	FILED 8/23/2017 DOCUMENT NO. 07212	2-2017
1	FPSC - COMMISSION (CLERK BEFORE THE DA PUBLIC SERVICE COMMISSION
2	In the Matter of:	
3	in the matter or:	
4		DOCKET NO. 20170009-EI
5	NUCLEAR COST RECO	VERY CLAUSE.
6		
7		VOLUME 1
8		(Pages 1 through 247)
9	PROCEEDINGS:	HEARING
10	COMMISSIONERS	
11	PARTICIPATING:	CHAIRMAN JULIE I. BROWN COMMISSIONER ART GRAHAM
12		COMMISSIONER RONALD A. BRISÉ COMMISSIONER DONALD J. POLMANN
13	DATE:	Tuesday, August 15, 2017
14	TIME:	Commenced at 1:30 p.m.
15	DI AGE	Concluded at 5:06 p.m.
16	PLACE:	Betty Easley Conference Center Room 148
17		4075 Esplanade Way Tallahassee, Florida
18	REPORTED BY:	LINDA BOLES, CRR, RPR
19		Official FPSC Reporter (850) 413-6734
20		
21		
22		
23		
24		
25		

APPEARANCES:

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JESSICA CANO and KEVIN I.C. DONALDSON,
ESQUIRES, 700 Universe Boulevard, Juno Beach, Florida
33408-0420, on behalf of Florida Power & Light Company.

J.R. KELLY, PUBLIC COUNSEL; CHARLES REHWINKEL, PATRICIA A. CHRISTENSEN and ERIK L. SAYLER, ESQUIRES, Office of Public Counsel, c/o the Florida Legislature, 111 W. Madison Street, Room 812, Tallahassee, Florida 32399-1400, appearing on behalf of the Citizens of the State of Florida.

JON C. MOYLE, JR., ESQUIRE, Moyle Law Firm, P.A., 118 North Gadsden Street, Tallahassee, Florida 32301, appearing on behalf of the Florida Industrial Power Users Group.

ROBERT SCHEFFEL WRIGHT and JOHN T. LAVIA, III, ESQUIRES, Gardner, Bist, Bowden, Dee, LaVia & Wright, P.A., 1300 Thomaswood Drive, Tallahassee, Florida 32308, appearing on behalf of the Florida Retail Federation.

APPEARANCES (Continued):

Energy.

Tallahassee, Florida 32399-0850, appearing on behalf of

KEITH HETRICK, GENERAL COUNSEL, and MARY ANNE

KYESHA MAPP and MARGO DUVAL, ESQUIRES, FPSC

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General Counsel's Office, 2540 Shumard Oak Boulevard,

appearing on behalf of Southern Alliance for Clean

HELTON, DEPUTY GENERAL COUNSEL, ESQUIRES, Florida Public

Service Commission, 2540 Shumard Oak Boulevard,

the Florida Public Service Commission Staff.

Tallahassee, Florida 32399-0850, appearing as advisors

to the Florida Public Service Commission.

5 Prefiled Direct Testimony Inserted

RONALD A. MAVRIDES

Prefiled Direct Testimony Inserted 37

STEVEN D. SCROGGS

Examination by Ms. Cano 65
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Examination by Ms. Christensen 139
Examination by Mr. Moyle 171
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2	1	Comprehensive Exhibit List	10	10	
3	2 th	nrough 39 (as identified in	10		
4		Comprehensive Exhibit List)			
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PROCEEDINGS

to have you all here today, August 15th, in this Nuclear

<u> </u>	
2	CHAIRMAN BROWN: All right. Good afternoon.
3	(Chorus of greetings.)
4	Thank you. It's nice to see you all. I
5	haven't seen some of you in a while, so it's a pleasure

Cost Recovery Clause hearing.

I'd like to convene the hearing at this time.
Staff, would you please read the notice.

MS. MAPP: Good afternoon. By notice issued June 30th, 2017, this and place was set for a hearing in Docket No. 20170009-EI. The purpose of the hearing was set out in the notice.

CHAIRMAN BROWN: Thank you, Ms. Mapp. And we will take appearances starting with Florida Power & Light.

MS. CANO: Good afternoon. Jessica Cano and Kevin Donaldson appearing on behalf of Florida Power & Light.

CHAIRMAN BROWN: Thank you.

Duke.

MR. BERNIER: Good afternoon. Matt Bernier for Duke Energy Florida.

FLORIDA PUBLIC SERVICE COMMISSION

CHAIRMAN BROWN: Thank you.

FIPUG.

MR. MOYLE: Hi. Jon Moyle on behalf of the 1 Florida Industrial Power Users Group, FIPUG. 2 3 CHAIRMAN BROWN: Thank you. SACE. 4 MR. CAVROS: Good afternoon, Commissioners. 5 George Cavros on behalf of the Southern Alliance for 6 7 Clean Energy. CHAIRMAN BROWN: Thank you. 8 9 Retail Federation. 10 MR. WRIGHT: Thank you, Madam Chairman. Robert Scheffel Wright and John T. LaVia, III, on behalf 11 12 of the Florida Retail Federation. 13 CHAIRMAN BROWN: Thank you. 14 And Public Counsel. MR. REHWINKEL: Good afternoon. Charles J. 15 Rehwinkel, Patricia Christensen, Erik Sayler, and J.R. 16 17 Kelly with the Office of Public Counsel for the 18 customers of FPL and Duke Energy Florida. 19 CHAIRMAN BROWN: Thank you. Staff. 2.0 21 MS. MAPP: Kyesha Mapp, and I'd also enter an 22 appearance for Margo Duval. 23 CHAIRMAN BROWN: Thank you. 24 MS. HELTON: Mary Anne Helton, I'm here as 25 your advisor. And I'd also like to make an appearance

2 advisor.

preliminary matters that we need to address. So, staff, could you kick us off with them?

transcribed for the record, and there are a few

have a clear hearing proceeding. It is being

for Keith Hetrick, your General Counsel, and also an

please silence your electronic devices so that we could

All right. At this time I'd ask if you could

CHAIRMAN BROWN: Thank you.

MS. MAPP: Yes.

CHAIRMAN BROWN: Thank you.

MS. MAPP: By Order No. 2017-0260-PCO-EI, the Prehearing Officer granted the Office of Public Counsel and PCS Phosphate's joint motion to temporarily hold in abeyance and reschedule the 2017 hearing for Duke Energy Florida as relates to the Levy Nuclear Project.

The DEF portion of this hearing today will only relate to the CR3 uprate portions, and the Levy project will continue in October 25, 2017.

PCS Phosphate has been excused from this hearing, and on August 11th, 2017, the City of Miami officially withdrew from this docket. As a result, its witness, Eugene Meehan, will not be appearing before the Commission today.

