatories and requests for production of documents. To evaluate the 2 issues related to project schedule, cost and risk management. I reviewed many internal documents, status reports and correspondence with regulatory authorities. I reviewed responses to discovery requests and issued additional discovery requests as needed. I assisted OPC attorneys with the depositions of FPL witnesses. Q.WHAT IS THE PURPOSE OF YOUR TESTIMONY? 8 9 In my testimony, I will address three subjects. The first subject is the inappropriate Å. methodology that FPL employs to assess the long-term feasibility of its EPU uprate 10 11 project. Next, I will describe how the deficient feasibility methodology and 12 imprudence on FPL's part in the areas of selecting a "fast track" approach for the 13 EPU project, estimating the overall costs of the uprate projects and managing risk during the project have potentially placed the utility in the position of incurring 14 15 unreasonable costs that are in excess of those associated with an alternative generation plan and so should be disallowed from the amounts that FPL is authorized 16 17 to collect from customers. Finally, I will address the issue relating to the estimate of the capital costs of its EPU project that FPL submitted in prefiled testimony dated 18 19 May 1, 2009, and that it decided not to update either prior to or during the September 20 2009 hearing in Docket No. 090009-EL 21 **III.SUMMARY OF TESTIMONY** PLEASE SUMMARIZE YOUR CONCLUSIONS WITH RESPECT TO THE 22

METHODOLOGY THAT FPL USES TO PERFORM ITS FEASIBILITY

ANALYSES OF THE UPRATE PROJECTS.

23

I conclude that FPL's comparison of the cumulative present value of revenue requirements of two resource plans-one incorporating the nuclear uprate projects and another without the nuclear uprates- in which FPL excludes amounts already spent from the capital costs of the "with uprate" scenario, is ill-suited to the circumstance of FPL's EPU uprate project. This is because FPL had little grasp of what the capital costs would be at the beginning of the project, and FPL's estimates of the cost of completing the projects ("to-go costs") have increased dramatically from the outset. Excluding "sunk costs" is an accepted way of performing a feasibility study when the overall project cost is known, stable and well defined. However, if the project costs are largely unknown and estimates are understated at the outset, and if as a result the "to go" costs increase nearly as much as the annual "past spent" amount that is excluded from the comparison over time, the exercise can cause misleading results: based only on "to go" costs, the analysis will likely continue to show feasibility, but when all costs are considered, the project may be uneconomical for customers. If there was ever a valid basis for using the comparison of revenue requirements as the means of evaluating the feasibility of the uprate projects, it has eroded in light of FPL's experience with estimating the costs of the project. My GDS colleague, Brian Smith, will illustrate the problem and propose a means of compensating for the distortion produced by FPL's inappropriate methodology pending the adoption of a replacement methodology. In that regard, for future feasibility studies I recommend that the Commission direct FPL to perform a "break-even" analysis for the uprate projects similar to the "break-even" study that it prepares to support the long-term feasibility of its proposed new nuclear units, and to calculate separate such "breakeven" thresholds for the St. Lucie and Turkey Point sites.

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	Q.	The able boundaries took testinout conceauting
2		MANAGEMENT IMPRUDENCE AND YOUR RECOMMENDATION THAT
3		THE COMMISSION DISALLOW COSTS FOR THE EPU PROJECT THAT
4		ARE GREATER THAN THE BREAKEVEN COSTS.
5	A.	FPL's uprate projects began with what FPL styles an initial "scoping" study, followed
6		by an "indicative" bid from Bechtel, its EPC contractor. As FPL's witness Jones
7		acknowledges, an uprate to an existing nuclear unit is a hugely complex undertaking.
8		At the beginning, it is imbued with enormous uncertainties. This type of project is
9		uniquely unsuitable for the fast track approach, in which an organization commits to a
0		project and spends large sums before it has any idea of the ultimate cost. Not only
1	, '	did FPL not have a reasonable idea of the final cost of the project, FPL exacerbated
2		the situation by failing to quantify the "breakeven" point (that is, the maximum cost
3		per installed kW of uprate capacity that would be as cost-effective or more cost-
4		effective than the alternative to the uprate). Such a "breakeven" analysis is better
5		suited to a project that is characterized by substantial uncertainty than is the
6		comparison of revenue requirements that FPL adopted as its long term feasibility
17	٠	methodology for its uprate projects. Even today, FPL does not have a good handle on
18		the ultimate cost of the uprates, and it does not incorporate a contingency factor that
19		is adequate for the circumstances. Further, FPL was slow to recognize and take into
20		account early indications that its initial estimates were inadequate. These missteps
21		constitute imprudence that has exposed customers to the real likelihood that costs of a
22 .		plan with the uprate projects will be higher than corresponding costs of a resource
23		plan that does not include the projects. In fact, OPC witness and fellow GDS
24		consultant Brian Smith will demonstrate that, at this stage of the projects, FPL's own
25		data indicate that customers will see net costs, not net benefits, from the uprate

projects. This is the case even though the biggest expenditures are yet to come. To protect the customers from having to bear unreasonable costs occasioned by FPL's imprudence, I recommend that the Commission should disallow all costs greater than the breakeven cost from the amount that FPL seeks to collect through the NCRC. Because estimated capital costs and years of operations remaining prior to the expiration of operating licenses differ materially between the St. Lucie and Turkey Point uprate activities, I further recommend that the Commission direct FPL to perform a breakeven analysis for each EPU project, so that the economic feasibility and the justification for the continuation of the extended uprate project at each plant site can be evaluated individually rather than being lumped together. PLEASE SUMMARIZE YOUR CONCLUSIONS AND Q. RECOMMENDATIONS WITH RESPECT TO THE ISSUE OF WHETHER FPL SHOULD HAVE AMENDED ITS TESTIMONY CONCERNING ITS ESTIMATE OF CAPITAL COSTS ASSOCIATED WITH THE UPRATE PROJECTS DURING THE SEPTEMBER, 2009 EVIDENTIARY HEARING. Based on my review of information provided in discovery, I conclude the information regarding the cost of the EPU projects that FPL included in prefiled testimony in May 2009 was not the most current view of the utility, as the estimate in the May prefiled testimony had been effectively superseded by revised estimates as of the Executive Steering Committee meeting of July 25, 2009. At that time, managers of the uprate projects increased the estimate contained in May 2009 prefiled testimony by some \$300 million, representing a 21% increase above the estimate contained in the prefiled testimony. FPL's uprate managers adjusted their estimates of capital costs again in August 2009, when they increased estimated capital costs by another \$144.5

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	million, or a total of \$443.6 million more than the amount FPL had been using as its
	estimate since 2007. FPL should have apprised the Commission of these
	developments no later than the time when its witness testified in the evidentiary
	hearing conducted on September 8, 2009. Further, because the capital cost estimate is
	a key component of the utility's long-term feasibility study which the Commission's
	rule requires FPL to present annually, FPL also should have revised its feasibility
	calculations to reflect the increased capital cost estimate and the correspondingly
	lower benefits associated with the increase during the same hearing. I am informed
	by OPC's counsel that OPC regards these failures as a violation of the rule governing
	the nuclear cost recovery clause.
	IV. FPL'S INAPPROPRIATE METHODOLOGY FOR MEASURING
	LONG TERM FEASIBILITY OF UPRATES
Q.	PLEASE SUMMARIZE THE METHODOLOGY THAT FPL EMPLOYS IN
	ITS ANALYSIS OF THE LONG TERM FEASIBILITY OF THE UPRATE
	PROJECTS.
Α.	FPL uses a methodology called the Current Present Value of Revenue Requirements
	(CPVRR). Using this methodology, the Company compares the revenue
	requirements flowing from a generation portfolio containing the EPU projects to a
	generation portfolio without the EPU projects for the entire life of the projects. The
•	revenue requirements include fuel costs, capital costs, operating costs and all other
	costs related to operation of the plants. FPL calculates the present value of these
	costs and compares the sum of the revenue requirements for each generation
	portfolio. The generation portfolio with the lower CPVRR is considered to be the
	more economical portfolio. FPL excludes expenditures incurred prior to the analysis.

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1		and includes only the remaining costs to complete the unit as capital costs, on the
2	•	basis that the expenses incurred in prior periods are "sunk costs."
3		
4	· <b>Q</b> .	DID YOU ADDRESS THIS CHOICE OF METHODOLOGIES IN THE
5	•	TESTIMONY THAT YOU SUBMITTED IN DOCKET NO. 100009, PRIOR
<b>6</b> .		TO THE DECISION TO DEFER FPL-RELATED ISSUES TO THIS
7		HEARING CYCLE?
8	A.	Yes, I discussed my view of the shortcomings of the methodology as it is applied to
9		the EPU uprate projects in the prefiled testimony that I presented in Docket No.
10		100009-EI. The comments that I made in that testimony remain valid.
11		
12	Q.	PLEASE TELL THE COMMISSIONERS WHY YOU BELIEVED THEN,
13		AND CONTINUE TO BELIEVE NOW, THAT FPL'S METHODOLOGY, AS
14		IT IS APPLIED TO THE EPU UPRATE PROJECTS, IS DEFICIENT.
15	A.	The CPVRR method utilizing only cost to complete is appropriate for evaluating a
16	٠	project with known and stable cost. As I explained in my testimony in Docket No.
17		100009-EI, this method is not appropriate for evaluating the economics of a project
18		for which the final estimated cost is rapidly increasing. If the estimated total cost is
19		increasing at a rate that approximates the expenditures on the project, the cost to
20		complete will be unchanged while the total project cost is rapidly increasing. This
21	·	masks the true picture of whether the project is economically feasible.
22		. ••
23	Q.	ARE THERE INDICATIONS THAT THE SHORTCOMING THAT YOU
24		DESCRIBE IS AFFECTING THE VALIDITY OF THE RESULTS OF THE
25		ANNUAL ANALYSIS THAT FPL CONDUCTS?

1.	A.	Yes. As discussed further in the testimony of OPC witness Brian Smith, it appears
2		that the EPU projects provide net costs, not net benefits, to customers when total costs
3		of the project are considered and compared to the alternative generation portfolio.
4	. •	Yet, FPL's feasibility analyses, which ignore past expenditures, continue to show that
5		the EPU projects have economic benefit.
6		
7	Q.	HOW DOES THE METHODOLOGY THAT FPL EMPLOYS TO MEASURE
8		LONG TERM FEASIBILITY OF ITS EPU UPRATE PROJECTS COMPARE
9		TO THAT WHICH IT USES TO ASSESS THE FEASIBILITY OF ITS
10		PROPOSED NEW TURKEY POINT NUCLEAR UNITS?
11	· A.	FPL uses a "breakeven" methodology to assess the feasibility of the new Turkey
12		Point 6 and 7 units. In the breakeven methodology, FPL calculates the total capital
13		cost at which the CPVRR of a generation portfolio including the new nuclear units
14		equals the CPVRR of the alternate generation portfolio. If the cost of the new nuclear
15		units exceeds the breakeven cost, the units are not economically feasible. If the cost
16		is less than the breakeven cost, they are economically feasible.
17		
18	Q.	WHAT INFORMATION DOES A BREAKEVEN ANALYSIS PROVIDE, AND
19		IN WHAT CIRCUMSTANCES IS THIS INFORMATION USEFUL?
20	A.	A breakeven analysis provides the project total cost that the project must come in at
21		or below for the project to be beneficial to ratepayers. This information is very useful
22		for project managers to monitor the ultimate feasibility of the project as the project
23		proceeds. If project cost estimates are rapidly increasing, the breakeven analysis
24		provides an early warning to project managers that the project may no longer be
25		feasible.

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2	Q.	HAS FPL CONDUCTED A BREAKEVEN ANALYSIS FOR ITS UPRATE
3		PROJECTS THAT IS SIMILAR TO THE ONE IT PERFORMS FOR ITS
4		PROPOSED NEW NUCLEAR UNITS?
5	A.	No. In response to OPC Interrogatory No. 85 (included as Exhibit WRJ-3), which
6		asks FPL to explain why a breakeven cost analysis was conducted for Turkey Point
7		and 7 but not for the EPU project, FPL states:
8		It is not necessary to perform a breakeven cost analysis in order to evaluate a potential generating unit option.
10 11		This response further states:
12 13 14 15 16		In its need filing for the Turkey Point 6 and 7 project, FPL chose to introduce a new breakeven cost calculation approach for that specific project. This approach was developed and utilized because of the more numerous areas of uncertainty that would affect the analysis of a much
18 19 20		longer-term project.  In testimony (Sim May 2, 2011 page 10, lines 12 – 17), FPL asserts that the
21		comparison of the cumulative net present value of revenue requirements is the
22	•	appropriate method to use for the uprate projects. FPL offers no explanation for this
23		position.
24		
25	Q.De	O YOU AGREE WITH FPL ON THIS POINT?
26	A.	No. I believe the breakeven analysis is more appropriate than the CPVRR
27		methodology for the uprate projects, just as it is the methodology of choice for the
28		proposed new units.
29		
30	Q.	IN RESPONSE TO OPC INTERROGATORY 85 FPL DISCUSSES ITS USE
31		OF A CPVRR ANALYSIS TO EVALUATE THE WEST COUNTY ENERGY

1		CENTER UNITS. DO YOU AGREE THAT THIS IS AN APPROPRIATE
2		ANALOGY?
3	A.	No, I do not. The use of a CPVRR evaluation is appropriate for the West County
4		Energy Center Units. These are gas fired, combined cycle units of which hundreds
5		have been constructed around the country. FPL has extensive experience, including
6		recent experience, in constructing this type of unit. For a unit with high cost
7		certainty, such as a combined cycle unit, a CPVRR evaluation is appropriate. This is
8		clearly not the case for the EPU projects.
9.		
10	Q.	WHAT SIMILARITIES EXIST BETWEEN THE PROJECT TO BUILD NEW
11		UNITS AND THE UPRATE PROJECTS THAT LEAD YOU TO STATE THE
12	•	SAME TYPE OF FEASIBILITY ASSESSMENT SHOULD BE PERFORMED
13		FOR EACH?
14	A.	Because of the complexity of the project and FPL's decision to "fast track" its
15 ·		construction prior to the completion of the engineering design activities that are
16	•	necessary to quantify costs, the costs of the EPU uprate projects are as highly
17		uncertain, if not more so, than the costs of the new Turkey Point units. (I will
18		develop the level of uncertainty that supports this observation more fully in a later
19	•	section of my testimony.) Accordingly, everything that FPL said about the suitability
20		of the breakeven analysis to the proposed new nuclear units is fully applicable to the
21		EPU uprate projects. As the uprate projects progress, it is important for project
22		managers to recognize when the project cost forecast is approaching the point at
23		which the project is not economically feasible. Reliance on only a CPVRR
24		methodology can result in the continuation of a project when it is no longer
25		economically feasible and when it is too late to make necessary changes.

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2	Q.	WHAT ACTION DO YOU RECOMMEND TO THE COMMISSION ON THIS
3		SUBJECT?
4	A.	I recommend that the Commission find the long term feasibility methodology that
5		FPL applies to its uprate projects is inappropriate and should not be accepted. I
6		recommend that the Commission find that the results of the feasibility analysis
7		sponsored by FPL in this case are misleading, in that they mask what can be
8	•	described a "shortfall in cost-effectiveness" of the uprate projects that I attribute to
.9		management imprudence. Finally, FPL should be directed to perform a breakeven
10	•	analysis for its uprate projects similar to that which it prepares annually for its
11		proposed new units.
12		
13	7	V. IMPRUDENCE OF FPL'S MANAGEMENT OF THE EPU PROJECTS
14 15	Q.	HOW IS FPL APPROACHING THE PLANNING AND CONSTRUCTION OF
16		THE EPU UPRATE PROJECTS?
17	A.	FPL is employing what is called a "fast track" approach.
18		
19	Q.	WHAT IS A "FAST TRACK" METHOD OF CONSTRUCTING A PROJECT,
20		AND HOW DOES THAT DIFFER FROM A NORMAL APPROACH?
21	<b>A</b>	FPL witness Jones, in his May 2, 2011 testimony, at page 17, quotes the Project
22		Management Institute's "A Guide to the Project Management Body of Knowledge",
23		third edition. I will quote from the same book, page 146:
24 25 26 27 28		Fast Tracking. A schedule compression technique in which phases or activities that normally would be done in sequence are performed in parallel. An example would be to construct the foundation for a building before all the architecture drawings are complete. Fast tracking can result in rework and increased risk. This approach can require work to be performed without

complete detailed information, such as engineering drawings. It results in 1 2 trading cost for time, and increases the risk of achieving the shortened project 3 schedule - (emphasis added) 4 WHAT ARE THE ARCHITECTURE AND ENGINEERING DRAWINGS, 5 Q. 6 AND WHY WOULD PROCEEDING WITHOUT COMPLETE DRAWINGS 7 RESULT IN INCREASE COST FOR THE PROJECT? 8 A. The architecture and engineering drawings provide the final engineering design of the 9 project. "Final engineering design" refers to the full specifications (size, materials, 10 configuration, etc.) of the physical components to be installed. Proceeding without 11 complete drawings and engineering can result in increased project costs in several 12 ways. First, as described above, rework may be required if the final design is 13 different from a preliminary design that is implemented on the project. In addition, 14 until the final design is complete, the true scope of the project is not known and the final cost is impossible to estimate with any degree of accuracy. Thus, the actual 15 16 final cost may be significantly more than the original estimate because the scope of 17 work included in the original estimate was incomplete. Finally, an engineering and construction contractor will not be able to provide a firm bid on a project based only 18 19 on preliminary engineering. Since the scope is not known, the risk is too great. 20 Therefore, to protect itself, an engineering and construction contractor will only 21 provide a bid on a "time and materials" basis. This results in a high likelihood of 22 increased costs. 23 Q. DOES FPL PLAN TO PERFORM WORK WITHOUT COMPLETE DESIGN 24 **DRAWINGS?** 25 Apparently, FPL is considering this option. The pace of the completion of design A. engineering drawings has been far slower than that which would be needed to support 26 FPL's implementation schedule. I will develop this point in greater detail later in my 27

testimony. For my immediate purposes, I have attached as Exhibit WRJ-4 a graph that FPL uprate managers presented to FPL's Executive Steering Committee for the meeting of October 27, 2010. The graph depicts the actual amount of design engineering for the St. Lucie uprate project that has been completed over time, and shows the status (as of the October 2010 meeting) of the design engineering work relative to the stated target date of July 2011 for 90% completion of 40 design modification relative to the stated target date of July 2011 for 90% completion of the work. To packages. gain an appreciation for the degree to which the rate of completed design engineering would have to accelerate in order for FPL to achieve its current schedule for accomplishing design work, I have added a data point reflecting the status of engineering as of April 2011 -- the most recent date for which I have FPL data -- and then drawn a dotted line to connect that date to the target date. The steep dashed line shows that for FPL to adhere to its schedule for placing the additional megawatts of capacity associated with the uprate projects into service, either the speed with which FPL and Bechtel are performing design engineering would have to increase dramatically—at a rate which experience to date suggests would be highly unlikelyor FPL would have to perform construction without having completed design work, which would mean the ultimate costs would be even more uncertain. Of course, the alternative would be to slip the schedule. However, that would also have consequences in the form of increased costs and a smaller amount of time within which to generate fuel savings sufficient to offset the capital costs of the uprate additions before the nuclear units' operating licenses expire-all of which has implications for the projects' economic feasibility. To date, FPL's position has been that it intends to adhere to the existing schedule, notwithstanding the large amount of design engineering that remains to be done. That plan necessarily entails the type of cost risk to which the publication refers. FPL witness Jones, in his deposition, stated

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that if portions of the design engineering are not ready in time to support the implementation schedule, it would be possible to undertake construction "at risk" in advance of the completion of design work (Jones deposition transcript, June 22, 2011, at pages 23-24). This, as his term "at risk" implies, is very risky from a cost, schedule and NRC point of view.

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## Q. IS FAST TRACKING APPROPRIATE FOR PROJECTS SUCH AS THE FPL

## EPU PROJECTS?

In my opinion, it is not. I agree wholeheartedly with FPL witness Jones when he says "The EPU project is of extraordinary managerial and technical difficulty. FPL's EPU project represents one of the largest and most complex nuclear design, engineering and construction projects undertaken in the nuclear industry since the construction of the last generation of U.S. nuclear plants." (Jones May 2, 2011 testimony, page 4, lines 16-19) However, this has been true of the projects from the outset. These projects represent a combined 450MWe of nuclear capacity, which is larger than some existing nuclear plants. Practically all of the last generation of nuclear projects to which Mr. Jones refers were built with variations of fast track, time-and-material contracts with disastrous results from a cost and scheduling standpoint. The utility industry said "never again." For the current generation of new nuclear units, utilities have chosen to negotiate contracts that have fixed scope and fixed price features to control cost and provide some degree of cost certainty to ratepayers, stockholders and regulators. This is the approach wisely taken by FPL and PEF in approaching the Turkey Point 6&7 and Levy 1&2 projects. Nevertheless, FPL has chosen to approach the EPU projects in the same, high risk manner in which the last generation of nuclear units were built.