FPL has stated during the prehearing

conference that in the event of the withdrawal of 1 Miami's witness, it would also withdraw its two rebuttal 2 witnesses, Steven Scroggs and John Reed. 3 Staff has prepared a Comprehensive Exhibit 4 List, and the list itself is marked as Exhibit No. 1. 5 Due to a scrivener's error, staff's direct exhibits were 6 7 erroneously numbered No. 35 and 36. That has been corrected and are now numbered No. 38 and 39. All --8 9 the updated list has --10 CHAIRMAN BROWN: Ms. Mapp, could you repeat those numbers again? 11 12 MS. MAPP: Yes. They were previously numbered 35 and 36. 13 14 CHAIRMAN BROWN: Okay. MS. MAPP: And now have been renumbered 38 15 and 39. 16 17 CHAIRMAN BROWN: Got it. 18 MS. MAPP: And the updated Comprehensive 19 Exhibit List has been provided to all the parties, 20 Commissioners, and the court reporter. 21 All parties were able to stipulate to staff's 22 two exhibits, direct exhibits, and we will seek to enter 23 them into the record at the appropriate time. 24 CHAIRMAN BROWN: Okay. 25 MS. MAPP: And at this time staff requests

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that Exhibit No. 1, the Comprehensive Exhibit List, be entered into the record and that the exhibits be marked as numbered therein.

CHAIRMAN BROWN: All right. Seeing no objection from any of the parties, we will go ahead and enter into the record Exhibit 1 as well as mark all of the exhibits therein. All right.

(Exhibit 1 marked for identification and admitted into the record.)

(Exhibits 2 through 39 marked for identification.)

MS. MAPP: All parties have waived opening statements and post-hearing briefs for the DEF portion of this docket, and all parties have stipulated to DEF witness Thomas G. Foster and staff witness Ronald Mavrides and they have been excused from this hearing. Their testimony and exhibits will be moved into the record at the appropriate time.

There are proposed Category 2 stipulations on Issues 11 through 15 relating to DEF. The Prehearing Order provides that FPL's petition be addressed first, then DEF's. However, in light of the proposed stipulations on DEF Issues 11 through 15, staff would recommend that the Commission take up DEF's case first.

CHAIRMAN BROWN: Okay. That sounds

reasonable. And since the parties have waived opening 1 2 statements and there are proposed stipulations, let's 3 just go right to the record first with Duke. At this time I'll ask Duke to move testimony and exhibits, if 4 5 you'd like them moved into the record. MR. BERNIER: Thank you, Madam Chairman, we 6 7 would. At this time I'd like to enter the direct testimonies of Thomas G. Foster filed on March 1st and 8 9 May 1st, 2017, into the record as though read. CHAIRMAN BROWN: Seeing no objections, we'll 10 go ahead and enter into the record Thomas G. Foster's --11 12 both direct testimonies. MR. BERNIER: Thank you. And I'd also like to 13 14 enter Exhibits No. 29 and 31 from staff's Comprehensive Exhibit List into the record. 15 CHAIRMAN BROWN: Seeing no objections, we will 16 17 go ahead and enter into the record Exhibits 29 and 31. (Exhibits 29 and 31 admitted into the record.) 18 19 MR. BERNIER: Thank you, ma'am. That does it 20 for us. 21 CHAIRMAN BROWN: All right. Thank you. 22 23

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IN RE: NUCLEAR COST RECOVERY CLAUSE BY DUKE ENERGY FLORIDA, LLC.

FPSC DOCKET NO. 170009-EI

DIRECT TESTIMONY OF THOMAS G. FOSTER

I. INTRODUCTION AND QUALIFICATIONS

- Q. Please state your name and business address.
- A. My name is Thomas G. Foster. My business address is 299 First Avenue North, St.
 Petersburg, FL 33701.

- Q. By whom are you employed and in what capacity?
- **A.** I am employed by Duke Energy Florida, LLC, as Director, Rates and Regulatory Planning.

- Q. What are your responsibilities in that position?
- A. I am responsible for regulatory planning and cost recovery for Duke Energy Florida, LLC ("DEF"). These responsibilities include regulatory financial reports and analysis of state, federal, and local regulations and their impact on DEF. In this capacity, I am also responsible for the Levy Nuclear Project ("LNP") and the Crystal River Unit 3 ("CR3") Extended Power Uprate ("EPU") Project ("CR3 Uprate") Cost Recovery filings made as part of this docket in accordance with Rule 25-6.0423, Florida Administrative Code ("F.A.C.").

Q. Please describe your educational background and professional experience.

I joined the Company on October 31, 2005 as a Senior Financial Analyst in the Regulatory group. In that capacity I supported the preparation of testimony and exhibits associated with various Dockets. In late 2008, I was promoted to Supervisor Regulatory Planning. In 2012, following the merger with Duke Energy Corporation ("Duke Energy"), I was promoted to my current position. Prior to working at Duke Energy I was the Supervisor in the Fixed Asset group at Eckerd Drug. In this role I was responsible for ensuring proper accounting for all fixed assets as well as various other accounting responsibilities. I have 6 years of experience related to the operation and maintenance of power plants obtained while serving in the United States Navy as a Nuclear Operator. I received a Bachelors of Science degree in Nuclear Engineering Technology from Thomas Edison State College. I received a Masters of Business Administration with a focus on finance from the University of South Florida and I am a Certified Public Accountant in the State of Florida.

Α.

II. PURPOSE OF TESTIMONY.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present for Florida Public Service Commission ("FPSC" or the "Commission") review and approval of the actual costs associated with DEF's LNP and CR3 Uprate project activities for the period January 2016 through December 2016. Pursuant to Rule 25-6.0423, F.A.C., DEF is presenting testimony and exhibits for the Commission's determination of prudence for actual expenditures and associated carrying costs. I will also present the LNP and CR3

under

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1		Uprate project 2016 accounting and cost oversight policies and procedures pursuant
2		to the nuclear cost recovery statute and rule.
3		
4	Q.	Are you sponsoring any exhibits in support of your testimony on the 2016 LNP
5		and CR3 Uprate project costs?
6	A.	Yes. I am sponsoring sections of the following exhibits, which were prepared under
7		my supervision:
8		<u>2016 Costs:</u>
9		• Exhibit No (TGF-1), contains schedules showing the actual costs associated
10		with the Levy Project. This exhibit consists of: 2016 Summary, 2016 Detail

- ated Schedule, 2016 Detail - LLE Deferred Balance Schedule, and Appendices A through E, which reflect DEF's retail revenue requirements for the LNP from January 2016 through December 2016. Sponsors of specific schedules are identified in the Table of Contents in Exhibit No. _ (TGF-1). I will only be sponsoring the 2016 True-Up Summary, portions of the 2016 Detail Schedules, and Appendices A, B and C. Christopher Fallon will be co-sponsoring portions of the 2016 Detail Schedules and sponsoring Appendices D and E.
- Exhibit No. ____ (TGF-2) contains schedules showing the actual costs associated with the CR3 Uprate project and consists of: 2016 Summary, 2016 Detail Schedule and Appendices A through E, which reflect DEF's retail revenue requirements for the CR3 Uprate project from January 2016 through December 2016.

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1	The Company relies on the information included in the testimony in the conduct of
2	its affairs.
3	These exhibits are true and accurate.
4	
5	Q. What are the 2016 Detail Schedules and the Appendices?
6	A. • Schedule 2016 Summary Schedule reflects the actual 2016 year-end revenue
7	requirements by Cost Category for the period, and final true-up amount for the
8	period.
9	Schedule 2016 Detail Schedule reflects the actual calculations for the true-up of
10	total retail revenue requirements for the period.
11	Schedule 2016 Detail - LLE Deferred Balance Schedule (LNP only) reflects the
12	revenue requirement calculations for the LLE deferred balance for the period.
13	Appendix A (LNP) reflects beginning balance explanations.
14	Appendix A (CR3 Uprate) reflects beginning balance explanations and support
15	for the 2016 CR3 Uprate Regulatory Asset amortization amount.
16	Appendix B reflects Other Exit/Wind Down expenditure variance explanations
17	for the period.
18	Appendix C provides support for the appropriate rate of return consistent with
19	the provisions of Rule 25-6.0423, F.A.C.
20	Appendix D describes Major Task Categories for expenditures and variance
21	explanations for the period.
22	 Appendix E reflects contracts executed in excess of \$1.0 million (if any).
23	

- Q. What is the source of the data that you will present in your testimony and exhibits in this proceeding?
- A. The actual data is taken from the books and records of DEF. The books and records are kept in the regular course of our business in accordance with generally accepted accounting principles and practices, provisions of the Uniform System of Accounts as prescribed by the Federal Energy Regulatory Commission ("FERC"), and any accounting rules and orders established by this Commission.

- Q. What is the final true-up amount for the LNP for the period January 2016 through December 2016?
- A. The final true-up for the calendar period ending December 2016 is an under-recovery of \$8,554,134. This amount can be seen on Line 3 of the 2016 Summary Schedule of Exhibit No. ____ (TGF-1). Line 1 of the 2016 Summary Schedule represents current period exit and wind down costs (including the disposition of Long Lead Equipment ("LLE")) and carrying costs on the unrecovered investment balance (including prior period (over)/under recovery balances), and was calculated in accordance with Rule 25-6.0423, F.A.C.

- Q. What is the final true-up amount for the CR3 Uprate project for which DEF is requesting recovery for the period January 2016 through December 2016?
- A. DEF is requesting approval of a total over-recovery amount of \$608,728 for the calendar period of January 2016 through December 2016. This amount can be seen on Line 3 of the 2016 Summary Schedule of Exhibit No. ____ (TGF-2). Line 1 of the 2016 Summary Schedule represents the current period exit and wind down costs and

carrying costs on the unrecovered balance including prior period (over)/under recovery balances, and was calculated in accordance with Rule 25-6.0423, F.A.C..

Q. What is the carrying cost rate used in the 2016 Detail Schedule?

A. For both the CR3 Uprate and the LNP, DEF is using the rate specified in Rule 25-6.0423(7)(b), F.A.C. The carrying cost rate used for this time period in the 2016 Detail Schedule was 6.76 percent. On a pre-tax basis, the rate is 9.80 percent. This rate is based on DEF's December 2015 Earnings Surveillance Report. This annual rate was also adjusted to a monthly rate consistent with the Allowance For Funds Used During Construction ("AFUDC") rule, Rule 25-6.0141(3), F.A.C. Support for the components of this rate is shown in Appendix C of Exhibit Nos.___(TGF-1) and (TGF-2).

III. COSTS INCURRED IN 2016 FOR THE LEVY NUCLEAR PROJECT.

- Q. What are the total retail costs DEF incurred for the LNP during the period January 2016 through December 2016?
- A. The total retail costs for the LNP are \$8.6 million for the calendar year ended December 2016, as reflected on 2016 Summary Schedule Line 1e in Exhibit No_(TGF-1). This amount includes \$3.2 million in exit/wind-down costs and LLE disposition costs as can be seen on the 2016 Summary Schedule on Lines 1b and 1c, and \$5.4 million for the carrying costs on the unrecovered investment balance shown on the 2016 Summary Schedule Line 1a. These amounts were calculated in accordance with the provisions of Rule 25-6.0423, F.A.C.

1	Q.	How did actual Generation expenditures for January 2016 through December
2		2016 compare with DEF's actual/estimated costs for 2016? REDACTED
3	A.	Appendix D (Page 2 of 2), Line 4 shows that total Generation project costs were
4		, or higher than estimated. By cost category, major cost
5		variances between DEF's projected and actual 2016 LNP Generation project costs
6		are as follows:
7		
8		Wind-Down Costs: There were no major variances from the estimates with respect
9		to these costs.
10		REDACTED
11		Disposition: Expenses for Disposition of assets activities were
12		higher than estimated, as explained in the testimony of Christopher Fallon.
13		
14	Q.	What was the source of the separation factors used in the 2016 Detail Schedule?
15	A.	The jurisdictional separation factors are consistent with Exhibit 1 of the Revised and
16		Restated Stipulation and Settlement Agreement ("2013 Settlement Agreement")
17		approved by the Commission in Order No. PSC-13-0598-FOF-EI in Docket No
18		130208-EI.
19		
20	IV.	OTHER EXIT/WIND-DOWN COSTS INCURRED IN 2016 FOR THE LEVY
21		NUCLEAR PROJECT.
22	Q.	How did actual Other Exit/Wind-Down expenditures for January 2016 through
23		December 2016 compare with DEF's actual/estimated costs for 2016?

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1	A.	Appendix B, Line 4 shows that total Other Exit/Wind-down costs were \$44,730.
2		There were no major variances from the estimates with respect to these costs.
3		
4	v.	COSTS INCURRED IN 2016 FOR THE CR3 UPRATE PROJECT.
5	Q.	What are the total retail costs DEF incurred for the CR3 Uprate during the
6		period January 2016 through December 2016?
7	Α.	The total retail costs for the CR3 Uprate are \$14.3 million for the calendar year
8		ended December 2016, as reflected on 2016 Summary Schedule Line 1d in Exhibit
9		No(TGF-2). This amount includes exit/wind-down costs as can be seen on the
10		2016 Detail schedule on Line 16d and carrying costs on the unrecovered investment
11		balance shown on Line 5d. These amounts were calculated in accordance with the
12		provisions of Rule 25-6.0423, F.A.C.
13		
14	Q.	How did actual expenditures for January 2016 through December 2016
15		compare to DEF's actual/estimated costs for 2016?
16	Α.	Appendix D (Page 2 of 2), Line 4 shows that there were no cost variances between
17		DEF's actual and actual/estimated 2016 Generation Wind-Down and Disposition
18		costs. There were no expenditures for Wind-Down activities nor were there any
19		Sales or Salvage of Assets or Disposition activities in 2016.
20		
21	Q.	What was the source of the separation factors used in the 2016 Detail Schedule?
22	A.	The jurisdictional separation factors are consistent with Exhibit 1 of the 2013
23		Settlement Agreement approved by the Commission in Order No. PSC-13-0598-
24		FOF-EI in Docket No. 130208-EI.