•		•
2 ·	Q.	DOES FPL ACKNOWLEDGE THAT THE FAST-TRACK PROCESS HAS
3		CAUSED PROBLEMS?
4	A.	Yes. On July 25, 2009, the EPU project management gave a presentation to the
5		Executive Steering Committee (ESC) revealing significant project cost increases.
6	•	Part of the presentation consisted of project management executives discussing the
7		"lessons learned" so far in the project. Concerning the fast-track process, the
8		following bullets were included:
9		Underestimated the risk and costs associated with the fast track project
10		concept (Turkey Point 7/25/2009 update page 39-Bates 000094)
11 .		<ul> <li>Fast Track Modification Control(Turkey Point 7/25/2009 update page 40-</li> </ul>
12		Bates 000095)
13		o Looked at the project only from a high level risk assessment
14		o Should have don(e) a more detailed risk assessment when establishing
15		the budget
16		o Did not assess the quality of original site staffing due to fast tracking
17		These comments are from the Turkey Point presentation. Those from the St. Lucie
18		presentation are essentially the same. (Bates number 000474 and 000475)
19		· .
20	Q.	DID THE PROJECTS START OUT AS FAST TRACK
21		PROJECTS?
22	A.	No. Based on information that OPC acquired from FPL's former Vice President-
23		Uprates during discovery, it is my understanding that FPL contemplated proceeding
24		with the uprate activities using FPL's normal project management process before
25		senior management directed project managers to use the "fast track" approach to

ı		auchipi to place the additional megawatis on line by 2012. See Exhibit WKJ-11.
2		Pages TR-25-28.
3 4	Q.	IS THE STATUS OF PROJECT DESIGN COMPLETION AN
5		IMPORTANT FACTOR IN THE SUCCESS OF A PROJECT?
6	A.	In my opinion, it is extremely important. Completing the design is the key to
7		knowing the cost and schedule. Prior to the design reaching a relatively high state
8	•	of completion a significant amount of uncertainty exists in the key drivers of
9		project cost and schedule including:
0		Number of modifications to be installed;
1.		Estimated craft manhours;
2		Estimated engineering costs;
3		Estimated equipment costs;
4		Bstimated material costs;
5		• Licensing requirements;
6		Project critical path.
7	•	As a result, cost and schedule estimates for a fast track project are highly
8	•	uncertain: Actual projects costs are likely to exceed initial estimates as the design
9		of the project is completed and the scope of the project is identified. Initiating a
20	•	very large and complex project with a high level of cost and schedule uncertainty
21		can lead to an unsuccessful project that does not provide the hoped for benefits.
22 23	Q.	DOES COST CERTAINTY INCREASE AS DESIGN ENGINEERING

1	A.	Yes, and FPL agrees. Page 10 of the September 9, 2009 presentation to the FPL
2		Executive Steering Committee (ESC) states:
3 4		Engineering and Design will complete in December 2010 improving cost certainty.
5 6		(As of April 18, 2011, only 31% of the engineering design projects, called
7		modifications or "mods," have been completed.)
8		Page 7 of the March 8, 2010 presentation (a little over a year ago) to the ESC states:
9 10 11 12		The project is at the very early stages of design. Cost certainty will improve as design is completed.
13 14	Q.	THESE QUOTATIONS ABOVE REFER TO THE "DESIGN". WHAT IS
15		MEANT BY THAT?
16	A.	These statements are referring to design engineering. The project record is full of
17		references to cost uncertainty usually associated with the status of the design
18		engineering of project modifications. Design engineering on this project is divided
19		into discrete packages that are associated with a particular project or modification.
20	•	Examples are Turkey Point Unit 3 Main Feed Pump Replacement, Condensate Pump
<b>2</b> 1		and Motor Replacement and Containment Cooling Modifications. The total BPU
22		projects currently consist of 209 Mods, including 95 at St. Lucie and 114 at Turkey
<b>23</b> .		Point. Over the past year, the projects have grown from 191 to 209 Mods, and there
24		likely will be more.
25		
26	Q.W	HAT IS THE STATUS OF DESIGN ENGINEERING AT THIS TIME?
27	A.	As I said earlier, the latest information that I have is as of April 2011. It was supplied
28		by the Company in its response to OPC Interrogatory 50. It states that 31% or 65 of
29		the 209 Mods have completed design engineering allowing some cost certainty for
30		those Mods. From January 2010 until the latest data provided by FPL in April 2011,

1		a period of 15 months, the FPL EPU organization has completed the design of 65
2		Mods (31%) or a little over 4 per month. They are scheduled to complete all 209
3		Mods by the end of 2011, or 144 over 8 months, or about 18 per month, requiring a
4		significant increase in the completion rate achieved to date. WRJ-4, to which I
5		referred earlier, is a graph from the October 27, 2010, meeting showing the schedule
6		for Design Modification completion. The dotted line indicating the slow pace of the
7		progress during the six months prior to April 18, 2011 and the additional line
8		indicating the steep rate of acceleration that would be needed to enable FPL to remain
9		"on course," provide a dramatic visual of the lack of engineering progress.
10.		
11	Q.CO	OULD IT BE THAT A NUMBER OF MODS ARE ALMOST COMPLETE?
12	A.	According to the data, there are 23 Mods that are between 90% and 100% complete
13		and 37 that are between 30% and 90% complete. There are 67 that are between 0%
14		and 30% complete and 17 that have not been started. I do not find these figures
15	•	encouraging.
16		
17	Q.IS	THE COMPANY CONCERNED ABOUT THIS SITUATION?
18 19 20	A.	Yes, they are. In the March 23, 2011, ESC presentation (Exhibit WRJ-5) on page 21, FPL states that:
21 22 23		Bechtel (the EPC contractor) has struggled with meeting pre-outage milestones for design modifications requiring increased focus and management attention.
24 25		It also states that recovery plans have been established. FPL witness Jones stated in
26		his deposition of June 22, 2011 that he has started contracting out some of the work to
27		other engineering firms. (Jones deposition transcript, June 22, 2011, page 42, lines 22
28		-24) With an outage starting in five months, this may be too little, too late. I have
29		noted in the Company's response to OPC Interrogatory No. 56, which asks for the

1		outage schedule, that every outage date is prefaced with the tentative "currently
2		scheduled?"
3		
4	Q.	HAS LATE ENGINEERING ALREADY CAUSED DELAYS IN
5		COMPLETING THE EPU PROJECTS?
6	A.	Yes. The outage for completion of implementation of the first EPU project, St. Lucie
7		1, has slipped three months from to to to the tother
8		outages have slipped some also. The ESC was told at its March 23, 2011, meeting
9		(ESC slides, page 36) (Exhibit WRJ(FPL)-6)
10 11 12 13		Moved outage start dates to provide additional time for engineering and planning, bringing more certainty with execution.
14	Q.	WHAT IS THE CURRENT OVERALL STATUS OF THE PROJECTS?
15	<b>A.</b> ·	As witness Jones indicates in his testimony, the projects are still in the early
16		stages. Engineering is only 50% complete on a manhour basis and only 31% of
17	•	the known project modification designs are complete. At this point, according to
18		Dr. Sim, FPL has spent only \$700 million out of \$2.48 billion total. The first
19		major RPU implementation and completion outage is coming up at St. Lucie 1,
20		only some 4 1/2 months away, and I would point out that for that outage only 15 of
21		45 currently identified Mods have completed engineering. FPL has hired an
22		outside estimating firm to help cost out the completion on over 100 Mods for
23		Turkey Point, indicating that they are a long way from having costs nailed down
24		on construction at Turkey Point. (FPL Response to OPC Interrogatory No. 83)
25		Because this Turkey Point estimating work is in the early stages, I expect that the
26		estimating for construction at St. Lucie is also very early in its development. FPL
27		has to spend almost \$2 billion (according to their soft numbers) over the next 18

1	months for work that is, as of today's date, unplanned and unpriced. Based on
2	what they know now, the almost \$2 billion can only be an uneducated guess.
3	
4	Q. ARE THERE OTHER ISSUES THAT ARE OF CONCERN FOR THE EPI
5	COST AND SCHEDULE?
6	A. Yes. Witness Jones identifies a number of additional problems beside the design
7	in his May 2, 2011, testimony: (Jones May 2, 2011, testimony, pages 35 - 38)
8	<ul> <li>Structural Integrity-This factor deals with the ability of existing buildings,</li> </ul>
9	floors, walls, etc. to support new, heavier equipment in place and also as the
10	equipment is transported to its proper position in the plant. This engineering
11	and planning work has not been accomplished and will cause additional
12	engineering as well as construction.
13	Limited Work and Staging Space—Because of the numerous mods to be
14	accomplished at the same time, the planning and scheduling of simultaneous
15	projects in the same work spaces are very difficult. This will cause additional
16	engineering and labor costs.
17	• Rigging of Equipment—Mr. Jones states that some of the equipment to be
18	replace or modified weigh up to 185 tons. Some of it is in places that are
19	difficult to access. The additional costs are associated with engineering and
20	implementation of this unplanned for work.
21	Operating Plant Environment—I discussed this earlier. This means that every
22	action taken inside a licensed nuclear power plant must take into account the
23	plants NRC technical specifications. For example, there will some equipmen
24	that cannot be taken out of service unless a backup is in operation. Physical
25	security, health physics, and radiation protection specifications must be

1		strictly adhered to. Fitness for duty requirements must be applied to all plant
2		and contractor personnel.
3		• Work Order Planning and Integration with Routine Outage Activities—Work
4		in operating nuclear facilities must be detailed with strict, specific procedures
5		that must be developed before work begins. Also, during a refueling outage at
6		a nuclear power plant, there is a beehive of activity that will be taking place
7		normally without the installation of the 209 mods. Coordination of these
8		efforts will increase cost and lengthen schedules.
9	W	itness Jones indicates in his response to OPC INT 80 that:
10 11 12		the extent and impact of these complicating factors cannot be fully determined until the associated engineering and construction planning activities are completed.
13 14	Q.	WHAT DO YOU CONCLUDE CONCERNING THE MANAGEMENT OF
15		THE FPL EPU PROJECTS?
16	A.	I conclude that that the decision to fast track these projects and to pursue them
17		without performing a breakeven analysis was an imprudent decision on the part of
18		FPL management. I expect significant increases in project cost and more project
19		delays in the coming two years. Project cost will not be known until the project is
20	٠	complete, rendering FPL's feasibility analyses of relatively little use. This fast
21		track decision will likely result in costs that will significantly exceed the cost of
22		the studied alternative.
23	Q.	HOW WOULD YOU DESCRIBE THE NATURE OF FPL'S EPU
24		PROJECTS, IN TERMS OF THE DEGREE OF UNCERTAINTY AND
25		COMPLEXITY?
26	A.	As witness Jones states in his testimony and I have discussed above, the EPU
27		projects are the largest and most complex since the last generation on U.S. nuclear

1	•	plants. I would maintain that it is even more complex, because it must be
2	•	accomplished within existing, operational nuclear plants, creating all the
3		expensive complications that witness Jones discusses so well. I would add,
4		however, that witness Jones' points regarding complexity have been known from
5		the beginnings of the project, and demonstrate why the decision to "fast track" the
6	٠	uprate projects was so risky.
7		
8	Q.	IN YOUR OPINION, DO FPL'S ESTIMATED COSTS CONTAIN
9		ENOUGH CONTINGENCY AT THIS TIME GIVEN THE PRESENT
10		STATUS OF THE EPU PROJECTS?
11	Α.	No, they do not. In its answer to OPC Interrogatory 77, FPL states that its
12		contingency in its current number is from 0 to 7%, which seems quite small
13		considering that the engineering is only 50 % complete and the major construction
14		has not yet been estimated to the level of detail necessary to set up construction
15 ·		contracts (See response to OPC Interrogatory 83.) In my opinion, a higher
16		contingency commensurate with the current design and construction status would
17		be appropriate.
18		
19	Q.	FPL'S PAST AND CURRENT FEASIBILITY ANALYSES INDICATE
20		THE EPU UPRATE PROJECT HAVE BEEN AND ARE CURRENTLY
21		COST-EFFECTIVE TO CUSTOMERS. DOES THAT ALLAY YOUR
`22		CONCERNS REGARDING THE SIGNIFICANT INCREASES IN THE
23		CAPITAL COSTS THAT FPL HAS ESTIMATED IT WILL INCUR TO
24		COMPLETE THE PROJECTS?

A.	No, it does not. As I discussed above, the capital costs are still uncertain at this
	point. As OPC Witness Brian Smith points out, the EPU projects are not feasible
	under the base case assumptions when costs spent to date are included. FPL has
	not calculated a break-even cost and therefore does not know how much the
	ratepayers can afford for them to spend on the projects. I recommend that the
	Commission order FPL to immediately submit a breakeven analysis for the EPU
•	projects. The St. Lucie and Turkey Point projects should be looked at separately
	in the analysis, with a break-even cost identified for each project.
Q.	WHY DO YOU RECOMMEND SEPARATE ANALYSES FOR EACH
	PROJECT?
A.	At current estimates, the Turkey Point project's estimated cost is approximately
	\$250 million more than the estimate for St. Lucie. It is my understanding that the
	capacity increase for the Turkey Point EPU project is less than that for St. Lucie.

15 .

\$250 million more than the estimate for St. Lucie. It is my understanding that the capacity increase for the Turkey Point EPU project is less than that for St. Lucie. In addition, the operating licenses for Turkey Point expire in 2032 and 2033, while St. Lucie's operating licenses expire in 2036 and 2043, giving St. Lucie 14 more unit-years of operation. Bear in mind that the economic feasibility of an uprate project depends on the ability of the additional megawatts of nuclear capacity to generate fuel savings over time that will more than offset the "price tag" of capital investment. The higher capital costs, lower increments of additional nuclear generating capacity, and shorter periods of service present a greater "hurdle" that the Turkey Point uprate activities must overcome to demonstrate economic feasibility. These differences between the two plants may possibly show that the St. Lucie EPU has been "carrying" the Turkey Point EPU.

1		In any event, the differences warrant separate analyses for the plant sites, and
2		separate decisions with respect to whether each should continue.
3		
4	Q.	TO BE CLEAR, HOW HAS MANAGEMENT IMPRUDENCE IN
5		MANAGING THE EPU UPRATE PROJECTS, IN YOUR OPINION,
6		CONTRIBUTED TO THE SITUATION IN WHICH, WITH RESPECT TO
7		WHETHER CUSTOMERS WILL REALIZE NET BENEFITS OR NET
8		ADDITIONAL COSTS, THE ECONOMIC FEASIBILITY OF THE
9		PROJECT IS QUESTIONABLE?
10	A.	FPL's imprudent decision to fast track the EPU projects has led to a situation in
11	•	which FPL is spending substantial sums of money very quickly while not
12		knowing what the final bill is going to be. As FPL has acknowledged, it is
13		impossible to know what the projects will cost until the designs are complete.
14		The final designs were only 31% complete as of April 18, 2011. By using
15		inaccurate, understated estimates of project costs and ignoring money already
16		spent, the projects will always look feasible even though they may ultimately cos
17		the rate payer more than the alternative generation portfolio.
18.		
19	<b>Q.</b>	EVEN IF FPL'S EPU UPRATE PROJECTS TURN OUT TO BE NOT
20		COST-EFFECTIVE, ISN'T THAT OFFSET BY THE PROJECT'S FUEL
21		SAVINGS, FUEL DIVERSITY AND LOWER EMISSIONS OF
22		GREENHOUSE GASES?
23	. <b>A.</b>	Project fuel costs are the majority of costs that are included in the CPVRR or
24		breakeven analyses. Thus, these savings are already considered. The cost of
25		greenhouse gases is also taken into account in CPVRR and breakeven analyses.

1		The value of fuel diversity has not been quantified, and should be a matter of
2		Commission policy; however, the fuel diversity benefits cannot be evaluated in
3		isolation from a realistic appraisal of economic feasibility, and would not be
4		worth pursuing at some level of cost.
<b>5</b> .		
6	Q.	WHAT DO YOUR OBSERVATIONS REGARDING MANAGEMENT
7		IMPRUDENCE INDICATE WITH RESPECT TO THE AMOUNTS
8		COLLECTED FROM CUSTOMERS IN 2009, 2010, 2011, AND THE
9		AMOUNT THAT FPL WISHES TO COLLECT IN 2012?
10 .	Α. ·	I recommend that the Commission require the Company to determine a breakeven
11		cost for each project. The Company should be allowed to collect future amounts
12		up to the breakeven costs. Amounts for 2009, 2010, 2011 and 2012 could be
13		collected as long as the breakeven values have not been exceeded. The amount of
14		the breakeven cost could be reviewed and trued up each year.
15		
16	Q.	BASED ON YOUR TESTIMONY ON THE SUBJECT OF PRUDENCE,
17		WHAT ACTION DO YOU RECOMMEND TO THE COMMISSION/
18	A	I recommend that the Commission take the following actions:
19		1. Order FPL to submit a breakeven analysis for each EPU project, St. Lucie
20	•	and Turkey Point.
21		2. Based on these analyses, determine if Turkey Point EPU should be
22		continued.
23		3. Limit future recovery of EPU capital cost to the amounts determined in the
24		final breakeven analyses as filed by FPL at the conclusion of the project
25		and reviewed and approved by the Commission.

•		VILLE 2007 ESTEMATES OF CHARLESTONIALED CALIFIED COSTS
?	Q.	HOW DID YOU CONDUCT YOUR REVIEW OF THE 2009 ESTIMATES OF
}		UPRATE-RELATED CAPITAL COSTS TO ASCERTAIN WHETHER THE
ŀ		MAY 2009 ESTIMATES REPORTED IN FPL'S PREFILED TESTIMONY
5	•	SHOULD HAVE BEEN UPDATED PRIOR TO OR DURING THE
5		SEPTEMBER 2009 EVIDENTIARY HEARING?
7 · .	Α.	As the Commission learned last year, in February 2010 FPL engaged Concentric
3		Energy Advisors to investigate an employee complaint letter. In the letter the author
•		expressed his concern about (among other things) the disregard with which managers
0		of the uprate projects treated indications that the costs of the projects were rapidly
1		increasing beyond the initial estimates, and the manner in which FPL would report
2		those increases in the costs of the uprate projects to the Commission. In June 2010,
3		John Reed, President of Concentric Energy Advisors, submitted to FPL a report in
4		which Mr. Reed concluded that the May 2009 estimates contained in FPL's prefiled
5		testimony were not the best information known by FPL at the time of the September
6		2009 hearing, and that FPL's witness should have revised the estimate to reflect the
7		utility's then current view of the costs. As the Commission is also aware, FPL took
8		issue with its consultant's finding in this regard prior to the time that the Commission
9		deferred FPL-related issues to the 2011 hearing cycle. In this docket, Mr. Reed has
0	•	reiterated his conclusion that FPL should have revised its estimate of capital costs
1.	•	upward prior to or during the September 2009 hearing, while FPL witnesses Art Stall
2		and Armando Olivera contend that, because the updated cost information was subject
.3		to further review and efforts to control, FPL had no basis on which to revise its May
24		2009 prefiled testimony at the time of the September hearing. OPC asked me to
15		perform an independent review of the facts and circumstances that gave rise to these

1		differing assertions, and form my own conclusion regarding whether FPL should have
2		updated its May 2009 testimony to reflect higher projected capital costs at the time of
3		the September 2009 hearing.
4		
5	Q.	WHAT INFORMATION DID YOU REVIEW IN FORMULATING YOUR
6		OPINION?
7	A.	The documents and materials that OPC requested in discovery and that I reviewed for
8		this purpose include the bulk of the materials that Mr. Reed listed in his June, 2010
9		report. In addition to these materials, I reviewed FPL's answers to OPC's
10		interrogatories, FPL's prefiled testimony in this docket and the transcripts of the
11		depositions of Art Stall, John Reed, and Terry Jones. By telephone, I monitored the
12		deposition of former FPL Vice President-Uprates Rajiv Kundalkar, who sponsored
13	•	the May 2009 prefiled testimony on the subject of capital cost estimates during the
14		September 2009 hearing.
15		· ·
16	. <b>Q.</b>	PLEASE DESCRIBE THE FACTS ON WHICH YOU BASE YOUR
17		CONCLUSION THAT FPL DID NOT PRESENT THE BEST AVAILABLE
18	•	INFORMATION REGARDING ITS ESTIMATE OF THE COSTS OF
19		COMPLETING THE UPRATE PROJECTS DURING THE SEPTEMBER 2009
20		EVIDENTIARY HEARING.
21	A.	The original estimate for the EPU projects was based on conceptual scoping studies
22		and indicative bids from the EPC contractor. Detailed engineering was essentially at
23		zero percent, and there was a high degree of uncertainty in the project estimate.
24		During 2009, EPU project management made monthly presentations on the EPU
25		project, including cost estimates, to FPL's Executive Steering Committee (ESC). In

1		the May 2009 presentation to the ESC, the total cost forecast for both St. Lucie and
2		Turkey Point remained the same as the original estimate. (OPCPOD1, No. 9,
3		FPL000103 - 000132) (Exhibit WRJ-7) However, a closer examination of the May
4		2009 forecasts shows that the total of costs for engineering, materials and
5		implementation had increased from the original estimate by over 25% for St. Lucie
6		from (\$475 million to \$595 million) and over 27% for Turkey Point from (\$546
7		million to \$696 million).
8		
9	Q.	PLEASE EXPLAIN HOW THESE CATEGORIES COULD HAVE
10		INCREASED IF THE OVERALL ESTIMATE DID NOT CHANGE.
11	A.	At the outset of the project, the uprate managers included a component in the estimate
12		that they labeled "Scope not estimated." Thereafter, each increase in costs that the
13		managers identified was assumed to reduce the "Scope not estimated" by the same
14		amount.
15		·
16	Q.	DO YOU AGREE WITH THE MANNER IN WHICH FPL USED "SCOPE
17		NOT ESTIMATED" TO MAINTAIN A CONSTANT PROJECT ESTIMATE?
18	A.	No. Necessarily, the premise for the practice is that FPL had accurately quantified,
19		to the dollar, the ultimate cost of the project, when in fact FPL, because of its decision
20		to "fast track" the decision, had little grasp on the costs that would be incurred. FPL
21	•	had no basis for using the 'Scope not estimated' as a "balancing adjustment." In his
<b>22</b> <sub>.</sub>		report, John Reed of Concentric Energy Advisors also criticized this practice.
23		
~4	_	DY HA GIV CONTINUE THE

1	A.	The Cost and Budget Summary maintained a constant Total project cost by reducing
2		the cost allocation for "Scope not estimated" from \$182 million to \$69 million for St.
3		Lucie and from \$204 million to \$50 million for Turkey Point. As of May 2009 there
4		was clearly upward pressure on the estimated cost of the project. In the June 2009
5 ·		ESC presentation the Total cost estimate for St. Lucie and Turkey remained the same
6		but the "Scope not estimated" component had dwindled to \$14 million for St. Lucie, a
7		92% decrease from the original \$182 million and to \$28 million for Turkey Point, an
8		86% decrease from the original \$204 million. (OPCPOD1, No. 11, FPL000191 -
9		000219) Projects costs had not stabilized and were continuing to increase. At the
10		July 2009 ESC meeting, the current forecast for St. Lucie was shown to have
11	•	increased by \$139.6 million above the original estimate and the current estimate for
12		Turkey Point was \$160.6 million above the original estimate. (OPCPOD1, No. 5,
13		FPL000056 - 000095 and OPCPOD1, No. 12, FPL000424 - 000475) (Exhibit WRJ-
14	•	8 and Exhibit WRJ-9) In June 2009, the allowance for "Scope not estimated" had
15		been exhausted, and FPL had to fully recognize the increase in project cost in the July
16		ESC meeting. The July 2009 ESC presentations included a detailed, line-by-line
17		presentation of costs as FPL management attempted to identify and understand the
18		reasons for the cost increases.
19		
20	Q.	ARE THERE OTHER ASPECTS OF THE JULY 2009 PRESENTATION TO
21		THE ESC THAT ARE SIGNIFICANT?
22.	Α.	Yes. The July 2009 ESC presentation also reflected the results of the recent efforts
23		by the EPU management team to rein in Bechtel's increasing cost estimates. The July
24		2009 ESC presentation also contains an updated feasibility analysis conducted by an
25		FPL analyst (not Dr. Sim) to examine whether the EPU projects remained