1	VI.	OTHER EXIT/WIND-DOWN COSTS INCURRED IN 2016 FOR THE CR3
2		UPRATE PROJECT.
3	Q.	How did actual Other Exit/Wind-Down expenditures for January 2016 through
4		December 2016 compare with DEF's actual/estimated costs for 2016?
5	Α.	Appendix B, Line 4 shows that total Other Exit/Wind-down costs were \$42,851.
6		There were no major variances with respect to these costs.
7		
8	VII	2016 PROJECT ACCOUNTING AND COST CONTROL OVERSIGHT.
9	Q.	Have the project accounting and cost oversight controls DEF used for the LNP
10		and CR3 Uprate projects in 2016 substantially changed from the controls used
11		prior to 2016?
12	A.	No, they have not. The project accounting and cost oversight controls that DEF
13		utilized to ensure the proper accounting treatment for the LNP and CR3 Uprate
14		project in 2016 have not substantively changed since 2009. In addition, these
15		controls have been reviewed in annual financial audits by Commission Staff and
16		were found to be reasonable and prudent by the Commission in Docket Nos.
17		090009-EI, 100009-EI, 110009-EI, 120009-EI, 140009-EI, 150009-EI and 160009-
18		EI.
19		
20	Q.	How does the Company verify that the accounting and costs oversight controls
21		you identified are effective?
22	A.	In addition to the accounting processes used, the Company does both internal and
23		external audits of DEF accounting and cost oversight controls.

With respect to management's testing of internal controls over financial reporting, the Internal Controls Group within the Controller's Department facilitates the review of controls documentation and management testing. Based on this testing, management determines whether the controls are operating effectively. If any control is identified with a design deficiency or is determined to be operating ineffectively, such issues are logged and monitored for remediation by the Internal Controls Group.

With respect to external audits, Deloitte and Touche, DEF's external auditors, determined that the Company maintained effective internal control over financial reporting during 2016.

- Q. Did the cancellation of the LNP and CR3 Uprate project change the Company's accounting and cost oversight control processes?
- **A.** No. DEF continued to follow the same policies and processes as before cancellation to ensure prudent accounting and cost oversight for the projects as they are being closed out.
- Q. Are the Company's project accounting and cost oversight controls reasonable and prudent?
- A. Yes, they are. DEF's project accounting and cost oversight controls are consistent with best practices for project cost oversight and accounting controls in the industry and have been and continue to be vetted by internal and external auditors. We believe, therefore, that the accounting and cost oversight controls continue to be reasonable and prudent.

A. Yes, it does.

Q. What process have you implemented to ensure that 2016 costs related to the LNP Combined Operating License ("COL") are not included in the NCRC?

A. As discussed by Mr. Fallon, on a project team level DEF has always segregated project costs incurred by specific project code and this process did not change for 2016. The project team continues to charge COL-related labor, Nuclear Regulatory Commission ("NRC") fees, vendor invoices and all other COL-related cost items to the applicable COL project codes. The Florida Regulated Accounting and Rates and Regulatory Strategy groups have ensured that the COL-related project codes and associated costs incurred in 2014 and beyond were not included in the Company's NCRC Schedules, and thus not presented for nuclear cost recovery. We continue to track the COL-related costs for accounting purposes consistent with the 2013 Settlement Agreement.

IN RE: NUCLEAR COST RECOVERY CLAUSE BY DUKE ENERGY FLORIDA, LLC.

FPSC DOCKET NO. 170009-EI

DIRECT TESTIMONY OF THOMAS G. FOSTER IN SUPPORT OF REVENUE REQUIREMENTS TO BE RECOVERED DURING THE PERIOD JANUARY-DECEMBER 2018 FOR THE LEVY AND CRYSTAL RIVER 3 EPU PROJECTS

I. INTRODUCTION AND QUALIFICATIONS.

- Q. Please state your name and business address.
- A. My name is Thomas G. Foster. My business address is 299 First Avenue North, St. Petersburg, FL 33701.

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

A. I am employed by Duke Energy Florida, LLC, as Director, Rates and Regulatory Planning.

Q. What are your responsibilities in that position?

A. I am responsible for regulatory planning and cost recovery for Duke Energy Florida, LLC. ("DEF" or the "Company"). These responsibilities include: preparing regulatory financial reports and analysis of state, federal, and local regulations and their impact on DEF. In this capacity, I am also responsible for the Levy Nuclear Project ("LNP") and the Crystal River Unit 3 ("CR3") Extended Power Uprate ("EPU") Project ("CR3 Uprate") Cost Recovery filings, made as part of this Nuclear Cost

Recovery Clause ("NCRC") docket, in accordance with Rule 25-6.0423, Florida Administrative Code ("F.A.C.").

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Q. Please describe your educational background and professional experience.

A. I joined the Company on October 31, 2005 as a Senior Financial Analyst in the Regulatory group. In that capacity I supported the preparation of testimony and exhibits associated with various Dockets. In late 2008, I was promoted to Supervisor Regulatory Planning. In 2012, following the merger with Duke Energy Corporation ("Duke Energy"), I was promoted to my current position. Prior to working at Duke Energy I was the Supervisor in the Fixed Asset group at Eckerd Drug. In this role I was responsible for ensuring proper accounting for all fixed assets as well as various other accounting responsibilities. I have 6 years of experience related to the operation and maintenance of power plants obtained while serving in the United States Navy as a Nuclear Operator. I received a Bachelors of Science degree in Nuclear Engineering Technology from Thomas Edison State College. I received a Masters of Business Administration with a focus on finance from the University of South Florida and I am a Certified Public Accountant in the State of Florida.

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II. PURPOSE OF TESTIMONY.

Q. What is the purpose of your testimony?

The purpose of my testimony is to present, for Florida Public Service 1 Commission ("FPSC" or the "Commission") review, DEF's expected 2017 2 and 2018 costs associated with the CR3 Uprate project consistent with Rule 3 25-6.0423(7), F.A.C. and known LNP costs pursuant to the Stipulation 4 approved by this Commission in Order No. PSC-15-0521-FOF-EI ("2015 5 6 Stipulation") and consistent with Rule 25-6.0423(7), in support of setting 2018 rates in the Capacity Cost Recovery Clause ("CCRC"). Pursuant to the 7 2015 Stipulation, DEF is seeking recovery for its known LNP costs in this 8 9 proceeding. As discussed further in the testimony of Witness Christopher Fallon, at this time there are certain Levy costs or credits that are not known 10 or knowable and DEF has not included these in our estimates.

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Q. Are you sponsoring any exhibits in support of your testimony?

- Α. Yes. I am sponsoring sections of the following exhibits, which were prepared under my supervision:
 - Exhibit No. (TGF-3) contains schedules showing the known costs associated with the Levy project. Sponsors of specific schedules are identified in the Table of Contents in Exhibit No. _ (TGF-3). Witness Fallon will be co-sponsoring portions of the 2017 Detail Schedules and 2018 Detail Schedules, and sponsoring Appendices D and E.
 - Exhibit No. _ (TGF-4), contains schedules showing the costs associated with the CR3 Uprate project.