1		economically feasible (using FPL's methodology) at the new higher cost estimates.
2		The feasibility analysis in the July 2009 ESC presentation used a combined EPU total
3		cost of \$1.706 billion, compared to the \$1.407 billion used in the original
4		Determination of Need filing and in FPL's 2008 and 2009 NCRC testimony. See
5		page 50 of Exhibit WRJ-9.
6	Q.	WHAT HAPPENED AFTER JULY 2009?
7	A.	Upward cost pressures continued, as the August 2009 cost estimate shown in the
8		September 2009 ESC presentation increased again from \$1.706 billion to \$1.850
9		billion. From the above presentation demonstrating continued increasing costs
10	•	throughout the spring and summer of 2009 and the use of the increased cost estimates
11		in the updated feasibility analysis, I conclude that the cost estimate submitted in
12		FPL's prefiled testimony in May 2009 was clearly stale and should have been
13		updated prior to or during the hearing in September 2009. In addition, FPL should
14		have updated the feasibility analysis that it presented at the September 2009 hearing.
15		to reflect the increased estimates of capital costs.
16		• ;
17	Q.	HOW WOULD YOU COMPARE YOUR CONCLUSION WITH THAT OF
18		CONCENTRIC ENERGY ADVISORS, AS EXPRESSED IN ITS JUNE 21,
19		2010, INVESTIGATION REPORT?
20	A.	I reached the same conclusion as Mr. Reed with respect to whether the capital cost
21		estimate should have been updated, with one difference. Mr. Reed approached his
22		task from the standpoint of whether FPL adhered to its own internal policies
23		regarding, among other things, communications to the Commission. My approach is
24		to assess whether FPL met Commission requirements for submissions in the nuclear
25		cost recovery clause, including the requirement of Rule 25-6.0423 that it provide an

analysis of the long term feasibility of the uprate project annually. Regardless of the 1 2 methodology that is used, a proper analysis of the long term feasibility of the uprate project requires that the best available information regarding the capital costs of the project be used as an input to the analysis. This was not done in the September 2009 5 hearing. 6 7 Q. FPL HAS ASSERTED THAT FPL HAD NO OBLIGATION TO UPDATE THE 8 TESTIMONY ON CAPITAL COSTS BECAUSE DESIGN ENGINEERING 9 HAD NOT BEEN COMPLETED FOR THE PROJECTS. DO YOU FIND 10 THIS PERSUASIVE? No, I do not. Design engineering for the project will not be complete until shortly 11 A. 12 before the project itself is complete. For example, as of April 18, 2011 design 13 engineering has been completed for only 31% of the Plant Change Modifications. (Response to OPC Interrogatory 50) The logical extension of FPL's assertion is that 14 15 FPL would need to update its initial estimate of capital costs (formed when little engineering had been done) and adjust the capital cost input to its ongoing economic 16 17 feasibility analyses only when the project is virtually complete. This approach would 18 frustrate the ability of the Commission to monitor the feasibility of the project over 19 time. Further, when FPL updated capital costs in May 2010, design engineering was 20 only 10% complete. 21 FPL HAS ALSO CONTENDED THAT AT THE TIME OF THE JULY 2009 22 Q. PRESENTATION TO THE ESC THERE EXISTED OPPORTUNITIES TO 23 REMOVE SCOPE FROM THE PROJECTS, AND THEREFORE THE 24

1		NUMBERS WERE PRELIMINARY AND NOT YET READY TO REPORT
2		TO THE COMMISSION. HOW DO YOU RESPOND?
3	A.	I respond in two ways. First, the July 2009 cost estimates were the result of extensive
4		line by line analyses of the capital costs which included identification and
5		quantification of all known reductions in scope. The reductions in scope were
6		quantified and reflected in the revised estimate of capital costs. See page 9 of Exhibit
7		WRJ-9. It is doubtful that additional reductions in scope would be identified at a later
8		date that would have a significant impact on the July 2009 estimate. This is borne out
9		by the fact that FPL increased its estimate of capital costs materially above the July
10		2009 estimate in the following month. Secondly, FPL could have provided the latest
11		cost estimates and informed the Commission of their preliminary nature with a
12		promise to provide the Commission with the latest update when it became more firm.
13		FPL should have informed the Commission of this latest cost estimate.
14	•	
15	Q.	FPL SAYS THAT IT DIRECTED ITS UPRATE MANAGERS TO REDUCE
16		COSTS BY "PUSHING BACK" AGAINST BECHTEL. IT SAYS THAT
17		BECAUSE IT HAS NOT ACCEPTED BECHTEL'S ESTIMATE, IT WAS
18		UNDER NO OBLIGATION TO REGARD THE JULY 25 ESTIMATES AS
19		HAVING SUPERSEDED THE MAY TESTIMONY. WHAT IS YOUR
20		RESPONSE?
21	A.	Again, the July 2009 cost estimates include the results of FPL's initiatives to push
22		back against Bechtel. In the May 2009 and June 2009 presentations, uprate managers
23		laid out a program of steps through which they intended to resolve their challenges to
24		Bechtel's new, higher estimates. The program contemplated a flurry of measures
25		designed to bring closure to the challenges within a 30 day time frame ending in late

1		June 2009. A table in the implementation section of the July 2009 report for both St.
2		Lucie and Turkey Point presents the results of extensive negotiations with Bechtel
3		that are incorporated in the July 2009 cost estimate. These tables entitled "Bechtel
4		proposal Estimate Changes's show the following cost changes resulting from the
5		negotiations with Bechtel::
6		Original P50 Submittal;
7		Most Likely P50;
8		Most Likely P50 Rev 1;
9		Reduced Scope Hours;
10	`	Consolidated Procurement;
11		Reduced Engineering manhours and Construction.
12.		Page 28 of 52 of Exhibit WRI-9 is a bar graph that was part of the presentation to the
13		ESC during the July 2009 meeting. It indicates that FPL's program of challenging
14		Bechtel's numbers resulted in a decrease in Bechtel's estimate of EPC-related costs
15		from the contained in Bechtel's May 12 presentation to by
16		the time the package for the July meeting was prepared. In short, negotiations with
17		Bechtel were far along at the time the July 2009 estimate was developed and
18		meaningful reductions in Bechtel's cost estimate were clearly identified.
19		·
20	Q.	FPL HAS ALSO MAINTAINED THAT BECAUSE IT WAS CONSIDERING
21		EITHER SELFPERFORMANCE OR REPLACING BECHTEL WITH A
22		DIFFERENT EPC CONTRACTOR, THE JULY 2009 PRESENTATION WAS
23		TOO PRELIMINARY TO HAVE THE EFFECT OF SUPPLANTING THE
24		MAY 2009 TESTIMONY. DOES THIS CONTENTION PERSUADE YOU

1		THAT FPL HAD NO OBLIGATION TO UPDATE ITS TESTIMONY BY THE
2		TIME OF THE SEPTEMBER 2009 HEARING?
3	A.	No, it does not. In July 2009, Bechtel was the primary EPC contractor and any steps
4		to self-perform or replace Bechtel were very preliminary. FPL could have qualified
5		their July 2009 estimate by stating that they were evaluating a self-performing option
6		or replacing Bechtel. In any event, FPL should have notified the Commission of the
7		July 2009 estimate with whatever qualifiers were needed.
8		
9	Q.	WOULD REPORTING A HIGHER ESTIMATE OF CAPITAL COSTS HAVE
10		UNDERMINED FPL'S ABILITY TO NEGOTIATE WITH BECHTEL FOR
11		THE BENEFIT OF CUSTOMERS?
12	<b>A.</b> ·	No. Aside from the fact that the negotiations had borne fruit by July 25, 2009, it is
13		important to remember that the EPC contract with Bechtel is essentially an agreement
14		to compensate Bechtel for "time and materials" associated with its services. At issue
15		at the time was Bechtel's estimates of labor that would be required. While of course
16	•	FPL's objective properly was and is to require accurate and reasonable estimates,
17		reporting a higher estimate to the Commission would not jeopardize FPL's ability to
18		hold Bechtel to only the levels of staffing that would be required to actually perform
19		the project as it progressed by supervising Bechtel and reviewing invoices so as to
20		guard against paying for inefficiencies.
21		
22	Q.	FPL POINTS TO THE FACT THAT ITS PROCESS FOR EVALUATING
23		CAPITAL COSTS WAS NOT FINISHED UNTIL SHORTLY PRIOR TO THE
24		MAY 2010 FILING FOR THE FOLLOWING YEAR, AT WHICH TIME IT
35		DDFCENTED TTC EIDCT DETTCION TO THE ODICINAL ESTIMATE OF

1		CAPITAL COSTS. DOES THIS SUPPORT FPL'S CONTENTION THAT
2		THERE WAS NO NEED TO REVISE THE MAY 2009 ESTIMATES DURING
3		THE SEPTEMBER 2009 HEARING?
4	A.	No. FPL has argued that a revision could not be made until design engineering had
5		been completed. At the time of the May 2010 testimony, in which FPL provided a
6		revised estimate that increased the original estimate by between \$252 million and
7		\$502 million, by its own account only 10% of the design engineering of the project
8		had been completed. (Testimony of Terry Jones dated May 3, 2010 page 6, lines 8-9
9		and 15 and page 36, line 12)
10		
11	Q.	WHAT IS THE SIGNIFICANCE OF THE UPDATED FEASIBILITY STUDY
12		THAT MANAGERS INCLUDED IN THE JULY 2009 PRESENTATION, AND
13	•	TO WHICH MR. JOHN REED REFERRED IN CONCENTRIC ENERGY
14		ADVISORS' JUNE 2010 INVESTIGATION REPORT?
15	A.	The fact that the managers of the uprate project asked for and obtained a revised
16		feasibility study taking into account both anticipated capacity increases and increased
17		capital costs reinforces my conclusion that FPL had moved beyond the May 2009
18	·	information.
19		•
20	Q.	IN RESPONSES TO OPC DISCOVERY REQUESTS, FPL CONTENDS THAT
21		THE PORTION OF THE JULY 2009 PRESENTATION TO THE ESC THAT
22		IS CAPTIONED AS A "FEASIBILITY ANALYSIS" WAS INSTEAD A
23		"SENSITIVITY STUDY" OF THE ORIGINAL FEASIBILITY ANALYSIS,
24		PERFORMED TO MEASURE THE SENSITIVITY OF THE ORIGINAL TO
25		CHANGES IN CAPITAL COSTS AND MEGAWATT INCREASES. DOES

· <b>I</b>		THIS CHARACTERIZATION LESSEN THE SIGNIFICANCE OF THE
2		EXERCISE, IN YOUR OPINION?
3	A.	No. It merely means that FPL held constant all of the variables except those for
4		which its most recent information exhibited material changes. That is exactly what I
5		would expect FPL to do with new information regarding higher capital costs and/or
6		increased capacity. It does not matter whether the calculations are labeled an updated
7		feasibility analysis or a sensitivity study-the significance is the same under either
8		designation.
9		
10	Q.	IN YOUR OPINION, SHOULD FPL HAVE PROVIDED THIS REVISED
11		FEASIBILITY INFORMATION TO THE COMMISSION DURING THE
12		SEPTEMBER 2009 HEARING IN ADDITION TO THE REVISED ESTIMATE
13		OF CAPITAL COSTS, EVEN IF THE RESULTS CONTINUED TO
14		INDICATE THE PROJECTS WERE COST-EFFECTIVE UNDER FPL'S
15	•	METHODOLOGY?
16	A.	Yes. FPL has an obligation to keep the Commission fully informed with the latest
17	•	available information as the BPU project progresses. This includes material changes
18		in schedule, cost and/or overall feasibility that occur following the regular submission
19		date. In addition to a snap shot in time that these data provide, they also allow the
20		Commission to develop a trend over time which is important in determining the
21		ultimate success of the project.
22		
23	Q.	HAVE YOU SEEN ANY INDICATIONS THAT FPL'S MANAGERS
24		CONTEMPLATED UPDATING THE MAY 2009 TESTIMONY AT ANY
25		POINT PRIOR TO THE SEPTEMBER 2009 HEARING?

1 .	A.	Based on my review, I believe it is clear that, as of the August-September 2009 time
2		frame, FPL's Vice President-Uprates and FPL's senior management had
3		communicated on the subject, and had adopted the position that updating the capital
4		costs was not called for. I did review one document that indicates to me the witness
5		was considering updating his testimony earlier in the process.
6		
7	Q.	PLEASE CONTINUE.
8	<b>A.</b>	In discovery, OPC obtained, and I reviewed, an email that Rajiv Kundalkar, the FPL
9		witness who sponsored the 2009 cost estimate, wrote to FPL's Chief Nuclear Officer
10		on May 30, 2009. I am attaching it as Exhibit WRJ-10.
11		
12		The memorandum indicates to me that Mr. Kundalkar was considering updating his
13		testimony once the pending challenges to Bechtel's estimates were resolved at the
14		time he wrote it.
15		
16	Q.	PLEASE EXPLAIN.
17	A.	In this email, after first alluding to the fact that the Commission Staff had requested
18		copies of all presentations on the uprates to the ESC and the Chief Nuclear Officer,
19		Mr. Kundalkar stated:
20		In previous planning discussions with Armando and the
21		legal staff we had made them aware of the expected \$\$
22		estimated could be higher than the \$750 million for PTN
23		and the \$650 million for PSL based on Bechtel's recent
24		view. Therefore, in the May testimony we indicated that
25		FPL will update this related information as seon as final
26		analysis and designs are completed. Armando's advise
27		(sic) at the time was to introduce the topic and
28		collect/finalize the facts and scope for further submittal at
29		appropriate time.
30		
31		Therefore, the timing of getting the scope firmly defined and validation of estimates becomes very important. We
32		owa volidation of antimatea bacoming view (MMONTON) Wa

have laid out a schedule that Bechtel and the PTN/PSL/JW 1 teams are working to be ready for FPL-Bechtel meeting 2 scheduled for 6/12/09. Also, we will need the same 3 information for your review and Jim Robo meeting in mid-4 5 late June. 6 I believe the document shows that Mr. Kundalkar was concerned at the time that the 7 PSC Staff would observe the disparity between the estimates he included in his May 8 2009 prefiled testimony and the higher estimates that were contained in presentations 9 to senior management that Staff had requested. It appears to me that at the time he 10 was writing he regarded the conclusion of the period in which managers were 11 attempting to bring closure to the Bechtel-related challenges-scheduled to end in 12 late June—as the point at which pending issues of scope and estimates could be 13 14 clarified and the disparity between his testimony and presentations to management 15 could be addressed. 16 WHAT DID MR. KUNDALKAR SAY ABOUT THE DOCUMENT? 17 Q. During his deposition, Mr. Kundalkar denied that the memorandum is related to the 18 A. 19. subject of updating the May testimony. He maintained that the higher Bechtel estimates were "unvetted" and referred to the status of design engineering. I am 20 21 attaching the pertinent portion of the transcript of Mr. Kundalkar's deposition as Exhibit WRJ-11 (see pages TR-56-76). However, even if the witness either had no 22 23 intention of updating testimony at the time or changed his mind after he wrote the memorandum, based on the other matters I have described my opinion is that FPL 24 should have updated the testimony on estimated capital costs no later than the 26 September 2009 hearing.

27

1	Q.	DOES THE FACT THAT DURING THE SEPTEMBER 2009 HEARING
2		WITNESSES KUNDALKAR AND SIM WERE AVAILABLE ON THE STAND
3		TO ANSWER ANY QUESTIONS REGARDING POSSIBLE INCREASES
4		ALTER YOUR CONCLUSION?
5	A.	No.
6		•
7	Q.	WHY NOT?
8	A.	In the first place, I believe FPL had a responsibility to be forthcoming with the
9		information. In addition, neither witness was in a position to provide full information
10		in response to questions. This is because FPL did not share the fact of a revised
11		feasibility study containing higher (by \$300 million) July estimates of capital costs,
12	•	much less the even higher (by \$144 million) August estimate, with Dr. Sim, who
13		sponsored the feasibility study that was based on the May 2009 estimate. Further,
14		FPL did not inform Mr. Kundalkar, who helped present the July data to the BSC
15		shortly before he was assigned to a different position, that the uprate managers had
16		increased the estimate of capital costs again (by approximately \$144 million) in
17		August 2009 before he testified in September 2009. See Exhibits WRJ-12, WRJ-13,
18		and WRJ-11, at pages TR-131-134.
19		
20	Q.	BASED ON YOUR REVIEW AND ANALYSIS, WHAT DO YOU
21		RECOMMEND THAT THE COMMISSION FIND?
22	A.	I recommend that the Commission find that FPL failed to provide the best, most
23		current information regarding its estimate of capital costs during the September 2009
24	٠.	hearing when it elected to not update and revise the May 2009 prefiled testimony with
25		information that was developed between the May filing data and the Tabe 25, 0000

1		meeting of the ESC. Further, because the capital cost estimate is a key input to the
2		feasibility analysis required by Rule 25-6.0423, F.A.C., to satisfy that requirement
3		FPL should have updated the feasibility analysis to incorporate the more recent
4		estimate.
5		
6		VII.TURKEY POINT UNITS 6 AND 7
7	Q.	HAVE YOU REVIEWED THE STATUS OF TURKEY POINT 6 AND 7 AND
8		THE FPL'S MANAGEMENT OF THIS PROJECT?
9	A.	Yes, I have. I am not taking issue with FPL's approach to the Turkey Point 6 and 7
10		project at this time.
11	•	
12	Q.	DOES THAT CONCLUDE YOUR TESTIMONY?
13	A.	Yes, it does.

1

## BY MR. McGLOTHLIN:

2 3

Commissioners.

I will. Good morning, Mr. Chairman, Commissioners.

Please summarize your testimony for the

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My testimony -- in my testimony I address three issues that I have identified related to FPL's EPU projects underway at Turkey Point 3 and 4 and St. Lucie These issues are FPL's flawed methodology for estimating the long-term feasibility of the EPU projects, exhibiting dramatic and rapid increases in estimated costs, FPL's imprudence in selecting the fast-track project management approach for the extremely complex EPU projects when it had little grasp of what the EPU projects would cost or what they needed to cost to remain economically feasible, and finally FPL's failure to update its estimate of EPU capital costs in the 2009 hearing when it was clear that the then current estimates were far above the costs that FPL maintained was still valued.

In my testimony in the 2010 NCRC proceeding, I explained why the CPVRR methodology used by FPL to demonstrate economic feasibility of the EPU project was not appropriate and would provide misleading results when applied to the EPU project due to the uncertain and rapidly increasing cost estimates.

The continued cost increases experienced this year validate my concerns of last year. FPL has spent approximately \$700 million on the EPU projects, and the original estimate presented in the need case of \$1.798 billion has increased \$700 million to \$2.48 billion. Since FPL has spent as much on the project as the cost has increased, the estimated cost to complete the project is essentially unchanged, and the projects remain economically feasible, according to FPL's methodology.

This is obviously a situation in which the results are just not credible. I recommend that the Commission require FPL to implement a breakeven cost methodology for the EPU projects, as they have done for the Turkey Point 6 and 7 project.

I investigated how FPL got itself into this situation. I found that FPL adopted a fast track management approach for the project in which FPL's normal project development process was abandoned and they committed to the project with essentially no engineering completed, without a good idea of the cost for the project, and without even knowing what the project needed to cost to be economically feasible.

Because essentially none of the design was complete, it

was not possible to receive fixed or firm price bids, and the work is being constructed on a time and material basis.

Having been in the nuclear power business for many years, this situation seemed unfortunately familiar. The last generation of nuclear power plants were begun with incomplete designs, extremely optimistic cost estimates, and built on a time and material basis. I believe that most of us in this room know the results of those projects: Lengthy scheduled delays and massive cost overruns.

Based on the results of my review, I conclude that FPL was imprudent to abandon their normal construction processes and attempt the EPU projects on a fast track basis.

Finally, I was asked to review FPL's decision to not update the Commission on the most recent cost estimates for the EPU project during the 2009 NCRC proceeding. I reviewed the contemporaneous Executive Steering Committee presentations in the June through September 2009 time frame. I reviewed e-mail correspondence received in response to discovery. I reviewed Concentric Energy's report of their investigation of this issue. OPC issued a data request essentially asking for all of the documents that

Concentric reviewed and I reviewed those documents.

By September 2009, the forecast cost of the EPU projects increased by 444 million over the forecast costs presented by FPL in May 2009. As stated in my testimony, I agree with FPL's consultant John Reed that FPL should have made the Commission aware of those most recent cost estimates.

In my testimony I make the following recommendations for this Commission's consideration. I recommend that the Commission direct FPL to employ a breakeven analysis as the appropriate tool for which to assess the long-term feasibility of the EPU project. I recommend that this Commission require FPL to perform separate breakeven analyses for the St. Lucie and Turkey Point EPU projects. If the Turkey Point EPU project is determined to be uneconomic based on this analysis, FPL should be required to make an affirmative case for continuing this project.

I recommend that this Commission find that FPL's decision to embark on EPU projects using a fast track methodology was imprudent. The impact of this imprudence should be measured in terms of whether resulting costs exceed the final breakeven analysis as filed by FPL at the conclusion of the project and reviewed and approved by the Commission.

Finally, I recommend that the Commission find that FPL failed to provide the best, most current information regarding its estimate of capital costs during the September 2009 hearing when it elected to not update and revise the May 2009 prefiled testimony with information that was developed between the May filing date and the August 2009 estimates prepared by EPU project managers.

That concludes my opening statement.

MR. McGLOTHLIN: Dr. Jacobs is available for cross-examination.

CHAIRMAN GRAHAM: Are there any -- do any, any of the Intervenors have any questions?

MS. KAUFMAN: I have no questions. Thank you,
Mr. Chairman.

MS. WHITE: No, sir. Thanks.

CHAIRMAN GRAHAM: Florida Power & Light?

MR. ANDERSON: No questions for the witness.

Thank you.

## CHAIRMAN GRAHAM: Staff?

MR. YOUNG: Mr. Chairman, in lieu of cross for this witness, OPC and the parties have agreed that Staff can enter the deposition transcript of Witness Jacobs into the record in lieu of cross. And that would be identified -- Staff requests that it be marked for

identification purposes as Number 198.
CHAIRMAN GRAHAM: What will the short title
for that be?
MR. YOUNG: Deposition Transcript of Witness
Jacobs.
CHAIRMAN GRAHAM: Okay.
(Exhibit 198 marked for identification.)
MR. YOUNG: And that will be provided to you.
We're making copies as we speak.
MR. ANDERSON: Chairman Graham, could the
record also reflect FPL's continuing objection to the
admissibility of the testimony for the reasons stated in
the motion to strike.
CHAIRMAN GRAHAM: So noted.
Is Staff good?
MR. YOUNG: And with that, Staff has no
questions.
CHAIRMAN GRAHAM: Okay.
To the Commission board. Commissioner Edgar.
COMMISSIONER EDGAR: Thank you, Mr. Chairman.
First, just for my benefit, a clarification
I'd like to ask Mr. Anderson. Is the FPL objection to
all of this witness's prefiled testimony?
MR. ANDERSON: The objection is to the
portions which are specified in green and attached to

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the motion to strike, which address the legal matters 1 that we discussed at length yesterday. 2 COMMISSIONER EDGAR: All right. Thank you. 3 But obviously you have no questions on any of the 4 remainder of the prefiled testimony. MR. ANDERSON: That is correct. 6 COMMISSIONER EDGAR: I have just one or two, 7 if I may. 8 CHAIRMAN GRAHAM: Sure. 9 COMMISSIONER EDGAR: Good morning. 10 THE WITNESS: Good morning, Commissioner. 11 12 COMMISSIONER EDGAR: Yesterday I asked 13 Mr. Olivera one or two questions, and I said at the time that I would pose a similar question to you, so I want 14 to follow through on that. 15 And I recognize in your testimony, and you 16 have given it to us also in your summary, that it is 17 18 your belief that FPL failed to provide information to us 19 that they should have at a certain point in time. Is it your belief or opinion that FPL withheld 20 21 information that was required to be submitted to the Commission by either rule or statute? 22 23 THE WITNESS: That seems to me to be more of a legal question, but it's my belief that the -- that FPL 24 25 should have provided the most up-to-date information

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available to this Commission in order to allow you to make a decision based on the most current information.

commissioner EDGAR: Okay. And in your testimony at page 42, line 22, and I'll quote, your words are, "I recommend that the Commission find that FPL failed to provide the best, most current information regarding its estimate of capital costs." How do you define "best information"?

THE WITNESS: Well, that would be the information of the cost estimate that best reflects their, their current estimate of what the project will ultimately cost at the point in time that the testimony was given.

**COMMISSIONER EDGAR:** Is that possibly subjective?

guess the company has argued the other side of that.

But I believe if the, if there were small fluctuations in the cost estimate, then you could argue that those weren't relevant or material. However, from, from the cost estimate that the company testified to in May 2009, by the time of the hearing in September, the costs of the project had gone up \$444 million, which is a very significant and material change. So I believe if you have that degree of change, that should have been

provided to the Commission.

COMMISSIONER EDGAR: One second.

CHAIRMAN GRAHAM: Sure.

grappling with is the timing of everything, and of course we need to come back and, and look to the statutes and the rules as guidance for our decisions and for processes and procedures. And I understand your point about there being a legal question, and I'm sure that will be briefed and I look forward to that. But yet when I'm trying to think timeline of information coming in and going through processes and procedures and our need for, as has been stated, accurate information, I'm trying to find what to hang this fail to provide current information. Again, it just seems somewhat subjective. So I realize you've answered this question over and over and over, but I'm going to ask you to do it again.

How do -- how -- what are you basing current and best upon in your testimony before us?

THE WITNESS: Well, I'm basing it on the review of documents provided by the company, in particular the July 25th, 2009, presentation to the Executive Steering Committee that indicated a \$300 million cost increase was recognized in July of

2009. And again an August estimate increased the cost by another \$144 million. So by the time of the September hearing, it just seems clear to me that there was very compelling evidence that the cost of the project was going up dramatically, and so --

COMMISSIONER EDGAR: Future estimated costs?

THE WITNESS: Future, yes. Total, total

costs, total estimated costs.

COMMISSIONER EDGAR: Not costs incurred.

THE WITNESS: That's right, not costs incurred. And it continued to go up even beyond that point. So, I mean, I think there was no credible evidence that those costs were, were not accurate and that the cost testified to in 2009 was, was stale by that time, in May of 2009. Sorry.

COMMISSIONER EDGAR: Thank you.

CHAIRMAN GRAHAM: Commissioner Balbis.

COMMISSIONER BALBIS: Thank you, Mr. Chairman.

And I have a couple of questions for this witness.

And I want to focus on your testimony on page 14 concerning the imprudence of FPL's management of the EPU products -- or projects.

THE WITNESS: Yes.

COMMISSIONER BALBIS: And not focusing on the decision to fast track or not, where a good portion of

your testimony focuses on that, and you did indicate that, I believe it's on page 21, on whether or not the company was concerned about this situation. And I assume by the situation is the percentage of completion of the design or other preliminary work; is that correct?

THE WITNESS: Yes. Uh-huh.

COMMISSIONER BALBIS: And you indicated that they were concerned. Again, focusing on 2009 and 2010, did you see or find evidence of any action taken by FPL in 2009 and 2010 was imprudent in reaction to this, this concern?

THE WITNESS: No. No, I didn't. They were, they were committed to a fast track approach. The results of that commitment were the costs were increasing and the scope of the project was increasing beyond what they had originally estimated it to be. But by the 2009/2010 time frame they were committed to that approach, and I believe they were addressing those issues prudently at that point in time.

COMMISSIONER BALBIS: So the, the actions that you list, or at least one of them that you list on page 22, where FPL has hired an outside estimating firm to help cost out the completion, there was also the discussion on the option of them self-performing some of

the work, those decisions, would you feel those are imprudent or prudent, again in 2009 and 2010?

THE WITNESS: I believe those are prudent.

The reason those are in here was just to demonstrate that, again, that when they initiated this project, they didn't have a firm grasp for the scope or the, or the costs going forward. So by this time they called in help to help them get a better estimate, and I think that was prudent.

COMMISSIONER BALBIS: Okay. And then I have one question on one of your exhibits, and this will be my last question, Mr. Chairman. It's the graph that shows the percent complete. I forget which exhibit that is. I believe it's WRJ-FPL-4.

THE WITNESS: Yes. Let me, if I may, correct before, we go any further, one thing. The numbers on the side are not percentage numbers. Those are the number of modification packages.

COMMISSIONER BALBIS: Okay. That was the question that I had.

THE WITNESS: Okay.

COMMISSIONER BALBIS: And what does that number represent?

THE WITNESS: I think there was some confusion earlier about what those numbers represented. But, in

fact, that was the, that was the point of the correction I made to my testimony earlier when I began.

COMMISSIONER BALBIS: Okay.

THE WITNESS: Is that those are actually design modification packages, not a percentage complete.

COMMISSIONER BALBIS: And did you clarify in your testimony -- I believe you did, but, again, I want to avoid confusion. On the number of mods complete and manhours, there was an assessment on the earned value or actually work that has been done on each one of those mods in order to determine; is that correct?

THE WITNESS: That's correct.

COMMISSIONER BALBIS: Okay. Thank you. I have no further questions.

CHAIRMAN GRAHAM: Thank you.

Commissioner Brisé.

COMMISSIONER BRISÉ: Thank you, Mr. Chairman.

I have two questions, one going back to the line of questioning that Commissioner Edgar was on, and I'm going to ask you a very specific question.

So from your perspective, even if the company hadn't gone through its normal processes of vetting the information, you think that information should have brought, been brought to the Commission; is that your perspective?

THE WITNESS: Yes, sir.

COMMISSIONER BRISÉ: Okay. So then -- but from your perspective you think that that is the best and most accurate information that should be provided to the Commission, providing that all of the processes internally by the company have not been put in place with respect to those numbers?

THE WITNESS: Yes. I think they could have presented the information in that light: Our current formal estimate is the May 2009 estimate; however, we have very strong indications that the costs are going up. This is our current estimate; it may change slightly. But I think they should have provided that information in that light.

COMMISSIONER BRISÉ: But you would agree that reasonable people could disagree on the fact on whether you think that information should have been brought forth from the company's perspective?

THE WITNESS: Well, I believe reasonable people have disagreed on that, so I would agree with you.

(Laughter.)

COMMISSIONER BRISÉ: Okay. All right.

And, and down the path of 2009 and 2010, the actions that the company has taken between 2009 and 2010

with respect to projected costs and all of that, from your perspective, limiting to 2009, 2010, were the projected costs and the costs that were incurred actually prudent?

THE WITNESS: I'm sorry. I didn't fully understand that. Could you rephrase that or repeat that?

COMMISSIONER BRISÉ: Sure. When looking at 2009 and 2010, we will say -- I'm asking you do you think the actions that the company has taken with respect to the project in question were prudent?

THE WITNESS: Yes. I believe I addressed that earlier. But by the time -- once they had committed on the fast track project, they were sort of in the reactive mode and they were, they were reacting as best they could. And during that time frame I believe they were acting prudently once they got -- initiated the project as they had.

COMMISSIONER BRISÉ: Okay. The reason I asked that question is because we're, we're looking at 2009 and 2010.

THE WITNESS: That's correct.

COMMISSIONER BRISÉ: So -- thank you.

CHAIRMAN GRAHAM: Commissioner Brown.

COMMISSIONER BROWN: Thank you, Mr. Chairman.

And now I just have to ask a question as a follow-up to Commissioner Edgar's, because I was not completely satisfied with the answer that you gave regarding -- I know you're not a lawyer, but she asked you a question, Commissioner Edgar asked you a question about whether the company was required under law, under statute or rule to provide that information in September. And your answer -- if you could just elaborate a little bit more for me.

THE WITNESS: I'm afraid I'm going to have to give the same answer in that I'm not an attorney and I'm not really able to speak on what's required by rule or by law. But I think it is inherently the company's responsibility to provide the most up-to-date and accurate information to this Commission so you can have that information in your decision-making process.

COMMISSIONER BROWN: Okay. Thank you.

CHAIRMAN GRAHAM: All right. OPC for redirect?

#### REDIRECT EXAMINATION

#### BY MR. McGLOTHLIN:

Q Dr. Jacobs, with respect to the questions from Commissioners regarding your review of documents indicating that the estimate of capital costs had increased after the May 2009 prefiled testimony had been

submitted, did your review of those documents give you a sense of whether the project managers regarded the May 2009 estimate or the revised estimates in the July/August time frame as their view of the current situation?

A Yes. I believe they -- the July 2009 was a very detailed and specific meeting. And I think after that meeting, they, which indicated an increase of \$300 million in costs, I believe after that meeting, that was the cost estimate that was the operative estimate by the FPL managers.

Q And the Commissioners asked you some questions about the actions that FPL took in the 2009/2010 time frame. Do you have an opinion as to whether those actions have, have fully mitigated the impact on ratepayers or the decision to fast track this project?

A No, they have not. They've been, they've been reacting to the situation that they found themselves in as a result of the decision to fast track the project, and they have not fully mitigated the costs or impact.

MR. McGLOTHLIN: Thank you. I have nothing further.

CHAIRMAN GRAHAM: Okay. We have some exhibits to enter into the record.

MR. McGLOTHLIN: I move Exhibits 102 through

114. 1 CHAIRMAN GRAHAM: 102 through 114. 2 MR. McGLOTHLIN: We also have the revised and 3 corrected page to distribute at this point. 4 CHAIRMAN GRAHAM: Yes, that as well, if 5 6 there's no objections. 7 (Exhibits 102 through 114 admitted into evidence.) 8 9 MR. YOUNG: Mr. Chairman, at this time Staff moves 198. 10 11 CHAIRMAN GRAHAM: Also Staff's 198. Thank 12 you, sir. (Exhibit 198 admitted into evidence.) 13 14 MR. ANDERSON: Also, Chairman Graham, as proposed Exhibit 199, FPL offers some additional 15 16 excerpts from the Kundalkar deposition. Some pages are 17 in WRJ-11, Dr. Jacobs' attachment, and under the rule of 18 completeness we offer some additional pages. distribute those now. That will be Exhibit 199. 19 20 CHAIRMAN GRAHAM: I'll wait for you to 21 distribute to see if there's any objections. 22 This is Exhibit Number 199. Is there any 23 objection to entering 199 into the record? 24 MR. McGLOTHLIN: None from OPC. 25 CHAIRMAN GRAHAM: Staff?

1	MR. YOUNG: No objections.
2	CHAIRMAN GRAHAM: Okay. Then it's so.
3	(Exhibit 199 marked for identification and
4	admitted into evidence.)
5	Okay. Are we done with Dr. Jacobs for now?
6	MR. McGLOTHLIN: Yes, sir.
7	CHAIRMAN GRAHAM: Sir, thank you very much for
8	your testimony today.
9	THE WITNESS: Thank you.
LO	CHAIRMAN GRAHAM: Okay.
L1	OPC, is that it for your witnesses?
L2	MR. McGLOTHLIN: Yes, sir.
L3	CHAIRMAN GRAHAM: Staff?
L <b>4</b>	MR. YOUNG: Mr. Chairman, at this time Staff
L5	calls Lynn Fisher and David Rich to the stand. And I
L6	think they have been sworn.
L7	CHAIRMAN GRAHAM: Let the record show they
L8	both indicated they have been sworn.
_9	DAVID RICH
20	AND
21	LYNN FISHER
22	were called as witnesses on behalf of the Florida Public
23	Service Commission and, having been duly sworn,
24	testified as follows:
25	DIRECT EXAMINATION

1	MR. YOUNG: Good morning.									
2	THE WITNESS: (By Mr. Rich) Good morning.									
3	THE WITNESS: (By Mr. Fisher) Good morning.									
4	BY MR. YOUNG:									
5	Q Can you please state your full name and									
6	business address for the record.									
7	<b>A</b> (By Mr. Fisher) My name is Lynn Fisher. My									
8	business address is 2540 Shumard Oak Boulevard,									
9	Tallahassee, Florida.									
10	Q By whom are you employed and in what capacity?									
11	<b>A</b> (By Mr. Fisher) I'm employed by the Florida									
12	Public Service Commission as a Government Analyst II in									
13	the Office of Auditing and Performance Analysis.									
14	<b>Q</b> All right. Mr. Rich, can you please state									
15	your full name and business address for the record?									
16	<b>A</b> (By Mr. Rich) Yes. My name is David Rich.									
17	My business address is 2540 Shumard Oak Boulevard,									
18	Tallahassee, Florida, 32399.									
19	Q By whom are you employed and in what capacity?									
20	A (By Mr. Rich) The Florida Public Service									
21	Commission. I'm an Operations Review Specialist.									
22	Q Have you all jointly filed prefiled testimony									
23	consisting of five pages in this docket?									
24	A (By Mr. Fisher) Yes.									
25	<b>A</b> (By Mr. Rich) Yes, we have. Yes.									

Do you have any changes or corrections to that 1 2 testimony, that joint prefiled testimony? (By Mr. Fisher) 3 (By Mr. Rich) No, we don't. 4 MR. YOUNG: Mr. Chairman, at this time, I 5 request -- Staff requests that the joint prefiled 6 7 testimony of Mr. Fisher and Mr. Rich be entered into the record as though read. 8 CHAIRMAN GRAHAM: We will enter the joint 9 prefiled testimony of Fish and Rich into the record --10 I'm sorry -- Fisher and Rich into the record as though 11 12 read. BY MR. YOUNG: 13 Did you have two exhibits attached to your 14 joint prefiled testimony as relates to Florida Power & 15 Light, which is entitled 2010 Review of Florida Power & 16 Light Company's Project Management Internal Controls for 17 Nuclear Plant Uprate and Construction Projects, and 2009 18 Review of Florida Power & Light Company Project 19 Management Internal Controls for Nuclear Plant Uprate 20 and Construction Projects? 21 (By Mr. Rich) Yes, we did. 22 Do you have any changes or corrections to 23 those exhibits?

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(By Mr. Rich) No.

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MR. YOUNG: Mr. Chairman, at this time I will identify and ask that those identify, those exhibits be marked as exhibits, which are FR-1 and FR-2 respectively, and FR -- and those are Exhibit Numbers 115 and 116 on Staff's Comprehensive Exhibit List.

CHAIRMAN GRAHAM: Okay.

### 1 DIRECT JOINT TESTIMONY OF LYNN FISHER AND DAVID RICH

- 2 Q. Mr. Fisher, please state your name and business address.
- 3 A. My name is Lynn Fisher. My business address is 2540 Shumard Oak Boulevard,
- 4 Tallahassee, Florida 32399-0850.
- 5 Q. By whom are you employed?
- 6 A. I am employed as a Government Analyst II by the Florida Public Service Commission
- 7 (FPSC or Commission) in the Office of Auditing and Performance Analysis.
- 8 Q. What are your current duties and responsibilities?
- 9 A. I perform reviews and investigations of Commission-regulated utilities, focusing on
- 10 the effectiveness of management and company practices, adherence to company procedures,
- 11 | and the adequacy of internal controls. Mr. Rich and I jointly conducted the 2011 review of
- 12 Florida Power & Light Company's (FPL) project management internal controls for the nuclear
- plant uprates and new construction projects underway at the St. Lucie and Turkey Point sites.
- 14 Q. Please describe your educational and relevant experience.
- 15 A. In 1972, I graduated from Florida State University with a Bachelor of Science degree in
- 16 | Marketing. My relevant utility background includes over ten years in telecommunications
- 17 | industry sales, sales management, and marketing management positions, and over twenty
- 18 years experience with the FPSC in management auditing, performance analysis, process
- 19 reviews, and complaint investigation. Since joining the Commission, I have participated in
- 20 | numerous reviews of utility operations, systems, and controls, each of which culminated in a
- 21 written audit report similar to those attached as exhibits to this testimony. In 2008, 2009, and
- 22 | 2010, I participated in the review of FPL's project management controls for nuclear plant
- 23 | uprate and new construction projects. I have previously been involved in filing a report and
- 24 | testimony in Docket No. 080009-EI, Docket No. 090009-EI, and Docket No. 100009-EI.
- 25 Q. Have you filed testimony in any other dockets before the Commission?

- 1 A. Yes. In addition to the testimony filed in the dockets just discussed, I filed testimony
- 2 | in 2005 in Docket No. 050045-EI. The testimony consisted of a review of distribution electric
- 3 | service quality for FPL's Vegetation Management, Lightning Protection, and Pole Inspection
- 4 processes.
- 5 Q. Mr. Rich, please state your name and business address.
- 6 A. My name is David Rich. My business address is 2540 Shumard Oak Boulevard,
- 7 Tallahassee, Florida 32399-0850.
- 8 | Q. By whom are you employed?
- 9 A. I am employed as an Operations Review Specialist by the FPSC in the Office of
- 10 Auditing and Performance Analysis.
- 11 Q. What are your current duties and responsibilities?
- 12 A. I perform reviews and investigations of Commission-regulated utilities, focusing on
- 13 the effectiveness of management and company practices, adherence to company procedures
- 14 and the adequacy of internal controls. Mr. Fisher and I jointly conducted the 2011 review of
- 15 FPL's project management internal controls for uprate and new construction projects
- 16 underway at the St. Lucie and Turkey Point sites. In 2009 and 2010, I participated in the
- 17 | review of FPL's project management controls for nuclear plant uprate and new construction
- 18 projects and filed those reports as testimony in Docket No. 090009-EI and 100009-EI.
- 19 Q. Please describe your educational and relevant experience.
- 20 A. I am a 1978 graduate of the United States Military Academy at West Point, with a
- 21 Bachelor of Science degree and a concentration in Engineering. A Masters of Arts degree in
- 22 National Security Affairs from the US Naval Postgraduate School followed in 1987. I am also
- 23 | a graduate of the US Army Command and General Staff College and the Republic of Korea
- 24 Army Command and General Staff College. My relevant utility experience includes over
- 25 eight years with the FPSC in management auditing, utility performance analysis, process

1 reviews, and trend analysis. Since joining the Commission, I have participated in numerous 2 reviews of utility operations, processes, systems and controls, each of which culminated in a 3 written audit report similar to those attached as exhibits to this testimony. 4 O. Have you filed testimony in any other dockets before the Commission? 5 Yes. I have previously filed testimony in Nuclear Cost Recovery Clause proceedings A. in Docket No. 090009-EI and Docket No. 100009-EI. 7 Q. Please describe the purpose of your testimony in this docket. 8 A. Our testimony presents two audit reports entitled Review of Florida Power & Light 9 Company's Project Management Internal Controls for Nuclear Plant Uprate and 10 Construction Projects for the years 2010 and 2009 attached as Exhibits FR-1 and FR-2, 11 These reports were requested by the Commission's Division of Economic 12 Regulation to assist with the evaluation of nuclear cost recovery filings. 13 Exhibit FR-1 reviewed the period January 2010 through May 2011 and reports on key 14 project events, project controls, and contract activities for the St. Lucie Units 1&2 and Turkey 15 Point Units 3&4 uprate projects, and for the new construction project at Turkey Point Units 16 6&7. 17 Exhibit FR-2 reviewed the period January 2009 through April 2010 and reports on key 18 project events, project controls, and contract activities for the St. Lucie Units 1&2 and Turkey 19 Point Units 3&4 uprate projects, and for the new construction project at Turkey Point Units 20 6&7. Though this report was filed as testimony last year, it was not formally entered into the 21 hearing record. 22 O. Please summarize the areas examined by your review of controls. 23 A. The Office of Auditing and Performance Analysis conducted a review of the internal 24 controls and management oversight of the nuclear projects underway at FPL. We examined

the organizations, processes, and controls being used by the company to execute the Extended

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Power Uprate of St. Lucie Units 1&2 and Turkey Point Units 3&4 and the construction of the new Units 6&7 at Turkey Point. This is the fourth annual review of the company's controls for its nuclear uprate and construction projects. The 2008, 2009, and 2010 reports, entitled *Florida Power and Light Company's Project Management Internal Controls for Nuclear Plant Uprate and Construction Projects*, were published in August 2008, July 2009, and July 2010, and filed in Docket No. 080009-EI, Docket No. 090009-EI, and Docket No. 100009-EI, respectively. The primary objective of each annual review is to document project key developments, along with the organization, management, internal controls, and oversight that FPL has in place or plans to employ for these projects. The internal controls examined annually are related to planning, management and organization, cost and schedule controls, contractor selection and management, auditing, and quality assurance.

## Q. Does this conclude your testimony?

A. Yes.

# 

BY MR. YOUNG:

- Q Do you have -- do you all have a prepared summary of your joint prefiled testimony today?
  - A (By Mr. Rich) Yes.
  - Q Can you please provide that summary.
  - A (By Mr. Rich) Yes. Thank you.