These exhibits are true and accurate to the best of my knowledge and information.

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Q. What are the 2017-2018 Detail Revenue Requirements Schedules and the Appendices?

- A. The 2017 Detail Schedule reflects the calculations for the total retail revenue requirements for the period except for those associated with the Levy LLE deferred balance.
 - The 2018 Detail Schedule reflects the calculations for the total retail revenue requirements for the period except for those associated with the Levy LLE deferred balance.
 - The 2017 Detail LLE Deferred Balance Schedule (Levy only) reflects the revenue requirement calculations for the LLE deferred balance for the period.
 - The 2018 Detail LLE Deferred Balance Schedule (Levy only) reflects the revenue requirement calculations for the LLE deferred balance for the period.
 - The 2018 Estimated Rate Impact Schedule reflects the estimated
 Capacity Cost Recovery Factors for 2018.
 - Appendix A (CR3 Uprate) reflects beginning balance explanations and support for the 2017 and 2018 Regulatory Asset amortization amount.
 - Appendix A (Levy) reflects beginning balance explanations and support for the amortization amount of the remaining uncollected 2018 Regulatory Asset net investment.
 - Appendix B reflects Other Wind Down/Exit Cost variance explanations for the period.

- Appendix C provides support for the appropriate rate of return consistent with the provisions of Rule 25-6.0423(7), F.A.C.
- Appendix D describes Major Task Categories for expenditures and variance explanations for the period.
- Appendix E reflects contracts executed in excess of \$1.0 million.
- Appendix F (CR3 Uprate only) reflects a summary of the 2013-2019
 Uprate Amortization Schedule for the Uncollected Investment Balance.

III. CARRYING COST RATES AND SEPARATION FACTORS FOR BOTH THE CR3 UPRATE PROJECT AND THE LEVY NUCLEAR PROJECT.

- Q. What is the carrying cost rate used in the 2017 and 2018 Revenue Requirement Detail Schedules?
- A. DEF is using the rate specified in Rule 25-6.0423(7)(b), F.A.C. as follows:
 "The amount recovered under this subsection will be the remaining unrecovered Construction Work in Progress balance at the time of abandonment and future payment of all outstanding costs and any other prudent and reasonable exit costs. The unrecovered balance during the recovery period will accrue interest at the utility's overall pretax weighted average midpoint cost of capital on a Commission adjusted basis as reported by the utility in its Earnings Surveillance Report filed in December of the prior year, utilizing the midpoint of return on equity (ROE) range or ROE approved for other regulatory purposes, as applicable."

 The carrying cost rate used for this time period is 6.65 percent. On a pre-

tax basis, the rate is 9.65 percent. This rate is based on DEF's December

2016 Earnings Surveillance Report. This annual rate was also adjusted to
2 a monthly rate consistent with the Allowance for Funds Used During
3 Construction ("AFUDC") rule, Rule 25-6.0141(3), F.A.C. Support for the
4 components of this rate is shown in Appendix C in Exhibit Nos.____(TGF-3)
5 for the LNP and (TGF-4) for the CR3 Uprate project.

Q. What was the source of the separation factors used in the 2017 and 2018 Revenue Requirement Detail Schedules?

A. The jurisdictional separation factors are consistent with Exhibit 1 of the Revised and Restated Stipulation and Settlement Agreement ("2013 Settlement Agreement") approved by the Commission in Order No. PSC-13-0598-FOF-EI in Docket No 130208-EI.

IV. COST RECOVERY FOR THE LEVY COUNTY NUCLEAR PROJECT.

- A. KNOWN LNP COSTS PURSUANT TO THE 2015 STIPULATION.
- Q. Have you provided schedules that are consistent with the terms of the 2013 Settlement Agreement, the Stipulation approved by this Commission in Order No. PSC-15-0521-FOF-EI, and the nuclear cost recovery statute and rule?
- A. Yes. The costs and revenue requirements can be seen in the 2017 Detail

 Schedule, the 2017 Detail LLE Deferred Balance Schedule, the 2018

 Detail LLE Deferred Balance Schedule, and the 2018 Detail Schedule.

 Consistent with my May 1, 2015 and April 27, 2016 testimony, DEF's LNP costs, including carrying charges on the deferral of \$54 million equivalent to

the LLE amount in dispute in DEF's litigation claims against WEC reflect prudent LNP costs that DEF is entitled to recover from customers pursuant to: prior NCRC Orders, the 2013 Settlement Agreement, Section 366.93, Florida Statutes, and Rule 25-6.0423, F.A.C..

DEF has included all known LNP costs and credits, including carrying costs, for rate recovery of these costs in 2018.

Q. Have you included the \$30 million plus interest Judgment resulting from the Westinghouse litigation in the Revenue Requirement Detail Schedules?

A. No. Due to the pending litigation appeal, DEF has not paid the amount in the judgment and therefore has appropriately not included these costs in the 2017 and 2018 Detail schedules in Exhibit No.____(TGF-3). DEF cannot predict the outcome or timing of the appeal process or any potential future payments. However, consistent with the 2015 Stipulation, DEF reserves its right to petition the Commission to address any LNP-related costs and credits that become known and ripe for recovery in a future proceeding after the May 1, 2017 true up filing has been submitted.

Q. What are the total period revenue requirements for the LNP for the calendar year ended December 2017?

A. The total period revenue requirements for the LNP are approximately \$16.1 million for the calendar year ended December 2017 as reflected on the two 2017 Revenue Requirement Detail Schedules. The \$10.4 million on the

Q. What do these costs include?

2017 Detail Schedule Line 22 in Exhibit No._(TGF-3) includes approximately \$0.4 million for the carrying costs on the unrecovered investment balance shown on Line 8d and \$10 million of current period wind-down costs on Line 19d. Additionally, \$5.7 million is reflected in 2017 Detail - LLE Deferred Balance Schedule on Line 4 in Exhibit No._(TGF-3). These amounts were calculated in accordance with the provisions of Rule 25-6.0423, F.A.C..

B. EXIT & WIND-DOWN COSTS INCURRED IN 2017 FOR THE LEVY NUCLEAR PROJECT.

Q. What are the exit and wind-down costs incurred for the Levy Nuclear Project for the period January 2017 through March 2017?

A. The 2017 Detail Schedule in Exhibit No.__(TGF-3) Lines 1e, 3e, and 12e show that total known exit and wind-down expenditures excluding carrying costs were \$10.6 million.

A. The expenses on line 12e, of \$10.6 million represent known other exit and wind-down costs including regulatory, legal, and accounting wind-down support costs that the Company has incurred through March 31, 2017 related to the LNP. These costs were primarily litigation costs that were incurred since the WEC litigation began in 2013, further explained by Mr. Fallon.