Good morning, Mr. Chairman, Commissioners.

Mr. Fisher and my testimony presents, presents a review of the project controls in key events impacting Florida Power & Light's St. Lucie 1 and 2 and Turkey Point 3 and 4 uprate project, and the Turkey Point 6 and 7 new nuclear project during 2007 -- correction, 2010 into 2011.

Additionally, Staff conducted a follow-up review of events leading to and following the extended power uprate management changes in 2009. Project controls examined during our review include the areas of planning, management and organization, cost and schedule controls, contractor selection and management, auditing and quality assurance for new nuclear construction.

During 2010, Florida Power & Light slightly revised its cost estimates for new nuclear construction at Turkey Point Units 6 and 7. The final estimated cost now lies in a range from 12.85 billion to

\$18.75 billion. The in-service dates for Turkey Point Units 6 and 7 are 2022 and 2023 respectively.

Florida Power & Light filed its combined operating license application with the Nuclear Regulatory Commission in June 2009 and is currently focused on responding to requests for additional information from the NRC. The company expects to receive final approval in late 2013, with major site preparation work beginning the following year.

Florida Power & Light's decision to remove the limited work authorization from its application in November 2009 ensures that major construction will not begin until after the full license approval.

Florida Power & Light did not execute an engineering procurement and construction contract for Turkey Point 6 and 7 during the year 2010. Staff believes that the window of opportunity for negotiating and signing such a contract is still relatively distant, but must be in place by 2013 or 2014 to avoid schedule impact.

The reservation agreement for long-lead forging has again been extended, this time until September of this year. Staff believes that forging issues likewise must be settled and manufacturing begun by 2015 in order to meet current in-service dates.

Staff made no specific recommendations in this report for the Turkey Point 6 and 7 project, although we believe that the Commission should continue to closely monitor all new nuclear controls, costs, activities, and schedule as the Turkey Point 6 and 7 project transitions from licensing to site preparation and construction.

THE WITNESS: (By Mr. Fisher) Commissioners,
Florida Power & Light's uprate project for the St. Lucie
Units 1 and 2 and Turkey Point Units 3 and 4 experienced
several key project developments during 2010. The
current and nonbinding cost estimate for the extended
power uprate project is 2.3 billion to \$2.48 billion.
The high end of this estimate range represents an
increase of 37.9% over the original need determination
estimate of \$1.8 billion.

Several key events impacted the uprates in 2010: The submittal of the St. Lucie Unit 1 EPU LAR, the submittal of the St. Lucie Unit 2 EPU LAR, the submittal of the Turkey Point EPU LAR, and several work stoppages at Turkey Point and St. Lucie.

In addition, three of the four remaining outages have been extended and a vendor project management team at Turkey Point 3 and 4 have been removed.

Additionally, Staff conducted a follow-on

review of events leading to the EPU management changes 1 of 2009. Staff found no evidence of improper or duplicate invoicing, unnecessary work or rework, 3 overpayments, overcharging, or other examples of 4 mismanagement by the former EPU management team. 5 This concludes our summary. 6 MR. YOUNG: Mr. Chairman, I tender the 7 witnesses for cross. 8 CHAIRMAN GRAHAM: Intervenors? 9 10 MS. KAUFMAN: I have questions. 11 CHAIRMAN GRAHAM: Sure. 12 MS. KAUFMAN: Thank you. 13 CROSS EXAMINATION BY MS. KAUFMAN: 14 15 Good morning, gentlemen. 16 (By Mr. Fisher) Good morning. 17 (By Mr. Rich) Good morning. 18 Vicki Kaufman for the Florida Industrial Power 19 Users Group. 20 Can I take from your summary that, Mr. Fisher, 21 you were the person responsible for issues relating to 22 the EPU uprate? 23 (By Mr. Fisher) I wrote the portion of our 24 report that related to EPU. However, Mr. Rich conducted 25 the follow-up portion, so -- I was involved in a

different audit at that time. So he would be the one that, that would handle most of the questions relating to the follow-up.

Q Okay.

A (By Mr. Rich) I might also add, Ms. Kaufman, that our work is, is a combined effort, and that although we perhaps spent more time and energy on certain aspects of it and delineated the work in that manner, we're both fully capable of answering. We'll opine and bump in when we think it's appropriate, if that's all right with you.

Q Absolutely. And so what I'll do is I'll ask my question, and you gentlemen decide who's the appropriate person. And if one finishes and the other has a comment to add, that's perfectly fine.

A (By Mr. Rich) Thank you.

Q The area that I want to talk to you about, and I'm going to be looking at Exhibit 115, which is your 2010 review.

A (By Mr. Rich) Uh-huh.

Q And I want to just talk to you for a moment about the extended power uprate events and developments. And if you can look, on my copy it's Section 1.4.3 in the beginning.

A (By Mr. Rich) Could you cite a page for me,

please?

Q I think it's page 4 of the report, as opposed to your testimony.

- A (By Mr. Rich) Page 4. Thank you.
- And let me know when you're there.

And I think, Mr. Fisher, you alluded to this area in your summary. But if you look under Section, it's actually 1.4.3, the third paragraph there, you say, "During 2009, FPL's senior management made the decision to replace the EPU management team. Senior management appears to have believed the management team could not provide the necessary control of EPC contractor estimates and that more aggressive actions were required." Do you see that?

- A (By Mr. Fisher) Yes.
- Q Can you explain, first of all, how you reached your conclusion that senior management thought that the management team of the EPU project couldn't provide the necessary controls?
- A (By Mr. Fisher) Yes. Most of this was related to the company's response to our questions related to why, why was there a change made to the team. The response indicated that senior management was not totally happy with the, with the ability to, to question and to push back on the vendor, in this case the EPC

1	vendor, and therefore felt like there needed to be a									
2	change in management.									
3	Q Was, was the entire management team replaced									
4	for the EPU project?									
5	<b>A</b> (By Mr. Fisher) At least two, two of the VPs									
6	were. I'm not sure that I think there are still									
7	people involved there that were on the team that, that									
8	are working today.									
9	${f Q}$ Let me rephrase that inartful question.									
10	Were the, the top managers or top executives									
11	on that team replaced?									
12	<b>A</b> (By Mr. Fisher) Yes. One I think was going									
13	for an additional, a different job and so forth. So, in									
14	other words, was, was, I think continued to work with									
15	the company for a while and then later left.									
16	Q In a different capacity they continued to work									
17	for FPL.									
18	A (By Mr. Fisher) Yes. Yes. A different									
19	capacity. Thank you.									
20	<b>Q</b> And you make some reference, I guess, to what									
21	we've come to call the Concentric report. You reviewed									
22	that report?									
23	<b>A</b> (By Mr. Fisher) Yes.									
24	Q And Concentric came to a similar opinion									
25	regarding the performance of the prior EPU team, did									

1	they not?
2	A (By Mr. Fisher) I'm sorry?
3	$oldsymbol{Q}$ I'm sorry. In the on the same paragraph
4	I've been looking at, 1.4.3, you talk about an
5	investigative report by Concentric.
6	A (By Mr. Fisher) Uh-huh.
7	Q And you say that confirms your opinion
8	regarding the performance problems with the EPU team.
9	A (By Mr. Fisher) Yes. That and the company's
10	response.
11	MS. KAUFMAN: Thank you. That's all I have.
12	CHAIRMAN GRAHAM: Okay.
13	MR. McGLOTHLIN: No questions.
14	MR. WHITLOCK: No questions, Mr. Chairman.
15	CHAIRMAN GRAHAM: Florida Power & Light?
16	MR. ANDERSON: Yes, FPL does have a few
17	questions.
18	CROSS EXAMINATION
19	BY MR. ANDERSON:
20	Q I believe Ms. Kaufman was just asking you some
21	questions about Exhibit 116, is that right, which was
22	the report you prepared in July 2010?
23	A (By Mr. Rich) Yes.
24	Q Okay.
25	MR. ANDERSON: I'm going to ask that an

1	exhibit be distributed.
2	ms. kaufman: Mr. Chairman, just for clarity,
3	I think it was 115, just so the record is clear.
4	CHAIRMAN GRAHAM: Okay.
5	MR. YOUNG: I think it's 116.
6	MS. CANO: I may be able to help.
7	CHAIRMAN GRAHAM: Unless I'm going crazy, I
8	have it down as 115.
9	MR. YOUNG: I'm sorry. It's FR-2, and that's
10	116.
11	MR. ANDERSON: Okay. So
12	MR. YOUNG: That's what Ms. Kaufman was asking
13	about, FR-2.
14	CHAIRMAN GRAHAM: I have in my fingers, it's
15	FR-2, but the cover sheet says "July 2010." And looking
16	at the exhibit sheet, I have 115, FR-1, and the
17	description says "2010 Review of Florida Power & Light."
18	MS. KAUFMAN: I'm sorry, Mr. Chairman. I've
19	created a lot of confusion. Mr. Anderson or Ms. Cano is
20	correct. It's 116. I apologize.
21	CHAIRMAN GRAHAM: Okay. Thanks for confusing
22	${\sf me}$ .
23	(Laughter.)
24	Let's continue.
25	MR. ANDERSON: Great. Thank you.

### BY MR. ANDERSON: 1 Now that we're clear, the questions you were 2 just asked pertain to Exhibit 116 from July 2010; is 3 that right? 4 5 (By Mr. Rich) Yes. And since that time you've prepared a new 6 report, which is the July 2011 report, Exhibit 115; is 7 that correct? 8 9 (By Mr. Rich) That's correct. Okay. I've distributed a document which we've 10 marked as -- I'd asked be marked as Exhibit Number 200, 11 I think we're up to. And the short name for this would 12 be EPU 2009 Management Change, FPSC Audit Work Paper. 13 14 Do you have that before you? (By Mr. Rich) I do, yes. 15 (Exhibit 200 marked for identification.) 16 17 BY MR. ANDERSON: 18 Okay. Is this a document that you gentlemen 0 19 prepared? (By Mr. Rich) Mr. Fisher was not involved in 20 the EPU look back. This is a document I prepared. 21 22 Okay. Thank you, Mr. Rich. And in roughly Q what time period do you prepare this document? 23 24 (By Mr. Rich) We conducted this review between 25 September and December of last year.

1	Q Okay. And that's after the report Ms. Kaufman									
2	just asked you about; right?									
3	A (By Mr. Rich) Yes, it is.									
4	<b>Q</b> Okay. And just directing your attention to									
5	this document, it states an issue at the top, "Did the									
6	2009 EPU management changes cause or directly lead to									
7	cost overruns, unnecessary work or rework? Was the EPU									
8	management changeover the result of mismanagement?"									
9	That was the issue you were addressing, Mr. Rich?									
.0	A (By Mr. Rich) Yes, it was.									
.1	Q Then directing down about a third of the way									
.2	down the page under Condition, it says, "What is									
.3	happening? In concluding days of the 2010 hearings,									
.4	several Commissioners had questions they felt were not									
.5 <sup>.</sup>	adequately addressed by FPL during the proceedings.									
.6	These form the basis of a follow-on review conducted in									
.7	late 2010. The majority of questions were directly									
.8	investigated and answered by a thorough review of									
.9	circumstances and events leading up to and following the									
0	changeover." Did I read that correctly?									
1	A (By Mr. Rich) You did. But I would not place									
2	the emphasis on it that you did, sir.									
3	<b>Q</b> Okay. I understand. But I read the document									
4	correctly?									
5	A (By Mr. Rich) Yes, you did.									

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	Q	And	l th	nat's	what	kind	of	teed	up	the	additional	1
work	you	did	in	the	latter	r part	to :	f, of	201	.0 ir	n preparin	9
this	repo	ort f	or	2011	?							

- A (By Mr. Rich) Yes, sir. If I might, a thorough review was done of the transcript from last year. The Commissioners' questions, then serving and currently serving, were excerpted from that. Those questions formed the basis of the following review.
- **Q** Very good. Thank you. And it relates here work that you did. You did five document requests; is that right?
  - A (By Mr. Rich) Yes, there were five.
- Q Six on-site or phone interviews with FPL personnel?
  - A (By Mr. Rich) Yes.
- Q You talked to Mr. Reed, the CEO of Concentric Energy Advisors, in person?
  - A (By Mr. Rich) We did, yes.
- Q And then the third paragraph -- let me see if I've got this right. "While the documentary evidence and interviews in many places strongly support the Concentric findings, there was no direct or compelling evidence discovered of unnecessary rework, overpayments or overcharging or mismanagement on the part of the former EPU management team." Did I get that right?

- A (By Mr. Rich) Yes, you did.
- Q Okay. And then going on, "Staff would opine that FPL missed a golden opportunity to be fully forthcoming with the Commission and the public about anticipated cost increases, but was not compelled to divulge more information than they did under current Commission orders or Florida Statutes." Did I get that right?
  - A (By Mr. Rich) That's my opinion. Yes.
  - Q Right.

MR. ANDERSON: FPL has nothing further, but we'll offer Exhibit 200 into evidence.

CHAIRMAN GRAHAM: Okay.

Staff? I'm sorry. These are your witnesses.

Commission board?

Commissioner Balbis.

COMMISSIONER BALBIS: Thank you, Mr. Chairman.

I have a question for either of you, whoever is best to answer. And, again, based on this exhibit that was just passed out with the Bureau of Performance Analysis finding summary, with the complete change of the management team, did you find that -- and you have here no examples of overpayments, overcharging, or mismanagement. I assume that has to do with the vendors that are working for FPL; is that correct?

THE WITNESS: (By Mr. Rich) Yes, sir. If I might explain how we did that.

For a period of three months before the changeover and three months after we looked at 55, correction, 54% of the total expenditures by invoice of the five, five major vendors, and for the three-month period after the EPU changeover we looked at those same five vendors, 64% of expenditures. In those invoices we saw no evidence of duplicative work, overpayment, overcharging by the contractor. In fact, we saw evidence of appropriate push back when the vendor tried to overcharge.

commissioner Balbis: And did you analyze any of the work performed by FPL? And just to clarify, I mean, I would assume that the, the changing of an entire management team would require a lot of time getting up to speed for the personnel, et cetera. I mean, did your analysis include the internal work by FPL?

THE WITNESS: (By Mr. Rich) I don't know what degree to which you're referring as far as our investigation, sir. But I would answer it in this way, that we queried FPL senior executives on the changeover process and also looked at personnel records for both the incoming and the outgoing personnel involved. There was no evidence of dissatisfaction on the part of senior

FPL executives with the previous management of the EPU. In my investigation or my review it didn't appear that that was a -- was causation for the changeover.

And in querying FPL senior representatives, they, they opined that this was a matter of normal progression and transition in the company that had been done previously in the past and was a normal course of business events, to transition as the project transitioned, to get the right people in the right jobs at the right time.

COMMISSIONER BALBIS: So you're saying that FPL's response was, it was the normal process to change out the entire management team; is that correct?

THE WITNESS: (By Mr. Rich) No, sir, that's not my response. The response was in changing out Mr. Kundalkar specifically it would have been a normal transition process.

GOMMISSIONER BALBIS: Okay. And, again, I guess what I'm focusing on is, is I would assume that changing out of a management team for any project requires a lot of -- could require duplicative work by the management team, again, getting up to speed, additional hours spent that, you know, you could consider rework by the management team because the other team was up to speed. I mean, did you review that? Do

you have any indications of that? 1 THE WITNESS: (By Mr. Rich) No, sir. We 2 didn't review that. We focused on the vendor as far as 3 rework or duplicative work went. 4 COMMISSIONER BALBIS: Okay. Thank you. 5 have nothing further. 6 CHAIRMAN GRAHAM: Staff for redirect. 7 MR. YOUNG: Just one question. 8 REDIRECT EXAMINATION 9 BY MR. YOUNG: 10 Earlier in your, your response to Mr. Anderson 11 under Condition 2, what's happening, you said you would 12 not place the emphasis that Mr. Anderson placed on 13 reading that first paragraph. Can you explain why you 14 would not place that emphasis on that? 15 (By Mr. Rich) It's a subjective opinion, but Α 16 I would read the sentence as written without more 17 emphasis on the word "thorough." 18 MR. YOUNG: No further questions. 19 CHAIRMAN GRAHAM: Okay. We have some exhibits 20 to enter? 21 MR. YOUNG: Yes, sir. At this time Staff 22 moves 115 and 116 into the record. 23 CHAIRMAN GRAHAM: We'll move 115 and 116 into 24 the record. 25

(Exhibits 115 and 116 admitted into evidence.) 1 MR. ANDERSON: FPL offers Exhibit 200 into the 2 record. 3 MR. YOUNG: No objection. 4 CHAIRMAN GRAHAM: I don't see any objections, 5 so we'll offer, enter -- I'm sorry. We'll enter Exhibit 6 Number 200 into the record as well. 7 (Exhibit 200 admitted into evidence.) 8 Staff, are we finished with this witness? 9 MR. YOUNG: Yes, sir. We ask that the 10 witnesses be excused from the hearing. 11 CHAIRMAN GRAHAM: Do we have any objection to 12 the two witnesses being excused? 13 Seeing none, gentlemen, thank you very much 14 for your testimony today. 15 THE WITNESS: (By Mr. Rich) Thank you, Mr. 16 17 Chairman. MR. YOUNG: Mr. Chairman, at this time, with 18 the witnesses being excused, Staff will ask that 19 Ms. Kathy Welch's prefiled exhibit and -- prefiled 20 testimony and exhibits be entered into the record. She 21 is a stipulated witness that the parties all agree to 22 stipulate, and the Commissioners do not have any 23 questions for Ms. Welch. And that's 117 -- I'm sorry. 24

FLORIDA PUBLIC SERVICE COMMISSION

Those are Exhibits 117, 118, 119, and 120, along with

25

1	her prefiled direct testimony.
2	CHAIRMAN GRAHAM: 117, 18, 19, and 20.
3 .	Ms. Welch was already stipulated. There's no objection
4	to entering those into the record?
5	Seeing none, we'll do that.
6	(Exhibits 117, 118, 119, 120 admitted
7	evidence.)
8	MR. YOUNG: And just for the record, we did
9	move her testimony into the record.
10	CHAIRMAN GRAHAM: Yes.
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#### DIRECT TESTIMONY OF KATHY L. WELCH 1 2 0. Please state your name and business address. My name is Kathy L. Welch, and my business address is 3625 N.W. 82nd Ave., 3 A. Suite 400, Miami, Florida, 33166. 4 By whom are you presently employed and in what capacity? 5 O. I am employed by the Florida Public Service Commission as a Public Utilities 6 A. Supervisor in the Office of Auditing and Performance Analysis. 7 How long have you been employed by the Commission? 8 Q. 9 I have been employed by the Florida Public Service Commission since June, 1979. A. 10 Briefly review your educational and professional background. Q. 11 A. I have a Bachelor of Business Administration degree with a major in accounting 12 from Florida Atlantic University and a Masters of Adult Education and Human Resource 13 Development from Florida International University. I have a Certified Public Manager 14 certificate from Florida State University. I am also a Certified Public Accountant licensed 15 in the State of Florida, and I am a member of the American and Florida Institutes of 16 Certified Public Accountants. I was hired as a Public Utilities Analyst I by the Florida Public Service Commission in June of 1979. I was promoted to Public Utilities 17 18 Supervisor on June 1, 2001. Please describe your current responsibilities. 19 Q.

- A. Currently, I am a Public Utilities Supervisor with the responsibilities of administering the District Office and reviewing work load and allocating resources to complete field work and issue audit reports when due. I also supervise, plan, and conduct utility audits of manual and automated accounting systems for historical and forecasted data.
- 25 Q. Have you presented testimony before this Commission or any other

1	regulatory	agency?
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- 2 A. Yes. I have testified in several cases before the Florida Public Service
- 3 Commission. Exhibit KLW-1 lists these cases.
- 4 Q. What is the purpose of your testimony today?
- 5 A. The purpose of my testimony is to sponsor the staff audit report of Florida Power
- 6 & Light Company (FPL or Utility) which addresses the Utility's filing in Docket No.
- 7 | 110009-EI Nuclear Cost Recovery Clause for costs associated with its proposed nuclear
- 8 units called Turkey Point 6 and 7. We issued an audit report in this docket for the
- 9 proposed nuclear units on May 23, 2011. This audit report is filed with my testimony and
- 10 is identified as Exhibit KLW-2.
- 11 Q. Was this audit prepared by you or under your direction?
- 12 **A.** Yes, it was prepared under my direction.
- 13 Q. Please describe the work you performed in these audits.
- 14 A. We reconciled the filing to the general ledger and verified that the costs incurred
- were proper and capitalized to the appropriate account.

### Construction Work in Progress

- We sampled and verified the Company's pre-construction cost for the year ending
- 18 December 31, 2010. We included an assortment of vendors and high dollar amounts in
- 19 | the sample. Each transaction was traced to supporting documentation, examined to
- 20 determine if the cost was appropriately capitalized, and recalculated as needed. Affiliate
- 21 transactions were traced to support and compared to market rates. Payroll entries were
- 22 traced to timesheets and payroll details and examined to ensure proper payroll
- 23 distribution. Cash Vouchers were traced to invoices and contracts. Support for accruals
- 24 and other journal vouchers were examined, determined to be reasonable, and recomputed.

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## True-up

We obtained Account 107, Construction Work In Progress (CWIP) cumulative balance at December 31, 2010, the CWIP balance breakdown by project, and the general ledger excerpt for this period's project cost. We reconciled the projects total cost to the CWIP balance. We reconciled the cumulative project balance at year end to this period's project cost and reconciled the amount to the general ledger excerpt balance. From the ledger balance, we subtracted all non-incremental and carrying charges for both preconstruction and site selection to arrive at the pre-construction cost reflected on the Utility's schedule T-6.

We reconciled the Utility's Schedule T-1 – Revenue Requirement Summary schedule to the Pre-construction/Site Selection and Deferred Tax Carrying Cost schedules on Schedules T-2 and T-3A, respectively. We verified the Company's jurisdictional cost and recomputed all schedules for mathematical accuracy. Supporting documents for all adjustments were examined and the amounts were recomputed. We reconciled the beginning balances and carrying cost rates on the schedules to Commission Orders PSC-08-0749-FOF-EI, PSC-09-0783-FOF-EI, the Proposed Stipulation of Issues in PSC-11-0095-FOF-EI, and the revised prior year NCRC filings in Docket No. 100009-EI.

## Q. Please review the audit findings in this audit report, Exhibit KLW-2.

A. There was one finding in this audit related to lobbying expense. It has been Commission practice to disallow cost for direct lobbying or in support of direct lobbying activities. This Commission has maintained that costs of such activities should be borne by the stockholder since there is no evidence that the ratepayers receive any benefits from these expenditures.

During the testing of Pre-Construction expenditures, we found two entries for lobbyist registration fees for seven Company employees totaling \$3,430 (\$490 per

	1								
1	lobbyi	st x 7 Company e	mployees).	The invoice	ces are title	ed "Miami	-Dade	County	2010
2	Lobby	rist Registration."	If the C	Commission	disallows	the cost	stated	above,	Pre-
3	Const	ruction cost, Carry	ing Cost or	n Pre-Constr	ruction Cos	t, and De	ferred (	Carrying	Cost
4	would	be reduced by \$3,	389, \$292, a	and \$126, re	spectively.				
5	Q.	Does that conclu	de your tes	stimony?					
6	A.	Yes.							
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1	MR. YOUNG: At this time, Mr. Chairman, I
2	think we are on FPL's rebuttal.
3	CHAIRMAN GRAHAM: Okay. It seems like a nice
4	little place to take a pause. So I have 10:30. Let's
5	take a five-minute break. We'll reconvene at 10:35.
6	(Recess taken.)
7	Okay. We will reconvene and we are at
8	rebuttal.
9	Mr. Anderson, Florida Power & Light's got the
10	floor.
11	<b>MR. ANDERSON:</b> Thank you, Chairman Graham. At
12	this time, FPL would call as its first rebuttal witness
13	our President and Chief Executive Officer, Armando
14	Olivera, who the record will show was previously sworn
15	yesterday afternoon.
16	CHAIRMAN GRAHAM: Welcome.
17	THE WITNESS: Thank you.
18	ARMANDO OLIVERA
19	was called as a rebuttal witness on behalf of Florida
20	Power & Light Company and, having been duly sworn,
21	testified as follows:
22	DIRECT EXAMINATION
23	BY MR. ANDERSON:
24	Q Good morning, Mr. Olivera.
25	A Good morning, Mr. Anderson.

1	${f Q}$ Will you please reintroduce yourself for the
2	record.
3	A I'm Armando Olivera. I work for Florida Power
4	& Light. I'm President and Chief Executive Officer.
5	Q Have you prepared and caused to be filed two
6	pages of prefiled rebuttal testimony in this proceeding
7	on July 25, 2011?
8	A I have.
9	<b>Q</b> Do you have any changes or revisions to your
10	rebuttal testimony?
11	A No.
12	$oldsymbol{\mathtt{Q}}$ If I asked you the same questions contained in
13	your prefiled rebuttal testimony, would your answers be
14	the same?
15	A Yes.
16	MR. ANDERSON: Chairman Graham, FPL requests
17	that the prefiled rebuttal testimony be inserted into
18	the record as though read.
19	CHAIRMAN GRAHAM: We will insert into the
20	record, Mr. Olivera's rebuttal into the record as though
21	read.
22	MR. ANDERSON: We note for the record there
23	are no exhibits.
24	

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		REBUTTAL TESTIMONY OF ARMANDO J. OLIVERA
4		<b>DOCKET NO. 110009-EI</b>
5		JULY 25, 2011
6		
7	Q.	Please state your name and business address.
8	A.	My name is Armando J. Olivera. My business address is Florida Power &
9		Light Company, 700 Universe Boulevard, Juno Beach, Florida 33408.
10	Q.	Have you previously provided testimony in this docket?
11	A.	Yes.
12	Q.	What is the purpose of your rebuttal testimony?
13	<b>A.</b>	My rebuttal testimony addresses the direct testimony provided by William R.
14		Jacobs on behalf of the Office of Public Counsel.
15	Q.	Please provide a summary response to Witness Jacobs's testimony.
16	A.	The heart of Mr. Jacobs's claim is that FPL's 2007 decision to undertake the
17		Extended Power Uprate Project (EPU project) on an expedited basis was
18		imprudent.
19		
20		Based on this claim, Mr. Jacobs asserts that capital costs of the EPU project
21		should be disallowed to the extent EPU generation costs may be projected to
22		exceed natural gas generation costs.
23		

This "heads I win, tails you lose" claim is absolutely contrary to the regulatory 1 framework provided for by the Legislature and the Commission aimed at 2 promoting the development of new nuclear generation which has been relied 3 upon by FPL in undertaking the EPU project on an expedited basis. 4 5 In the 2007 EPU project need determination case, FPL made it absolutely 6 clear that the regulatory framework contained in the nuclear cost recovery 7 statute and rule were essential to its willingness to undertake this capital-8 intensive nuclear investment on an expedited basis. FPL therefore asked that 9 the Commission confirm that the nuclear cost recovery framework would 10 apply to the EPU project, which the Commission did in its need determination 11 12 order. 13 14 To be very clear, absent the assurances requested by FPL and provided by the Commission in its EPU project need determination order that the nuclear cost 15 16 recovery regulatory framework would be applied to the EPU project, FPL 17 would not have undertaken the EPU project on an expedited basis and would 18 have constructed natural gas fired generation. 19 Q. Does this conclude your testimony? 20 A. Yes.

### BY MR. ANDERSON:

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summary to the Commission.

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Thank you. Α

project on an expedited basis.

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FPL would not have undertaken the extended power uprate project on an expedited basis absent the application of the nuclear cost recovery framework to the project and absent the Commission's need determination approving FPL's pursuit of the uprate

Mr. Olivera, would you please provide your

The Office of Public Counsel's assertion that the capital cost of the project should be disallowed to the extent that uprate generation costs may be projected to exceed natural gas generation costs is a heads win, tails you lose approach. This suggested result is absolutely contrary to the regulatory framework provided by -- for by the Legislature and the Commission aimed at promoting the development of new nuclear generation.

In 2007, the EPU project need determination case, our company made it very clear that the regulatory framework for nuclear cost recovery was essential to FPL's willingness to undertake this capital intensive nuclear investment on an expedited basis.

The Commission should reject the attempt to revisit this decision in hindsight three years after the

issuance of the need determination approving the project.

This concludes my summary.

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

CHAIRMAN GRAHAM: Intervenors?

MR. McGLOTHLIN: I'll begin.

CHAIRMAN GRAHAM: Mr. McGlothlin.

#### CROSS EXAMINATION

#### BY MR. McGLOTHLIN:

Q Sir, refer to page 1 of your prefiled rebuttal testimony, and you also made this statement during your summary. At lines 20 through 22, you say, "Mr. Jacobs asserts that capital costs of the EPU project should be disallowed to the extent EPU generation costs may be projected to exceed natural gas generation costs."

Isn't it true, Mr. Olivera, that Dr. Jacobs' mechanism would involve not just natural gas generation costs but the present value of the revenue requirements of FPL's entire system?

A Yes. But the natural gas prices have a huge impact on the analysis. When this Commission approved the uprate project, natural gas that year was \$9. Today natural gas is under \$4, and that would have a big impact on this. And it's precisely the issue that we're

arguing, which is you can't -- we have no control of natural gas, and you want to go back and rewrite the history and say, okay, three years later the price of natural gas has changed, and we're going to rerun the analysis and we're going to rerun the breakeven analysis. That was precisely what the rule was intended to address, precisely what the legislation was intended to address.

- Q You said you would rerun the breakeven analysis. Isn't it true that, isn't it true that FPL has not performed and quantified the breakeven value for the EPU project?
  - A I'm sorry. I didn't follow your question.
- Q In your statement a moment ago you said that we're calling on FPL to rerun the breakeven analysis.

  I'm using breakeven in terms, in terms of the quantification of the maximum value in dollars per KW that FPL could spend on the uprate project and remain at or below the corresponding revenue requirement of the alternative portfolio.

And isn't it true that earlier witnesses for FPL in this case have said that FPL has not performed such a breakeven analysis for the uprate project?

A I believe that Mr. Sim addressed the issue.

But intuitively, when you have a big change in

1	natural gas prices, that would change the economics.
2	Now we have run the analysis based on the current
3	forward prices, and even at the current forward prices
4	the uprate projects still make a lot of economic sense
5	for our customers, not only because they provide real
6	benefits, savings to the customers, but also because
7	they provide fuel diversity. They represent a hedge on
8	our system.
9	And I'd just like to give you one example.
LO	Last year
L1	Q Excuse me, sir.
L2	MR. McGLOTHLIN: I believe that's well beyond
L3	the scope of my question, Mr. Chairman.
L4	CHAIRMAN GRAHAM: I agree.
L5	Mr. Olivera, if you can answer the question,
L6	and you get a little latitude to explain your answer.
L7	THE WITNESS: Yes, sir.
L8	MR. McGLOTHLIN: And that's my last question.
L9	CHAIRMAN GRAHAM: Okay.
20	Any of the other Intervenors?
21	Ms. Kaufman.
22	CROSS EXAMINATION
23	BY MS. KAUFMAN:
24	Q Good morning again, Mr. Olivera.
25	A Good morning.

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Q I just have one question for you, I think, and it had to do with some remarks you made in your summary, and you have them in your prefiled testimony as well.

And basically, as I understood what you said, you're contending that the legislative framework that is at issue in this case, that you relied upon that when you moved forward with the EPU project.

A We relied on both the legislation and the rule and the decision made by this Commission when they approved the uprate project.

Q Let me ask you this about the legislative framework and rule. Is there anywhere in that statute or rule that permits the company to recover costs from ratepayers that are either unreasonable or unnecessary?

A I believe that the -- that --

Q If you wouldn't mind answering yes or no, I would appreciate that.

A No, by my interpretation. I believe that the determination was prudency versus imprudency, and that's how we proceeded with this project.

Q But you would agree that there's no, there's no language in the rule or statute that you're relying on that would authorize the company to recover costs that are either unnecessary or unreasonable?

A I would define them that any costs that were

deemed to be imprudent by the company would not be 1 recoverable. 2 Well --3 Or deemed -- I'm sorry. Deemed imprudent by this Commission would not be recoverable. 5 Well, aren't costs that are unnecessary -- if 6 you incur unnecessary costs, would that not be an 7 indicator of imprudence? 8 I don't know what -- if you could define for 9 me what you mean by "unnecessary." 10 Unnecessary would be a cost that you did not 11 need to incur in order to move forward with the project. 12 And thus you would say it would be an 13 imprudent cost? 14 I'm asking you that. I'm asking you, would 15 you not consider an --16 Look, I'm not -- I didn't -- I'm not an expert 17 Α on the legislation, and you're trying to get me to 18 define, have a broader definition than the imprudency, 19 and we rely on the imprudency. 20 Okay. I'm not trying to trick you. I just 21 wonder that if the company spent dollars that weren't 22 necessary, you don't, you wouldn't find that imprudent 23 as you, as you analyze prudency? 24 If we spent dollars --25

MR. ANDERSON: FPL objects to this line of questioning. It's beyond the scope of Mr. Olivera's testimony, which is very narrowly focused, and we've permitted sufficient, I believe.

MS. KAUFMAN: Mr. Chairman -- if I could be heard.

CHAIRMAN GRAHAM: Yes.

MS. KAUFMAN: Mr. Olivera has, has told us all about his views of the regulatory scheme, and I think that my questions are directly relevant to that, and they're certainly not outside the scope.

CHAIRMAN GRAHAM: I think they are relevant, and I don't have a problem with the back and forth, because I believe Mr. Olivera is trying to clarify your answer before he answers your answer. I think we should continue.

MS. KAUFMAN: Thank you.

#### BY MS. KAUFMAN:

Q So I'll just ask it one more time and maybe we can agree or maybe we'll just continue to disagree, and that's fine, too.

And my question simply was, if the company were to expend costs that were unnecessary or not needed to pursue the project, would you not agree that such costs would be imprudent, as you define imprudency?

A If we -- if the company incurred costs that were not relevant to the project, then obviously they, we shouldn't recover those costs under this regulation.

MS. KAUFMAN: Thank you. That's all I have.

CHAIRMAN GRAHAM: Thank you.

SACE.

MR. WHITLOCK: No questions, Mr. Chairman. Thank you.

CHAIRMAN GRAHAM: Staff?

MS. NORRIS: Staff has no questions.

CHAIRMAN GRAHAM: Commission board.

Commissioner Brown.

COMMISSIONER BROWN: Thank you, Mr. Chairman.

Mr. Olivera, as a follow-up to Mr.

McGlothlin's question, McGlothlin's question with regard to why is the project still cost-effective, I'm curious in hearing that answer.

THE WITNESS: It's really cost-effective because the price of fuel, nuclear fuel, it is so, it's so low. If you look, for example, last year we had a \$4 billion fuel bill. Nuclear produced 20% of the energy, but yet it only represented \$160 million of that bill. When you look at the fuel savings associated with Turkey Point 6 and 7, they, the fuel savings for that project are \$75 billion, as calculated by Mr. Sim. And

it's those huge fuel savings that, that I rely on when we go through all this pain and agony of building a very complex project with a lot of technical challenges.

It's because the fuel savings are phenomenal, and they, not only are they real, they provide a real hedge and fuel diversity for our customers.

COMMISSIONER BROWN: Thank you.

CHAIRMAN GRAHAM: Commissioner Edgar.

COMMISSIONER EDGAR: Thank you, Mr. Chairman.

Mr. Olivera, in your prefiled testimony and also in your summary you described that, a portion of Mr. Jacobs' testimony as, quote, heads I win, tails you lose. I'm really not clear on what you mean by that phrase in the context of your testimony or using the flip a coin metaphor. Could you explain to me the point that you were trying to make by using that phrase?

THE WITNESS: Yes, I'd be happy to. In this scenario, it is, it's -- we take all the risk, as laid by Witness Jacobs, with, with these projects. But, you know, all the benefits accrue to, to the customers. I mean, in this scenario it assumes, by the way, too, that you could go out and finance these projects, even if you have this scheme where it's breakeven. So any incremental dollars that we spend would not -- at this particular point in time, taking a snapshot of where we

are, which is \$4 gas, you know, our -- we -- our shareholders have to absorb any other costs. And by the way, you're assuming that we could go out and finance this under this scenario, which I'll put that aside.

COMMISSIONER EDGAR: I'm not.

THE WITNESS: Okay. Well, if you want me

**COMMISSIONER EDGAR:** I'm not making that assumption.

THE WITNESS: Well, okay. Good. I mean, I'm happy to address that as well. Maybe I should address that and I'll come back to your question.

In this scenario, we, we spend every dollar that FPL generates, all the cash it generates, and then we go out and we borrow more to build these projects.

It's not just this; it's the modernizations that we're doing. These projects have created huge customer value.

It's why we have the lowest bills, because they're very efficient generation.

But, you know, over time you have to be able to keep financing that, and that requires going to investors. I'm the guy that often has to go talk to investors and say, this is a good -- you know, you should allow us to continue to borrow because we are going to recover prudently invested funds.

And so in this scenario it would be very hard to go talk to investors and say, well, anything above the breakeven, if we go over 3, \$400 million, we're probably going to be able to recover, but by the way, lend us the money. That's a tough, that's a tough thing for me to say to an investor.

If you go back to the breakeven, to the witness's recommended approach, that's kind of what you're doing. You're saying you're going to be spending, you're going to be taking all the risk, but you're not going to get recovered for it. And by the way, fuel prices go up, and let's assume that gas doubles again, customers get a huge windfall, but we would have lost an opportunity to recover any of those costs.

When you look at these projects, you have to look at not just the math. And the math is good because they save today, on all of the current assumptions they save customers money. I think you also have to put on a bigger hat and say, how is Florida best served? How do we best serve our customers? How do we bring in fuel diversity, continue to try to build some fuel diversity? And there aren't very many choices to do that right now.

I worry about continuing to build natural gas, but we don't have a lot of choices. And it's still,

it's the right strategy, but any opportunity you have to get more something else, such as nuclear, into the mix, relatively economic nuclear, it's a win for our customers.

determination was granted, it is my belief, and I think it's clear in the order, it's my belief and was my view at the time that the additional fuel diversity was an important component of the project. I continue to believe that, but I do not believe that we are litigating that today.

THE WITNESS: Good. Thank you.

COMMISSIONER EDGAR: You made the -- and this has taken me a little further than I had intended to go, but you opened the door. You made the statement a few moments ago that the company is taking on all the risk and all the benefits are accruing to the customers.

Some might say, or an alternate view might be that the ratepayers are taking on risk under the statutory, excuse me, statutory scheme that we have, that the ratepayers are taking on risk by paying costs over the years in advance of those fuel cost benefits accruing. Would you agree that the ratepayers are taking on risk by absorbing costs prior to the project being up and running?

THE WITNESS: Yes, I would agree. And if I gave, left you with the impression that -- when I said all the risk, I meant under the scheme of Witness Jacobs.

Absolutely, the customers are taking risk.

The shareholders are also taking risks. If you look at the time frame between '11 and '12, we will spend roughly \$2.2 billion on these projects. We will recover about \$500 million. So, you know, we're happy to have that, we're happy to have the direction from this Commission that ultimately there will be a path for the other. So the customers clearly are taking risk. I think it's a modest risk relative to the benefits that we believe the customers will get. But, yes, they certainly are taking risk, and I didn't mean to argue otherwise.

COMMISSIONER EDGAR: Those benefits down the road. Some might say that the Commission is also taking some risks.

THE WITNESS: I understand that too.

COMMISSIONER EDGAR: Thank you.

CHAIRMAN GRAHAM: Commissioner Balbis.

COMMISSIONER BALBIS: Thank you, Mr. Chairman.

A few questions for Mr. Olivera.

Mr. Jacobs, in his testimony, discussed the

changing of the EPU management team, and I would assume that the changing of the entire team is a difficult decision and one that is not made lightly.

Could you explain how you minimize and what the process was to change the team out so as not to affect those, that project?

THE WITNESS: Thank you for the opportunity.

We essentially only changed two people in the team, and

I will tell you why we changed it.

The project -- you know, we have, I think, a fair amount of experience with these large construction projects. You know, we have built four big power plants: Turkey Point 5, three West County units. So I think we have -- we kind of understand what it takes. This is arguably far bigger than those, but, you know, we have a lot of practice and a lot of people that are involved in it.

So we felt that as the project moved along from kind of a general scoping and general, sort of early procurement for the project, and we used a team that had a lot of engineering experience. The individual who was heading that had ran nuclear engineering for a long time, been working in kind of a support role. And as it evolved, you know, I for one felt strongly that we wanted somebody -- and because the

project was going to be done in operating power plants, which is different than doing this in a plant from scratch, I felt it was important to have somebody that had real operating experience running nuclear plants and had construction experience. Which these two guys, as good as they are, didn't have that experience. So that was really the decision behind asking Mr. Jones to really head this up. We also brought in another individual who has very extensive construction experience and has also dealt a lot with the vendors in procurement, and so we felt that that was kind of a good combination. And that was kind of -- in summary, that's the reason we made that change.

of making the change -- again, I want to focus on my assumption that, that any time you have a management change, that there's going to be some, there's a learning curve, there's -- I mean, what did you do or FPL do to kind of ease that transition?

THE WITNESS: A lot of the people who were involved in doing the work were the same. They didn't -- those people didn't change. It was really more in providing the direction, it was really more in having experience in dealing with vendors in a very complicated project. And you've already heard a lot

about kind of what the sausage (phonetic) making is, what it, what it takes to deal with a -- two very big vendors in Bechtel and Siemens that played a key, play a key role in these projects, and these people had that kind of experience.

And so, you know, the other, the other thing is you look to the rest of the team to provide continuity, and we still had the same oversight people involved. You know, I continued to be involved. The Chief Nuclear Officer continued to be monitoring this project pretty closely during that time.

COMMISSIONER BALBIS: Okay. And one last question, Mr. Chairman.

There's been a lot of discussion by Mr. Jacobs and others on, and yourself as far as the vendors and large vendors, and one of the concerns I have is that, you know, again, once you go down a certain path, that although decisions may be prudent, you're still somewhat at, at the mercy of the vendor that you've selected or the actions they take. Do you feel that the existing controls that you have in, in working with those vendors, again, there was discussion on pushing back on the vendor, et cetera, with the management changes or other changes, do you feel there's enough of a control on the vendors to protect FPL and the ratepayers?

THE WITNESS: I do. I feel like we have very good processes, very good controls in place. I take comfort in the Concentric report that's validated that and the Staff report that has also validated that.

COMMISSIONER BALBIS: Okay. Thank you. I have no further questions.

CHAIRMAN GRAHAM: Thank you.

Commissioner Brisé.

COMMISSIONER BRISÉ: Thank you, Mr. Chairman.

I want to thank Mr. Olivera for being here.

I have two questions for you. One of them -- and both of these are more broad questions.

Referring back to the section of your testimony where you talk about what the Legislature did and what the Commission did with the intention of promoting the development of new nuclear, yesterday part of the discussion was the issue of the option; whether a company can decide to seek an option to build these projects but ultimately decide not to build the projects. From your understanding, the intent of the Legislature was to actually have projects built. Would we agree on that?

THE WITNESS: Absolutely.

COMMISSIONER BRISÉ: So that would go to the idea that whatever projects that you all have undertaken

as a company, your intention is to build them?

THE WITNESS: Correct.

COMMISSIONER BRISÉ: Okay. The second question that I have goes to if the Commission were to disallow the capital costs as asserted by Mr. Jacobs, what do you think it does to the overall framework of nuclear generation moving forward in this state?

THE WITNESS: I think it would bring it to a halt. We would do our very best to complete these projects. But as I mentioned to Commissioner Edgar earlier, I'm not sure that we could go out and get the financing to complete these projects without the right framework and without -- and given -- I mean, if there was a change in, at least in my mind, the nuclear cost recovery rule, it would be a seismic change. And it would ripple not just through nuclear energy, it would ripple through all other aspects of what we do.

And so I think it would certainly slow -- stop nuclear. It would challenge us tremendously to finish these projects. And I would say that it would have ramifications in other projects, including the modernizations on anything else that has large capital, because there would be a concern whether a decision made by one Commission where, that we go out and make huge, huge commitments for very long-term projects, whether

that could be readily undone.

COMMISSIONER BRISÉ: Follow-up, Mr. Chairman.
CHAIRMAN GRAHAM: Sure.

commissioner Brisé: But considering that, on the flip side of that, if the Commission looks, looks at a variety of decisions that have been made by the company and begins to question the validity of some of those decisions as being reasonable or not reasonable, you do agree that the Commission then would have the right and would be in its place to stop, or at least seriously question some of these projects, and that should not impact the broader regulatory framework in keeping nuclear projects moving forward in a positive direction in the state.