1	Q.	How did these expenditures for January 2017 through December 2017
2		compare with DEF's projected costs for 2017?
3	A.	Appendix B, Line 4 shows that total Other Exit & Wind-Down Costs are
4		expected to be \$10.6 million higher than estimated because WEC litigation
5		costs were not included in the 2017 projection filing.
6		
7	Q.	Have you continued to ensure that costs related to the Levy site COL
8		are not included in the NCRC as of January 1, 2014?
9	A.	Yes.
10		
11	Q.	What is the true-up for 2017 expected to be?
12	A.	The 2017 true-up is an under-recovery of \$16.1 million as can be seen on
13		by adding line 22 of the 2017 Detail Schedule and line 6 of the 2017 Detail
14		LLE Deferred Balance schedules of Exhibit (TGF-3).
15		
16		C. LNP 2018 COSTS.
17	Q.	What are the exit and wind-down costs incurred for the Levy Nuclear
18		Project for the period January 2018 through December 2018?
19	A.	The 2018 Detail Schedule in Exhibit No (TGF-3) Lines 1e, 3e, and 10e
20		show that total known exit and wind-down expenditures excluding carrying
21		costs are \$0.
22		
23	Q.	What are the total revenue requirements, exclusive of the revenue tax
24		multiplier, for the LNP for the calendar year ended December 2018?

A. As can be seen in Exhibit No. _ (TGF-3), 2018 Summary Schedule Line 15, the total known revenue requirements to be recovered in 2018 is approximately \$81.8 million. This amount is primarily associated with the \$54 million deferral (\$50.3 million Retail), shown on Line 14 of the 2018 Summary Schedule and its carrying costs of approximately \$17.2 million, shown on Line 13 of the 2018 Summary Schedule. Finally, it includes approximately \$14.3 million associated with current period wind-down, carrying costs, and prior period unrecovered costs not related to the \$54 million deferral, shown on Line 12 on the 2018 Summary Schedule.

Q. Has DEF included all of its 2017 and 2018 LNP known costs or credits in this filing?

A. Yes it has. However, there are potential costs or credits that DEF has not included in its 2017 and 2018 LNP costs because they are not known at the time of this filing, as explained by Mr. Fallon. Consistent with the 2015 Stipulation, DEF reserves its right to petition the Commission to address any LNP-related costs and credits that become known after the May 1, 2017 true up filing has been submitted.

V. COST RECOVERY FOR THE CRYSTAL RIVER 3 UPRATE PROJECT.

- Q. What are you requesting with respect to the CR3 Uprate project?
- A. DEF requests that the Commission approve recovery of the CR3 Uprate project amounts consistent with 2013 Settlement in Order PSC-13-0598-FOF-EI, Section 366.93(6), Florida Statues, and Rule 25-6.0423(7), F.A.C..

In support of this request, DEF has prepared Exhibit No. _ (TGF-4), which shows the unrecovered investment and expected future payments and exit costs through the end of 2018 for purposes of setting 2018 rates. DEF requests that the Commission approve the revenue requirements for 2018 to be placed into the CCRC of \$49.6 million as shown on 2018 Summary Schedule Line 8 of Exhibit No._(TGF-4).

Q. What was the total unrecovered investment in the CR3 Uprate project as of year-end 2016?

A. The total year-end 2016 unrecovered investment to be amortized is approximately \$130.5 million as shown on lines 3a – 3b beginning balance amount in the 2017 Detail Schedule of Exhibit No._(TGF-4). This net amount represents the unrecovered construction costs incurred that have not been placed in service. This amount does not include prior period over/under recoveries, prior period amortization, or period costs like wind-down/exit costs.

Q. How is DEF recovering this investment?

A. DEF is continuing to recover this balance over the remaining three (3) year period from 2017-2019 as approved by the Commission in the 2013 Settlement in Order PSC-13-0598-FOF-EI, Docket No. 130208-EI, which allowed DEF to recover the unrecovered balance over the 2013-2019 period.

- Q. What are the total estimated period revenue requirements for the CR3

 Uprate project for the calendar year ended December 2017?
- A. The total estimated period revenue requirements for the CR3 Uprate project, excluding amortization, is approximately \$10.1 million for the calendar year ended December 2017, as reflected on the 2017 Detail Schedule Line 19 of Exhibit No._(TGF-4). This amount includes approximately \$10.1 million for the carrying costs on the unrecovered investment balance shown on Line 5d, and \$37,087 of current period wind-down costs shown on Line 16d. These amounts were calculated in accordance with the provisions of Rule 25-6.0423, F.A.C.

- Q. What is the total estimated over or under recovery for the CR3 Uprate project for the calendar year ended December 2017?
- A. The total estimated over-recovery is \$175,014 as shown in Exhibit No._(TGF-4), the 2017 Detail Schedule Line 21.

- Q. What are the total estimated revenue requirements, exclusive of the revenue tax multiplier, for the CR3 Uprate project for the calendar year ended December 2018?
- A. As can be seen in Exhibit No. _ (TGF-4), the 2018 Summary Schedule Line 6, the total estimated revenue requirements are approximately \$49.6 million. This consists primarily of \$43.7 million associated with amortizing the unrecovered construction cost spend, \$6.1 million in period carrying costs and other exit and wind-down activities, and (\$0.2) million of prior

period over-recoveries. These amounts are shown on Lines 1, 2 through 4, and 5 of the 2018 Summary Schedule, respectively.

3

- Q. Does this conclude your testimony?
- 5 A. Yes.

CHAIRMAN BROWN: Staff, can -- would you like to address Ronald Mavrides' testimony? MS. DUVAL: Yes, Madam Chair. Thank you. Staff would request to move the prefiled testimony of Ronald Mavrides into the record as though read. CHAIRMAN BROWN: We will go ahead and do that at this time. MS. DUVAL: And staff would also request to move into the record staff witness's REM-1, which is identified as Exhibit No. 34 on the Comprehensive Exhibit List. CHAIRMAN BROWN: Okay. Seeing no objections, we will go ahead and enter into the record Exhibit 34. Thank you. (Exhibit 34 admitted into the record.)

1	BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION	
2	COMMISSION STAFF	
3	DIRECT TESTIMONY OF RONALD A. MAVRIDES	
4	DOCKET NO. 170009-EI	
5	June 20, 2017	
6	Q. Please state your name and business address.	
7	A. My name is Ronald A. Mavrides. My business address is 1313 N. Tampa	Street,
8	Suite 220, Tampa, Florida 33602.	
9	Q. By whom are you presently employed and in what capacity?	
10	A. I am employed by the Florida Public Service Commission (FPSC or Commi	ission)
11	as a Public Utility Analyst in the Office of Auditing and Performance Analysis.	
12	Q. Briefly review your educational and professional background.	
13	A. I received a Bachelor of Science Degree in accounting from the University	sity of
14	Central Florida in 1990. I am also a Certified Internal Auditor, Certified Gover	nment
15	Auditing Professional and a Certified Management Accountant. I have been employ	yed by
16	the FPSC since October 2007.	
17	Q. Please describe your current responsibilities.	
18	A. My responsibilities consist of planning and conducting utility audits of n	nanual
19	and automated accounting systems for historical and forecasted data.	
20	Q. Have you previously presented testimony before this Commission?	
21	A. Yes. I filed testimony in the Fuel and Purchased Power Cost Recovery	Clause
22	Docket Nos. 090001-EI and 110001-EI and I filed testimony in the Nuclear	Cost
23	Recovery Clause Docket Nos. 140009-EI, 150009-EI, and 160009-EI.	
24	Q. What is the purpose of your testimony today?	
25	A. The purpose of my testimony is to sponsor staff audit reports of Duke E	Energy

- 1 | Florida, LLC (DEF or Utility) which address the Utility's filings in Docket 170009-EI,
- 2 | Nuclear Cost Recovery Clause (NCRC) for costs associated with its Nuclear units. The
- 3 | costs for Crystal River Unit 3 (CR3) as of December 31, 2016, are addressed in Exhibit
- 4 RAM-1 of this testimony. The costs for Levy Nuclear Units 1 & 2 as of December 31,
- 5 2016, are addressed in Exhibit RAM-2 of this testimony. Also attached are the audit
- 6 | reports for the Levy Nuclear Units 1 & 2 filed as Exhibits in Dockets 150009-EI and
- 7 | 160009-EI. These are identified as Exhibit RAM-3 and RAM-4 respectively of this
- 8 testimony.
- 9 Q. Were these audits prepared by you or under your direction?
- 10 A. Yes, these audits were prepared by me or under my direction.
- 11 Q. Please describe the work in the first audit addressing the costs for Crystal
- 12 River Unit 3.
- 13 A. Our overall objective was to verify that the Utility's 2016 NCRC filings for
- 14 | Crystal River Unit 3 in Docket No. 170009-EI are consistent with and in compliance with
- 15 | Section 366.93, Florida Statutes, and Rule 25-6.0423, Florida Administrative Code. Audit
- 16 staff performed the following procedures to satisfy the overall objective.
- 17 | Construction Work in Progress (CWIP)
- 18 We determined that there were no adjustments to unrecovered CWIP jurisdictional
- 19 balances that are included for recovery. All NCRC activity that is now related to capital
- 20 | investment is allocated to the Regulatory Asset Account. We determined that there was
- 21 | not any capital activity associated with the CR3 project in 2016.
- 22 Recovery
- 23 We traced the amount collected on Exhibit TGF-2 to the 2016 NCRC jurisdictional
- 24 | amount approved in Order No. PSC-16-0547-FOF-EI and to the Capacity Cost Recovery
- 25 | Clause in Docket No. 170001-EI. We verified that the Utility used the Commission

1 approved factor to bill the customers.

2 Expense

- 3 We judgmentally selected costs from the transaction details and reviewed them for the
- 4 proper period and amounts, and that they are allowable NCRC costs. For costs that are
- 5 | for a service or product that is under contract, we: 1) traced the invoiced cost to the
- 6 | construction contract or other type of original source document, 2) ensured that the
- 7 amounts billed are for actual services or materials received, and 3) investigated all prior
- 8 billing adjustments and job order changes to the contract(s). We sorted the transaction
- 9 detail listings by Operation and Maintenance expense category and reconciled them to the
- 10 filing. On a sample basis, we used employee time sheets to verify that labor hours
- 11 | charged to employee labor expense are correct.
- 12 Project Close-Out Costs
- 13 We investigated the status of project management close-out costs incurred during 2016.
- 14 We determined that 2016 was the first year that there were no project management related
- 15 | close-out costs incurred.
- 16 True-up
- 17 We recalculated the True-Up and Interest Provision amounts as of December 31, 2016,
- 18 using the Commission approved beginning balance as of December 31, 2015, the
- 19 approved 2016 jurisdictional separation factors, and the 2016 costs.
- 20 Q. Please describe the work in the second audit addressing the costs for Levy
- 21 Nuclear Units 1 & 2.
- 22 A. Our overall objective was to verify that the Utility's 2016 NCRC filings for Levy
- 23 Nuclear Units 1 & 2 in Docket No. 160009-EI are consistent with and in compliance with
- 24 | Section 366.93, Florida Statutes, and Rule 25-6.0423, Florida Administrative Code. We
- 25 performed the following procedures to satisfy the overall objective.

1 | Construction Work in Progress (CWIP)

- 2 We determined that there were no adjustments to unrecovered CWIP jurisdictional
- 3 | balances that are included for recovery. As of December 31, 2015, Account 107.001-
- 4 CWIP had a zero balance. All NCRC activity that is now related to capital investment is
- 5 | allocated to the Regulatory Asset Account. We judgmentally selected transactions from
- 6 | the provided transaction details and tested them for: 1) Compliance with contracts, 2)
- 7 Correct paid amounts, and 3) Correct recording periods.
- 8 Recovery
- 9 We traced the beginning balances of the 2016 Detail Calculation of the Revenue
- 10 Requirements to the ending 2015 Detail Calculation of the Revenue Requirements. Order
- 11 PSC-15-0521-FOF-EI, issued November 5, 2015, stated that costs, if any, will not be
- 12 | collected/recovered in 2016 or 2017. Audit staff determined that customers were not
- 13 | billed during the period January 1, 2016 through December 31, 2016.
- 14 Expense
- 15 We reconciled the trial balance accounts to the filing. We judgmentally selected costs
- 16 from the transaction details and reviewed them for the proper period and amounts, and
- 17 that they are allowable NCRC costs. For costs that are for a service or product that is
- 18 under contract we: 1) Traced the invoiced cost to the construction contract or other type
- 19 of original source document, 2) Ensured that the amounts billed are for actual services or
- 20 | materials received, and 3) Investigated all prior billing adjustments and job order changes
- 21 to the contracts. We sampled costs charged in 2016, including labor, and obtained the
- 22 supporting backup.
- 23 Long-Lead Time Items
- 24 We verified that the all of the long-lead-time items remaining were disposed of as at year
- 25 | end 2016.

1	Litigat	tion Expenses	
2	We v	rerified that there was no litigation expenses relating to Duke/Westinghouse	
3	Engine	eering, Procurement, and Construction contract litigation included for cost recovery	
4	in 201	6.	
5	<u>True-up</u>		
6	We traced the December 31, 2015, True-Up Provision to the Commission Order. We		
7	recalculated the True-Up and Interest Provision amounts as of December 31, 2016, using		
8	the Commission approved beginning balance as of December 31, 2015, the approved		
9	2016 jurisdictional separation factors, and the 2016 costs.		
10	Q.	Please review the audit findings in the audit report, Exhibit RAM-1.	
11	Α.	There were no findings in this audit.	
12	Q.	Please review the audit findings in the audit report, Exhibit RAM-2.	
13	Α.	There were no findings in this audit.	
14	Q.	Does this conclude your testimony?	
15	A.	Yes.	
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CHAIRMAN BROWN: Staff, let's go to the 1 2 proposed stipulations at this time. MS. DUVAL: Yes, Madam Chair. There are 3 proposed stipulations on Issues 11 through 15. If the 4 Commission determines that a bench decision is 5 6 appropriate, staff would recommend approval of the 7 proposed stipulations as set out within Section X of the Prehearing Order. 8 9 CHAIRMAN BROWN: Thank you. All right. Before we bring it back to the 10 11 bench, I just want to confirm from the parties if there 12 are any objections to -- and get confirmation of the proposed stipulations and if there are any objections, 13 14 starting first with Duke. MR. BERNIER: We're onboard with the 15 stipulations. 16 17 CHAIRMAN BROWN: Okay. FIPUG. MR. MOYLE: We're, we're good with the 18 19 stipulation. Thank you. CHAIRMAN BROWN: SACE? 2.0 21 MR. CAVROS: No objection from SACE. 22 CHAIRMAN BROWN: Retail. 23 MR. WRIGHT: No objections. 24 CHAIRMAN BROWN: Public Counsel. 25 MR. REHWINKEL: No objections. To be clear,