THE WITNESS: I agree. The Commission has wide discretion in, in what you do. I'm just mentioning in the real world that I -- you know, I have to go out and explain to our investors what these projects represent and why these, these are a good thing. And so I would hope that as you deliberate you factor into your decisions the impact that goes beyond any specific project. The decisions that you make, they are extrapolated. Right or wrong and whether we agree with it or not, they're extrapolated to any number of other investments. Even things that you want us to do and are

in complete agreement and feel that they should go 1 forward, they're extrapolated to those as well. 2 CHAIRMAN GRAHAM: Commissioner Brown. 3 COMMISSIONER BROWN: Thank you, Mr. Chairman. Just a follow-up to some of your responses to 5 some of the Commissioners' questions regarding 6 financing. Mr. Olivera, how do you feel that the current financial market today will affect the company's 8 financing capabilities on these projects? 9 THE WITNESS: Like everybody else, it's a 10 little scary to watch the gyrations of the market. 11 far, I mean, we've continued to have access to the 12 capital markets. We have a pretty extensive line of 13 credit that we have frankly barely touched. We -- sort 14 of that's been our backup. And so, you know, I can 15 never -- I learned long ago never to say never. But 16 right now we have access to capital, even if it was on a 17 short-term line of credit, that would allow us to 18 continue working on these projects. 19 Thank you. 20 COMMISSIONER BROWN: CHAIRMAN GRAHAM: Redirect? 21 MR. ANDERSON: Just very briefly. 22 REDIRECT EXAMINATION 23 BY MR. ANDERSON: 24 25 0 Commissioner Brisé was asking you some

questions, looking back at the legislation which promoted new nuclear generation, and we've talked about economic fuel diversity benefits and savings for customers. But was there an electric reliability aspect of that also?

A No, absolutely. And I think I mentioned that when I was answering Commissioner Edgar's questions.

The nuclear projects, not only do they provide fuel benefit, but they also provide a huge reliability benefit, particularly the units in Miami-Dade County.

We have roughly 25% of our customers are in the Miami-Dade County area, and so any generation we have close to the load center is more reliable than having to rely on generation that's far away and you have a lot of transmission lines that run for hundreds of miles. So we always favor anything that increases the capacity in that area.

Q And we've talked about the company has, has high electric reliability, but should that be taken for granted? Are there ever close calls that, in terms of electric reliability that nuclear generation can contribute to?

A I'm an old operating guy. I never take reliability for granted. It's hour by hour, minute by minute. And so, no, we can't take that for granted. We

1	can't take for granted the value of having sufficient
2	generation reserves, and I think this Commission has
3	historically recognized that.
4	MR. ANDERSON: We have no further questions.
5	Thank you.
6	CHAIRMAN GRAHAM: Okay. We don't have any
7	exhibits to enter into the record for this witness? No?
8	MR. ANDERSON: We do not.
9	CHAIRMAN GRAHAM: Sir, thank you very much for
10	your testimony.
11	THE WITNESS: Thank you, sir.
12	MR. ANDERSON: With the completion of
13	Mr. Olivera's rebuttal testimony, may he be excused for
14	the balance of the hearing?
15	CHAIRMAN GRAHAM: Is there any is it okay
16	for everybody for this witness to be excused?
17	MR. YOUNG: No objection.
18	CHAIRMAN GRAHAM: Intervenors?
19	Yes.
20	MR. ANDERSON: May we proceed with our next
21	witness?
22	CHAIRMAN GRAHAM: Yes.
23	MR. ANDERSON: FPL calls as its next witness
24	Terry Deason.
25	TERRY DEASON

was called as a rebuttal witness on behalf of Florida 1 Power & Light Company and, having been duly sworn, 2 testified as follows: 3 DIRECT EXAMINATION 4 BY MR. ANDERSON: 5 Good morning, Mr. Deason. Q 6 Good morning. 7 Α Have you been sworn? 8 Yes, I was sworn this morning. 9 Would you please tell us your name and your 10 business address. 11 12 Α Yes. My name is Terry Deason. And my business address is 301 Bronough Street, Tallahassee, 13 Florida, 32301. 14 By whom are you employed and in what capacity? 15 I'm employed by the firm Radey, Thomas, Yon & 16 Clark as a special consultant. 17 Have you prepared and caused to be filed 15 18 pages of prefiled rebuttal testimony in this proceeding 19 20 on July 25, 2011? Yes, I have. 21 Do you have any changes or revisions to your 22 rebuttal testimony? 23 24 Α I do not. If I asked you the same questions contained in 25 Q

1	your prefiled rebuttal testimony, would your answers be
2	the same?
3	A Yes, they would.
4	MR. ANDERSON: Chairman Graham, FPL asks that
5	the prefiled rebuttal testimony of the witness be
6	inserted into the record as though read.
7	CHAIRMAN GRAHAM: We will insert the
8	prefiled we will insert the prefiled rebuttal
9	testimony into the record as though read for Mr. Deason
10	BY MR. ANDERSON:
11	Q Mr. Deason, you have one exhibit which you
12	called TD-1. Is that right?
13	A Yes.
14	MR. ANDERSON: This is shown on Staff's
15	exhibit list, Mr. Chairman, as Exhibit 130.
16	CHAIRMAN GRAHAM: Okay.
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1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		REBUTTAL TESTIMONY OF TERRY DEASON
4		<b>DOCKET NO. 110009-EI</b>
5		JULY 25, 2011
6	Q.	Please state your name and business address.
7	A.	My name is Terry Deason. My business address is 301 S. Bronough Street,
8		Suite 200, Tallahassee, Florida 32301.
9	Q.	By whom are you employed and in what capacity?
10	A.	I am employed by the law firm Radey Thomas Yon and Clark as a Special
11		Consultant specializing in the fields of energy, telecommunications, water and
12		wastewater, and public utilities generally.
13	Q.	Please describe your educational background and professional
14		experience.
15	A.	I have over thirty-four years of experience in the field of public utility
16		regulation spanning a wide range of responsibilities and roles. I served a total
17		of seven years as a consumer advocate in the Florida Office of Public Counsel
18		(OPC) on two separate occasions. In that role, I testified as an expert witness
19		in numerous rate proceedings before the Florida Public Service Commission
20		(Commission). My tenure of service at the Florida Office of Public Counsel
21		was interrupted by six years as Chief Advisor to Florida Public Service
22		Commissioner Gerald L. Gunter. I left OPC as its Chief Regulatory Analyst
23		when I was first appointed to the Commission in 1991. I served as

Commissioner on the Commission for sixteen years, serving as its chairman on two separate occasions. Since retiring from the Commission at the end of 2006, I have been providing consulting services and expert testimony on behalf of various clients, including public service commission advocacy staff and regulated utility companies, before commissions in Arkansas, Florida, Montana, New York and North Dakota. My testimony has addressed various regulatory policy matters, including: regulated income tax policy; storm cost recovery procedures; austerity adjustments; depreciation policy; subsequent year rate adjustments; appropriate capital structure ratios; and prudence determinations for proposed new generating plants and associated transmission facilities. I have also testified before various legislative committees on regulatory policy matters. I hold a Bachelor of Science Degree in Accounting, summa cum laude, and a Master of Accounting, both from Florida State University.

# 15 Q. Are you sponsoring an exhibit?

A:

- 16 A. Yes. I am sponsoring the following rebuttal exhibit:
- 17 TD-1, Biographical Information for Terry Deason

# 18 Q: What is the purpose of your rebuttal testimony?

The purpose of my rebuttal testimony is to respond to certain assertions and recommendations made by OPC Witnesses Jacobs and Smith concerning Florida Power & Light Company's (FPL's) extended power uprate (EPU) project. Specifically, I respond to their assertion that the use of a cumulative present value of revenue requirements (CPVRR) analysis should be rejected

1		and substituted with a break-even analysis to determine recoverable costs. I
2		also respond to Witness Jacobs' assertion that FPL was imprudent in selecting
3		an expedited schedule for the EPU project.
4		
5		BREAK-EVEN ANALYSIS
6		
7	Q:	Do you agree with Witness Jacobs' assertion that the CPVRR analysis is
8		not valid for the EPU project?
9	A:	No, I do not.
10	Q:	Why do you disagree with the recommendation of Witnesses Jacobs and
11		Smith?
12	A:	Essentially, their recommendation is a mid-stream attempt to fundamentally
13		and inappropriately change the standard for determining cost recovery through
14		the nuclear cost recovery clause. Their recommendation is inconsistent with
15		Rule 25-6.0423, F.A.C., contrary to previous decisions of the Commission,
16		constitutes bad regulatory policy and is counter to the stated goals of the State
17		of Florida. Distilled to its essence these Witnesses are advocating the use of
18		hindsight to determine the prudence of costs incurred for the EPU project.
19	Q:	What is a CPVRR analysis?
20	A:	It is an analytical tool used to compare different approaches to determine the
21		one that is the most cost-effective. It is a generally accepted method and was
22		used by the Commission to determine that FPL's proposed EPU project for
23		the Turkey Point and St. Lucie nuclear power plants was the most cost-
24		effective alternative to meet its need for capacity and energy. It has been used

in many other Commission need determination cases as well as accepted in 1 prior nuclear cost recovery proceedings. It remains a valid tool to measure the 2 ongoing cost effectiveness and continued viability of the EPU project and 3 does so by appropriately using forward-looking costs. 4 Witnesses Jacobs and Smith state that their break-even alternative is 5 Q: needed to protect customers from unreasonable costs. Do you agree? 6 No, I do not. First, there is already a two-step mechanism in place to protect 7 A: customers from unreasonable costs. The first step is the need determination 8 process. The second step is the annual ongoing prudence and reasonableness 9 reviews of actual and projected costs. OPC's proposed break-even alternative 10 is merely a one-sided way to put a cap on otherwise prudent costs. In essence, 11 Witnesses Jacobs and Smith want to preserve all of the upside benefits of the 12 uprates with no risk that costs could reasonably fall beyond a break-even 13 14 point. 15 Q: Is such an approach consistent with good regulatory policy? No, it is not. Consistent with good regulatory policy, the Commission has the 16 A: responsibility to balance the needs of investors and customers. Customers 17 have the reasonable expectation to receive safe, reliable and efficient services 18 and the responsibility to pay the cost of providing those services. Investors 19 have the reasonable expectation that capital deployed to provide services to 20 21 customers will earn a reasonable return and will be eventually repaid in the 22 form of depreciation allowances. In balancing these interests, the

1		Commission should protect customers from imprudent costs and yet ensure
2		that all prudent costs are recovered.
3	Q:	How does use of OPC's break-even alternative impose a limitation on
4		costs?
5	A:	It imposes a cap on costs regardless of whether they were prudently incurred.
6		This is contrary to standards of ratemaking and cost recovery which call for
7		all prudently incurred costs to be recovered. This standard has been and
8		should continue to be applied to the EPU project.
9	Q:	If costs were to be higher than a break-even point, would the costs be
10		unreasonable or imprudent?
11	A:	No, not necessarily. There is nothing magical about the break-even point that
12		makes cost become unreasonable or imprudent, as Witnesses Jacobs and
13		Smith imply. The break-even point is only a point on a continuum of possible
14		cost ranges. It is the nature of the costs themselves and whether the costs have
15		been prudently incurred and well managed that determines their
16		recoverability.
17	Q:	Would there be other consequences of accepting the OPC's break-even
18		alternative?
19	A:	Yes. It could result in two different economic regulatory standards being
20		applied within the nuclear cost recovery rule to the same EPU project, one for
21		considering cost effectiveness and project viability (CPVRR) and a different
22		one to establish a cap on cost recovery (break-even). Having two different
23		standards being applied to the same costs would be inappropriate regulatory

1		policy and place utility management in an untenable position. It also would
2		have negative consequences on a utility's ability to acquire capital to support
3		cost-effective nuclear projects.
4		
5		Second, applying the break-even alternative as suggested by Witnesses Jacobs
6		and Smith would result in a significant shift in the balance of risk
7		contemplated in Rule 25-6.0423, F.A.C. It would introduce a new "moving
8		target" standard based on continual backward-looking determinations of costs
9		eligible for recovery. This is counter to the fundamental purpose of the rule to
10		encourage nuclear generation in Florida and basic principles of utility
11		ratemaking.
	•	XX71 1 TOL 13 1
12	Q:	Why does Florida have a regulatory policy to promote nuclear
12 13	Q:	why does Florida have a regulatory policy to promote nuclear generation?
	<b>Q:</b> A:	
13	-	generation?
13 14	-	generation?  Rule 25-6.0423, F.A.C., was proposed and adopted in response to Section
13 14 15	-	generation?  Rule 25-6.0423, F.A.C., was proposed and adopted in response to Section 366.93, Florida Statutes, which became law on June 19, 2006. This law sets
13 14 15 16	-	generation?  Rule 25-6.0423, F.A.C., was proposed and adopted in response to Section 366.93, Florida Statutes, which became law on June 19, 2006. This law sets forth the State of Florida's policy to promote fuel diversity and electric supply
13 14 15 16 17	-	generation?  Rule 25-6.0423, F.A.C., was proposed and adopted in response to Section 366.93, Florida Statutes, which became law on June 19, 2006. This law sets forth the State of Florida's policy to promote fuel diversity and electric supply reliability by encouraging utility investment in nuclear power plants. The
13 14 15 16 17 18	-	generation?  Rule 25-6.0423, F.A.C., was proposed and adopted in response to Section 366.93, Florida Statutes, which became law on June 19, 2006. This law sets forth the State of Florida's policy to promote fuel diversity and electric supply reliability by encouraging utility investment in nuclear power plants. The FPSC was directed by law to adopt a rule that would implement this
13 14 15 16 17 18 19	A:	generation?  Rule 25-6.0423, F.A.C., was proposed and adopted in response to Section 366.93, Florida Statutes, which became law on June 19, 2006. This law sets forth the State of Florida's policy to promote fuel diversity and electric supply reliability by encouraging utility investment in nuclear power plants. The FPSC was directed by law to adopt a rule that would implement this legislative directive.
13 14 15 16 17 18 19 20	A: Q:	generation?  Rule 25-6.0423, F.A.C., was proposed and adopted in response to Section 366.93, Florida Statutes, which became law on June 19, 2006. This law sets forth the State of Florida's policy to promote fuel diversity and electric supply reliability by encouraging utility investment in nuclear power plants. The FPSC was directed by law to adopt a rule that would implement this legislative directive.  What was the purpose of this directive?

model, which was used in the last round of new nuclear plants constructed in the United States, resulted in the disallowance of substantial investments based on reviews being undertaken only after plants were completed and requests were made to have them included in rate base. Often these reviews entailed upwards to a decade of costs that had been incurred. This caused several problems, not the least of which was the complexity and the span of time of the reviews. Another factor was the accumulated carrying costs of the investments and their resulting impact on rates. For investors to be willing to devote their capital to the planning, construction, and operation of new nuclear plants and for the benefits of new nuclear generation to be achieved, the Legislature determined that a different regulatory approach was needed. A key component of this new approach was to provide greater certainty to the amount and timing of recovery of all prudently incurred costs. Providing regulatory certainty for the recovery of all prudently incurred costs avoided the unacceptable risk of a prudence determination being made only after many vears of construction expenditures had been incurred. Pursuant to this directive, Rule 25-6.0423, F.A.C., established annual prudence determinations with much needed finality.

# Q: Why is this finality needed?

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It is needed to avoid the same concerns I expressed earlier with prudence reviews spanning unacceptable time frames and addressing costs that have accumulated over multiple years. Without the finality of the annual prudence determinations, it is possible and perhaps likely that investments in new

ı		nuclear generation would be subject to the same risks that plagued earner
2		investments in nuclear generation.
3	Q:	What is Florida's policy on the finality of prudence determinations of
4		nuclear costs?
5	A:	Florida's policy is to review the prudence of incurred costs annually and to
6		disallow those costs found to be imprudent. Costs determined to be prudent
7		are no longer subject to disallowance or further prudence review.
8	Q:	What is the standard used by the Commission in making its prudence
9		determinations?
0	A:	After a new nuclear project has received a determination of need, the
1		associated costs are not subject to challenge unless and only to the extent the
12		Commission finds, based on a preponderance of the evidence adduced at a
13		hearing, that certain costs were imprudently incurred. In addition, imprudence
14		shall not include any cost increases due to events beyond the utility's control.
15		Further, a decision to proceed with construction after a determination of need
16		is granted "shall not constitute or be evidence of imprudence". This standard
17		is contained in Section 403.519(4)(e), Florida Statutes and is specifically
8		referenced by Rule 25-6.0423, F.A.C.
9	Q:	Is OPC's suggested use of a break-even analysis consistent with this
20		standard?
21	A:	No, it is not.
22	Q:	How else would use of OPC's break-even alternative be inconsistent with
23		Florida regulatory policy?

1	A:	Rule 25-6.0423(f)(c)2. requires a determination of "the prudence of actual
2		construction expenditures expended by the utility, and the associated carrying
3		costs." The use of a break-even alternative as proposed by Witnesses Jacobs
4		and Smith does not address the prudence (or imprudence) of any actual
5		expenditures as required by Florida regulatory policy for nuclear projects.
6		Rather, the break-even alternative would establish an arbitrary cap on costs
7		that otherwise would be recovered, if found to be prudent.
8	Q:	In response to an earlier question, you stated that the break-even
9		approach recommended by Witnesses Jacobs and Smith would shift the
10		balance of risk contemplated in Rule 26-6.0423, F.A.C. Would you please
11		explain?
12	A:	Yes, I will. As I previously discussed, Florida regulatory policy as
13		represented by Rule 25-6.0423, F.A.C., recognizes that new nuclear
14		generation provides many benefits to customers, but is an inherently risky
15		undertaking for a utility because of the long lead times to plan, construct, and
16		operate such generation. This inherent risk acts as a disincentive to undertake
17		such projects. To better enable the benefits of new nuclear generation to be
8		realized, the rule provides greater regulatory certainty of cost recovery of
9		prudently incurred costs by providing for annual prudence reviews that
20		provide a high degree of finality. This is the balance to which I refer.
21		
22		The approach advocated by Witnesses Jacobs and Smith materially alters this
23		balance by purporting to disallow costs which fall beyond some break-even

	point on the cost continuum, but are nonetheless prudent. It essentially
	provides all of the benefits of new nuclear generation to customers but
	requires customers to potentially pay only part of the cost. Essentially, these
	Witnesses are proposing a risk sharing mechanism not contemplated or
	allowed by the rule.
Q:	Has the Commission previously addressed the concept of a risk sharing
	mechanism within the context of the nuclear cost recovery clause?
A:	Yes, the Commission has considered and rejected such a concept. In Order
	No. 11-0095-FOF-EI in Docket No. 100009-EI, intervenors argued that the
	Commission had the statutory authority to implement a sharing mechanism to
	prevent customers from bearing all of the risk when projects face significant
	uncertainty. In response, the Commission found that a risk sharing
	mechanism would not be consistent with the clear statutory requirement that
	all prudently incurred costs are recoverable. The Commission stated:
	In conclusion, based upon the analysis above, we find that we
	do not have the authority under the existing statutory
	framework to require a utility to implement a risk sharing
	mechanism that would preclude a utility from recovering all
	prudently incurred costs resulting from the siting, design,
	licensing, and construction of a nuclear power plant. To do so
	would limit the scope and effect of a specific statute, and an
	agency may not modify, limit, or enlarge the authority it
	derives from the statute.

1	Q:	Do you have any other concerns with the recommendation to institute a
2		risk sharing mechanism through a backward looking break-even
3		analysis?
4	A:	Yes, I do. Aside from the fact that the Commission has found it to be
5		statutorily impermissible, I believe it is bad regulatory policy and I am
6		concerned that adopting such an approach would have severe negative
7		implications for future generation expansion plans in Florida.
8	Q:	How so?
9	A:	I believe good regulatory policy should encourage utilities to consider all cost
10		effective options for new generation. Having a full array of viable options car
11		only serve to provide benefits to customers in terms of reliability, cost and
12		fuel diversity. I fear that a risk sharing mechanism as contemplated by the
13		break-even approach will lead to only the lower-risk options being considered
14		In today's environment, this means an even greater reliance upon gas-fired
15		generation. Of course, reliance on natural gas is one of the things the
16		Legislature and Commission are attempting to mitigate by encouraging
17		additional nuclear generation.
18		
19		DECISION TO EXPEDITE THE EPU PROJECT
20		
21	Q:	Do you agree with Witness Jacobs' conclusion that FPL's decision to
22		expedite the EPU project was imprudent?

1 A: I disagree with his conclusion. My lack of agreement is not based on an engineering analysis of the risks of undertaking the "fast track" approach.

Rather, I find fault with his conclusion from a regulatory policy perspective.

#### 4 Q: Please explain.

Good regulatory policy calls for issues to be raised at the appropriate time and for findings of prudence or imprudence of management decisions to be made based on facts known to management at the time decisions are made. The use of 20-20 hindsight to conclude a decision was imprudent is improper.

A:

FPL's decision to pursue the EPU project on an expedited basis was clearly disclosed in the need determination proceeding. The anticipated in-service dates of the uprates were part of FPL's filing and the cost-effectiveness calculations were consistent with the aggressive time frames. FPL's petition referred to the aggressive schedule of the uprates and FPL's Witness used terms such as "earliest feasible point in time" and "expedited basis" in referring to the EPU project's construction time frame and the ensuing benefits being achieved for customers. If there were concerns that the decision to expedite the process was an imprudent one, the issue should have been raised at that time and it was not. FPL has relied upon a regulatory decision to accept the expedited schedule and has pursued the EPU project accordingly and was encouraged to do so by the applicability of Rule 25-6.0423, F.A.C. Witness Jacobs now wants to use 20-20 hindsight to declare this previously-approved decision imprudent. Also, as I earlier described, the

1	decision	to	proceed	with	a	nuclear	project	that	has	been	granted	a
2	determina	tio	of need	cannot	t us	ed as evi	dence of	impru	ıdenc	e.		

- 3 Q: Do you have any other concerns with Witness Jacobs' conclusion of 4 management imprudence?
- Yes, I do. I believe Witness Jacobs' conclusion lacks an appreciation of the electric supply circumstances confronting FPL prior to and at the time of the need determination.
- What was the electric supply circumstances confronting FPL prior to and
   at the time of the need determination?

A:

FPL was faced with the need for reliable and cost effective base-load generation that also provided greater fuel diversity. The need for greater fuel diversity was clearly expressed to FPL by the Commission and other policy makers during this time. As early as 2004, the Commission raised concerns with a lack of fuel diversity and FPL committed to file a feasibility study of coal-fired alternatives, which was filed in 2005. In 2006, in emphasizing its concern of a lack of fuel diversity, the Commission stated that utilities should not assume the automatic approval of gas-fired plants in future need determination proceedings. In response to the Commission's direction, FPL proposed building two ultra-supercritical pulverized coal units in Glades County to come on line in 2012 and 2013. These units were referred to as the Florida Glades Power Park and were the subject of a need determination before the Commission in 2007. While the project had attractive economics and significant reliability benefits, it was not approved by the Commission.

The Commission cited concerns with the risks associated with new coal generation in light of anticipated greenhouse gas emissions regulations. FPL then found itself in a situation of meeting its need reliably and cost effectively and providing greater fuel diversity while minimizing greenhouse gas emissions. As a result, FPL proposed to expedite the EPU project in order to meet these needs. The Commission approved FPL's need determination request in late 2007 and the order was issued in early 2008. There were no intervenors in opposition to the EPU project.

## 9 Q: Why was there a need to expedite the EPU project?

A:

10 A: First was the need to have the uprates on line in time to meet FPL's need for capacity. Second was the desire to maximize benefits to customers through greater fuel savings as quickly as possible.

# Q: How does this relate to the issue of management prudency?

It goes right to the heart of the issue. The decision to expedite the EPU project needs to be reviewed in the context of the circumstances leading to and the reasons supporting it. FPL Management took action to meet its obligation to serve reliably and cost effectively and to address policy concerns over fuel diversity and greenhouse gas emissions. And they did this in a way that would maximize fuel savings to customers. Such action should be encouraged. It definitely should not be penalized by a finding of imprudence based on hindsight of a decision that was unchallenged at the time it was originally made. Given the facts and circumstances, a finding of management imprudence by the Commission would only tend to nullify its previous

נ	Ų:	Does this conclude your testimony:
5	0:	Does this conclude your testimony?
4		will only be harmed in the long term by such a message.
3		should not aggressively pursue solutions to challenging problems. Customers
2		send a message to FPL's management and other utility managers that they
l		decisions to encourage maximizing nuclear benefits to customers and would

Yes, it does. A:

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## BY MR. ANDERSON:

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Mr. Deason, would you please go ahead and introduce, reintroduce yourself to the Commission and provide a summary of your, of your testimony.

Commissioners, it's a pleasure to be back here in this hearing room again and to have this opportunity to provide testimony to you as you consider this very important matter.

OPC is recommending that FPL should be required to utilize a breakeven analysis to disallow otherwise prudent costs. This is inappropriate and should be rejected. OPC's recommendation is a midstream attempt to fundamentally and inappropriately change Florida's policy for determining nuclear cost recovery and feasibility and, if implemented, would have negative implications for FPL's customers.

OPC suggests that the Commission should no longer use the cumulative present value of revenue requirements, which I will refer to as present value analysis, as the means to determine cost-effectiveness and continued project viability.

For many years the Commission has consistently and appropriately used the present value approach to make decisions on cost-effectiveness in need determination proceedings and in the nuclear cost

recovery proceedings. The present value approach appropriately considers forward-looking costs and should not be discontinued.

OPC's suggestion to replace the Commission's use of the present value analysis with a breakeven approach is inappropriate for many reasons and should be rejected. OPC's proposed breakeven approach inappropriately relies on hindsight and has the effect of disallowing otherwise prudent costs. This is contrary to the state's policy to promote nuclear generation and violates basic principles of ratemaking. All prudently incurred costs are to be included in rates. OPC's suggested approach does not do this and violates this basic principle.

OPC's suggestion also materially distorts the balance of risk provided for by the Legislature and the Commission. This could have severe negative consequences for customers by limiting options for new generation needed to cost-effectively and reliably serve them. In essence, OPC's suggestion is a risk-sharing mechanism which has been previously rejected and determined by the Commission to be impermissible.

OPC also alleges that FPL's and this decision, this Commission's decision to expedite the extended power uprates was imprudent. I cannot agree that this

decision was imprudent. At the time FPL proposed and the Commission approved the expedited schedule, FPL was appropriately responding to the circumstances at the time. After being encouraged to consider ways to increase its fuel diversity, FPL proposed the Glades Power Park, two coal-fired units in Glades County. These units were rejected by the Commission.

FPL then proposed and the Commission approved the expedited schedule for the EPU project. This was done to cost-effectively meet the need for capacity and energy, to increase fuel diversity, to minimize greenhouse gas emissions, and to achieve fuel savings for customers as quickly as possible.

Such actions by FPL should be encouraged.

OPC's allegation of imprudence ignores these realities and penalizes FPL for proposing a cost-effective solution to meet these needs and achieve these goals.

FPL has appropriately relied upon the Commission's decisions to approve the expedited schedule. It is inappropriate to attempt to litigate that now. Good regulation should maintain consistent policies that can be relied upon and which encourage utilities to make aggressive and prudent decisions to maximize customer benefits. OPC's suggestion of imprudence would send the wrong message and have the

opposite effect. 1 2 That concludes my summary. 3 MR. ANDERSON: Thank you, Mr. Deason. 4 The witness is available for cross-examination, Chairman Graham. 5 CHAIRMAN GRAHAM: Thank you. 6 7 Intervenors? Ms. Kaufman. 8 CROSS EXAMINATION 9 BY MS. KAUFMAN: 10 Good morning, Mr. Deason. I've often wanted 11 to cross-examine you. 12 Α I bet you have. 13 (Laughter.) 14 If I were in your place, I would relish the opportunity. 15 16 You know I'm just kidding you. 17 Α I think back, was I ever mean to you before? Never. Always the consummate gentleman. 18 19 As I understand your testimony, and I think 20 you referenced this in your summary, you take issue with 21 Mr. Jacobs' suggestion that the Commission look at a 22 breakeven analysis, and you've referenced that. 23 And you also claim that that kind of analysis would require the Commission to engage in hindsight; is 24 25 that correct?

A Yes.

Q Okay. Would you agree with me that as the Commission evaluates the cost-effectiveness of a project each year as it goes forward, it should be able to use the tools that it finds the most appropriate to look at the project?

A Absolutely. The Commission should avail itself of the tools that it thinks are appropriate. The present value analysis is an appropriate tool, is one the Commission has relied upon in the past. And, and a breakeven analysis can also be used to look at whether a project should continue.

The problem I have is with the suggestion that a breakeven analysis, that that tool be used in an inappropriate manner, that manner being to basically put a cap on costs that otherwise would have been determined to be prudent. That is not the purpose, that is not the intent, that is not correct use of a breakeven analysis.

Q But I think that you agreed that the use of a breakeven analysis in this situation could be appropriate if the Commission deems it to provide information that they find relevant.

A Yes, it could be used by the Commission, not to determine what costs should be recoverable, but to determine the continued viability of the project.

One needs to understand that a breakeven analysis is just a refinement of the present value analysis. The present value analysis compares two alternatives and determines which of those is the most cost-effective alternative. A breakeven analysis just takes that one, takes it a step and looks and determines the magnitude of the difference in costs.

And if there are two projects and there's a difference, a beta of one million, that means that one is \$1 million more cost-effective than the other, and that the other project, that those costs, there's a \$1 million difference and that's the breakeven point.

Costs for the project that you approve could increase by \$1 million and it becomes breakeven with the project that you're comparing it against.

Q But certainly if the Commission wanted to request the company to perform a breakeven analysis, that would -- in your view, would that be something the company would be willing to provide?

A I can't speak for the company in that regard.

I believe that question was asked to Mr., perhaps

Mr. Sim yesterday. I think the record speaks for

itself. But as I recall, I think he indicated that is

an analysis that FPL can perform, perhaps routinely

performs. But the point that needs to be made to the

Commission is that you do not use that analysis as a tool for -- and achieve a purpose for a never -- it was never intended, it was never intended to be a tool to deny the recoverability of otherwise prudently incurred costs. That's the point.

**Q** Mr. Deason, I apologize for not recalling. Were you on the Commission when the determination of need for the EPU was granted?

A I was not.

Q Okay. Have you reviewed the record in that case in preparation for your comments here today?

A To a limited extent. I would not call it a thorough review of that record. I do recall that the, that the matter was actually presented to the Commission in the form of a stipulation. I do recall -- I looked at some of the information requests or interrogatories that the Staff submitted, and it appeared to me the Staff did a very thorough analysis, as they always do on need determination proceedings, but I do not believe there were other -- any other Intervenors in the case.

Q Well, from your limited review, as you've said, of the record, do you recall whether you ever saw the term "fast tracked" used by anybody in the documents that you reviewed?

A No. I, I did not see the term "fast track" in

my limited review, but I did see terms used. Expedited, 1 quickest feasible manner, or things similar to that. 2 But, no, the term "fast track," I did not see that 3 particular term. 4 Have you, have you been here -- were you here 5 yesterday? Have you been in the hearing room? 6 I was not in the hearing room yesterday. 7 did come out here yesterday evening about 5:30, quarter 8 to 6:00, just in case things were moving so rapidly as 9 to whether I would be needed, but that was my limited 10 extent to being here yesterday. 11 Okay. You reviewed the testimony in this 0 12 case, have you not? You certainly reviewed Dr. Jacobs' 13 testimony. 14 Yes, I did. 15 Okay. And you would agree with me that there 16 is a rather strenuous debate among the parties as to 17 whether expedited is the same thing as fast tracked? 18 Yes, I do understand that there is a 19 difference of opinion as to whether those terminologies 20 mean something different as they are used in the context 21 of the issues in this case. 22 MS. KAUFMAN: Thank you, Mr. Deason. It was a 23 pleasure. 24 25 CROSS EXAMINATION

1	BY MR. McGLOTHLIN:
2	Q Hello, Mr. Deason.
3	A Hello.
4	<b>Q</b> Based upon your prefiled testimony and your
5	summary, as I understand it, you object to the use of a
6	breakeven analysis to disallow costs that would
7	otherwise be deemed prudent; is that correct?
8	A That is correct.
9	MR. McGLOTHLIN: No further questions.
LO	MR. WHITLOCK: No questions for this witness,
11	Mr. Chairman.
12	CHAIRMAN GRAHAM: Staff?
13	MR. YOUNG: No questions.
14	CHAIRMAN GRAHAM: Commissioner Edgar.
15	COMMISSIONER EDGAR: Thank you, Mr. Chairman.
16	Hello, Mr. Deason.
17	THE WITNESS: Hello, Commissioner.
18	COMMISSIONER EDGAR: You have in your prefiled
19	and also in response to questions talked to us here
20	today a good amount about that, the issue of the
21	breakeven analysis. I'd like to approach that from a
22	slightly different point and pose to you, in light of
23	your unique experience working as a consumer advocate
24	and also as a regulator, could you speak to us from your

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experience and with your expertise about the issue of

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1 comprehensive? 2 3 5 different plant sites? 6 7 8

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separate long-term feasibility analyses versus

THE WITNESS: I need some clarification on your question. Are you talking about in the context of the EPU uprate project and it being conducted at two

COMMISSIONER EDGAR: Yes. Yes, I am.

THE WITNESS: Okay. I think it is, it is important for the Commission to consider the context in which the EPU project was presented to it at the time of the need determination. It was presented as one project, and the cost estimates and the comparison to other alternatives were done in the context of one project. I think for consistency that it needs to be, to continue to be, to be viewed as one project.

And the reason is because when the decision was made that it was the most cost-effective alternative, there was a need of a certain magnitude that needed to be met, and that need was as a result of the fact that the Commission denied the Glades power project. I'm not taking issue with the Commission's decision to deny that, but it is a reality.

COMMISSIONER EDGAR: Which was a vote that I made.

THE WITNESS: I didn't participate in that

case. But I do recall the Commission strongly encouraging FPL, all of Florida's utilities, perhaps FPL in particular, to look at what I call solid based, solid fuel generating alternatives, which would either be nuclear or coal, because there was concern about a lack of fuel diversity and perhaps an overreliance on natural gas generation.

And it was at the encouragement of the Commission that the Glades project was studied and it was proposed and it was fully vetted at the Commission and a decision was reached. And that's fine, that's the way the process should work, and a decision was made.

But I think the Commission should be cognizant that it put FPL in the position of having to determine how they could cost-effectively meet the demand that was envisioned in the 2012/2013 time frame, how they could do that while also minimizing greenhouse gas emissions, while increasing fuel diversity, and doing all of that in a cost-effective manner.

And that was as a result that FPL came forward with the EPU project, and it was one project to meet that demand. Both of these projects, if you want to say they were separate projects, were needed to meet the demand.

But beyond that, the cost-effectiveness was

looked at as one project, and to, now to sever that and say that they are standalone projects and one could proceed or one could not, I think that's placing a lot in jeopardy.

There's also been testimony in this proceeding about the location of generation and how that's important for liability purposes and in terms of perhaps additional transmission costs. I know there's an allegation by FP -- I mean by OPC that one of the, one of the, I think it's Turkey Point, that it may not appear to be as cost-effective because of the fact that the life of that plant is not as great as the remaining life of the other nuclear plant.

Well, I think the Commission should obviously ask whether there's a possibility of the life being extended at Turkey Point. I don't have an answer to that question, but that is perhaps a possibility.

But also the Commission has heard testimony about the necessity of having generation located close to load. So that's another aspect. I think the fact that the, that the generation was going to be, from Turkey Point was going to be closer to load was a consideration. I know it was something that Staff explored in their interrogatories as they posed them to FPL in terms of whether the project was cost-effective,

and it was a factor.

So to ignore the benefits and the cost parameters that were explored in the need determination and at this point, some years later, to sever that -- I think it could be done. I would use extreme caution before doing so. I just think that it could, it could, it could put some things in jeopardy.

and, you know, appreciate the points that you're making, realizing that at the time the project was presented as a whole as opposed to separate components, and that there was the belief and the expectation that that would therefore include some efficiencies and some additional cost-effectiveness and some, you know, additional benefits of, of approaching it that way.

But would you agree that, by virtue of a project being presented in that way, does not preclude the Commission's responsibility or authority to analyze a project as separate components?

THE WITNESS: I would agree with that,

Commissioner. My only caution would be to look at it,

make sure it's the right thing to do, realize that there

could be other consequences of breaking it apart. But,

yes, I think it's within the Commission's discretion to

do that.

COMMISSIONER EDGAR: Thank you.

CHAIRMAN GRAHAM: I'm glad you asked that question. You took it right out of my mouth.

Commissioner Brisé.

COMMISSIONER BRISÉ: Thank you, Mr. Chairman.

Mr. Deason, happy to see you again. I have a couple of questions, and they'll be based from your testimony. Go to page 3 on your testimony where on line 12 -- the question is, "Why do you disagree with the recommendation of Witnesses Jacobs and Smith?"

And, one, you have that the recommendation addresses a midstream attempt to fundamentally, fundamentally and inappropriately change the standard for determining cost recovery through the nuclear recovery clause. So I suppose that that goes to the issue of finality to a certain degree.

THE WITNESS: Yes, Commissioner, it does. It goes to, I think, the need for finality and how that was expressed by the Legislature and how the Commission adopted its rule. With the annual prudence reviews and the finality of those, I think, yes, it goes to the heart of that. And I think that OPC's suggestion is, is midstream in the fact that the Commission has already determined a need for the project and it's determined that the, the expedited approach was the appropriate

approach.

So, yeah, I would consider that it would be a midstream and it would be counter to the policy of the State of Florida to determine finality of costs based upon annual prudence reviews.

commissioner BRISÉ: Now, on, on page 4 you address the issue, starting at line 5, 5 through 14, whether the breakeven alternative is needed to protect customers from unreasonable costs, "Do you agree?"

The question that I have is do you agree for this instant or is that something that the Commission should potentially look at moving forward?

THE WITNESS: I believe -- the answer to your question is both. I think that my answer is in terms of where we find us, where we find ourselves at this point, as well on a moving forward basis.

You have to realize, Commissioner, that the breakeven analysis being proposed by OPC, it doesn't find fault with any particular costs. In fact, I think this testimony in this case is devoid of there being any specific cost that was incurred by FPL that was deemed to be imprudent.

What it does is it relies upon hindsight, relies upon sunk costs, and an ever-changing breakeven analysis which is going to change with time. That

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breakeven analysis is going to change as the price of gas changes, perhaps as inflation changes, cost of capital changes, or, or cost of materials change, or -- it's going to change as well.

Sitting here today, we don't know what the relationship is going to be with a breakeven analysis at the time that these, this EPU project is completed. It could be below that, it could be above. But the fact that it is above does not mean that there has been one dime of cost incurred imprudently, and that's how it violates the policy that has been established by the Legislature and this Commission.

COMMISSIONER BRISÉ: So final question. So from your perspective, not only in this instant but as an overarching policy for the Commission, it would be bad policy to pursue that, this, that approach?

THE WITNESS: Yes, it would be bad policy. It would be inconsistent with policy already established.

And as you heard Mr. Olivera say, he feels like that it would -- could possibly prevent the company from doing additional nuclear projects just from the fact of the adverse impacts on the investment community.

COMMISSIONER BRISÉ: Thank you.

CHAIRMAN GRAHAM: Redirect?

MR. ANDERSON: Thank you, Mr. Chairman.

#### REDIRECT EXAMINATION

### BY MR. ANDERSON:

Q Mr. Deason, Ms. Kaufman asked you if you recalled seeing the word "fast track" in the nuclear uprate need determination information. Do you recall that?

A Yes.

Q And you told us that you saw information about completing the project as soon as practicable and expedited and those things; right?

A Yes. I did see that terminology.

Q You are -- are you aware that the Commission determined in the 2008 need order that the uprates were approved to fulfill a 2012 reserve resource need for FPL?

A Yes, I saw that. And that was, that was the need -- that was determined that was the time frame. And the only way that those projects could have been completed is if it had been expedited. Now whether someone wants to use the term fast track or not, you know, I don't want to quibble with that. But I think the Commission did recognize to have these plants in place to meet the need for the time frame envisioned, 2012 and 2013, that these projects had to be expedited.

Q In the course of your work you mentioned that

you reviewed discovery that Staff propounded on the company and the company responded to in that case; is that right?

- A Yes, I did review that.
- Q From your review was it understood that this was a complex project?
- A Yes, it was -- to my -- in my opinion, yes. I think certainly the, the scope and the, the, the in-depth questions that were asked by Staff in their review, I think it was obvious that it was a complicated project.
- Q Was there testing and probing of the inputs to the economic analysis submitted in the proceeding?
- A Yes. It was -- yes. As, as is the case in all need determinations, it was certainly the case for the need determination for these projects as well.

  There were a number of scenarios that were reviewed that could affect the outcome of that, and the analysis was done which showed that these projects were -- they were either cost-effective in all scenarios or the vast majority of the scenarios.
- Q And you're familiar from your review of Dr. Jacobs' testimony that he points to the geographic distance of the plants and the differences in license terms and things like that, those are the part of the

1	reasons Dr. Jacobs says a different analysis should be
2	done; is that right?
3	A I'm sorry. Could you repeat the question?
4	<b>Q</b> Okay. Focusing on the discovery you reviewed
5	in the need determination case, did was there
6	investigation and probing of the different license lives
7	of the plants?
8	${f A}$ Honestly, I just don't remember that at this
9	point based upon my review.
.0	<b>Q</b> Okay. Okay. That's fine.
1	Did Public Counsel submit any testimony in the
.2	need determination for your review?
L3	A No, Public Counsel did not. It was my
L <b>4</b>	understanding there were no Intervenors in the case.
L5	<b>Q</b> If Public Counsel had wanted to challenge the
L6	timing or method of the project, call it expedited or
L7	call it fast track or call it Bob
L8	MR. McGLOTHLIN: I object to this line of
L9	questioning as beyond the scope of cross-examination.
20	MR. ANDERSON: I believe it's directly within
21	the scope because Ms. Kaufman asked about the 2007 need
22	determination proceeding.
23	MR. McGLOTHLIN: She didn't ask anything about
24	OPC's participation.
25	CHAIRMAN GRAHAM: Wait a second. I do not

remember what the question was. We can get the court reporter to bring it back.

MR. ANDERSON: May I rephrase a different question? Would that be better?

CHAIRMAN GRAHAM: Let's try that.

MR. ANDERSON: Okay.

#### BY MR. ANDERSON:

Q Mr. Deason, you noted there were no Intervenors; is that correct?

A That's correct.

Q Is it fair to say that if an Intervenor wanted to participate, they could have challenged the timing or method of the project by whether the project was expedited or fast tracked?

A Yes. The timing of a project would be a legitimate issue that could be raised in any need determination proceeding as to what -- and as to whether the need actually exists that is being, being presented. And the Commission looks at that and the timing of that and whether there are other alternatives which could meet that need, such as conservation efforts and things of that nature.

Q Regardless of who would have or could have raised that, is it good policy to permit years later relitigation of that?

1	A Well, I think this
2	MS. KAUFMAN: Chairman, I'm going to object.
3	I think this is way beyond the scope of my
4	cross-examination. And I think Mr. Deason has already
5	made his opinions clear.
6	CHAIRMAN GRAHAM: I have to agree with her.
7	MR. ANDERSON: We have no further questions.
8	Thanks.
9	CHAIRMAN GRAHAM: Thank you.
LO	We have some exhibits to enter into the
11	record?
12	MR. ANDERSON: Yes, we do. We have Exhibit
13	130. FPL offers Exhibit 130 into evidence.
14	CHAIRMAN GRAHAM: We will enter Exhibit 130
15	into the record. Any objections to that?
L6	MR. YOUNG: No objections.
17	CHAIRMAN GRAHAM: Okay. Anything else for
18	this witness?
19	(Exhibit 130 admitted into evidence.)
20	MR. ANDERSON: No, sir. We would ask that
21	Mr. Deason be excused for the balance of the hearing.
22	CHAIRMAN GRAHAM: Any objections to that?
23	Seeing none, Mr. Deason, thank you for your
24	testimony today.
25	THE WITNESS: Thank you.

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1	STATE OF FLORIDA )
2	: CERTIFICATE OF REPORTER COUNTY OF LEON )
3	
4	I, LINDA BOLES, RPR, CRR, Official Commission
5	Reporter, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.
6	
7	IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision;
8	and that this transcript constitutes a true transcription of my notes of said proceedings.
9	I FURTHER CERTIFY that I am not a relative,
10	employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties'
11	attorneys or counsel connected with the action, nor am I
12	financially interested in the action.  DATED THIS day of Quest,
13	2011.
14	
15	Disda Boles
16	LINDA BOLES, RPR, CRR  FPSC Official Commission Reporter
17	(850) 413-6734
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