we have -- it's a Type 2 stipulation, so we do not 1 object to the staff and the Commission stipulating to 2 these issues as presented. 3 CHAIRMAN BROWN: Thank you. 4 All right. Commissioners, any questions on 5 any of the stipulations on Issues 11 through 15 as set 6 7 out in the Prehearing Order on page 35? Seeing none, at this time I'll entertain a 8 9 motion. COMMISSIONER BRISÉ: Madam Chair, I move that 10 we accept the proposed stipulations on Issues 11 11 through 15. 12 13 CHAIRMAN BROWN: Thank you. 14 Is there a second? COMMISSIONER POLMANN: Second. 15 CHAIRMAN BROWN: Any discussion? Seeing none, 16 17 all those in favor, say aye. (Vote taken.) 18 19 Thank you. The stipulations passed. 20 Staff, are there any other matters to be 21 addressed before we conclude Duke's portion? 22 MS. DUVAL: No, Madam Chair, only to note that 23 the parties had already waived post-hearing briefs, and 24 with the bench decision they are no longer necessary. 25 CHAIRMAN BROWN: Thank you.

Do any of the parties have any other matters 1 to address with regard to Duke? 2 3 Seeing none, we'll go ahead and adjourn Duke's portion of the hearing and excuse Duke from the rest of 4 the proceeding today. 5 MR. BERNIER: Thank you very much, Madam 6 7 Chairman. CHAIRMAN BROWN: Thank you. Have a great day. 8 9 Now let's convene the FPL portion of the 10 hearing. And pardon me if parties need to get up and move. We're just going to move through this because 11 there -- I want to get to the record. 12 13 Preliminary matters. Staff, are there any preliminary matters? 14 MS. MAPP: Staff is not aware of any 15 16 additional preliminary matters. 17 CHAIRMAN BROWN: Florida Power & Light, are 18 there any preliminary matters? 19 MS. CANO: No, ma'am. 20 CHAIRMAN BROWN: Thank you. 21 Do any of the parties have any preliminary 22 matters? 23 All right. So let's move on to, to address 24 opening statements. 25 Pursuant to the Prehearing Order as laid out,

Florida Power & Light shall have ten minutes and the Intervenors each shall have five minutes, starting with Office of Public Counsel, followed by FIPUG, Retail Federation, and SACE. However, if the Intervenors have preference of a different order, please feel free to, to chime in. But we will start with Florida Power & Light. Welcome.

MS. CANO: Thank you, and good afternoon again, Madam Chairman and Commissioners.

FPL's Turkey Point 6 and 7 project has been presented each year since its affirmative need determination in 2008, and each year we have described the careful stepwise approach that FPL is taking to develop the opportunity for new nuclear generation to be added to its portfolio.

Now FPL is in the final steps of licensing, the result of almost ten years of diligent, prudent work. From FPL's perspective, completing the license is the right thing to do. A combined license for Turkey Point 6 and 7 will create a multi-decade opportunity for customers. A lot has changed in the last ten years and certainly a lot can change within the next 20.

Only modest expenditures are necessary to move forward to secure the license and maintain it. Upon nearing completion of the licensing phase, FPL decided

that it would not proceed immediately into preconstruction work upon receipt of the license. Instead, FPL decided to implement a project pause; in other words, simply complete obtaining its license and related approvals, maintain the approvals received, including some work to keep them current, and continue to observe and learn from the first wave of new nuclear construction projects.

Commissioners, where FPL stands today with respect to its new project is in stark contrast to where other new nuclear projects stand, and that is by design. FPL's filing this year proposes a cost recovery approach that aligns with its project approach.

With respect to historical costs, those are presented in a similar manner as would typically be presented in the nuclear cost recovery docket. FPL is seeking a prudence determination on its 2015 and 2016 costs and is asking to reflect the final true-up of those years, a \$7.3 million overrecovery, in 2018 rates.

These 2015 and 2016 costs were first presented to this Commission and sought for recovery as projections in 2014 and 2015 along with feasibility analyses and all other required filings. In March of this year, FPL filed the required true-up data and testimony supporting the prudence of its project

management and the resulting costs incurred. FPL has met its filing obligations supporting the prudence of these years, and no party is presenting testimony that challenges the prudence of those costs.

FPL is not seeking to recover its current year or projected year costs at this time. Instead, FPL has proposed to defer the review and recovery of those costs until a decision is made regarding the initiation of preconstruction work. FPL's proposal makes sense from a factual perspective and a legal perspective.

Factually, the proposed deferral aligns with the project pause that's discussed by Mr. Scroggs and the expected relatively lower amount of spending that will occur over the next few years. Legally the proposed deferral allows this Commission to exercise its broad ratemaking authority by temporarily suspending this annual docket without running afoul of Section 366.93 and Rule 25-6.0423, the nuclear cost recovery statute and rule.

FPL's proposal preserves the ability of all parties and this Commission to fully review at a future date whether the costs that FPL incurs are reasonable and have been prudently incurred consistent with the nuclear cost recovery statute and rule. There is no legal basis for certain Intervenors' claims that the

Commission will be obligated to allow for recovery at some future date some unlimited, unknown amount of costs.

And you'll likely hear arguments today about the need for a feasibility analysis, but a feasibility analysis is unnecessary. And, again, FPL's position is supported both factually and legally.

First of all, it's unnecessary given FPL's decision to take a project pause. That decision and the support for that decision, including the progress of recent projects and current economic factors, seems to have been overlooked by all Intervenors in this case.

A feasibility analysis is also unnecessary given FPL's proposal to defer review and recovery of the costs. Try as they may, intervening parties cannot overlook the fact that a feasibility analysis is only required when cost recovery is sought, and FPL is not seeking cost recovery at this time.

In their clamor for a feasibility analysis,
Intervenors are asking you to prejudge an issue that is
not before you: Specifically whether Turkey Point 6
and 7 should move forward into preconstruction and
construction and be built.

A request to move forward into preconstruction will only be presented to this Commission after

extensive review, discussion, and analysis at FPL, and
we would expect similarly to have a very robust
discussion before this Commission and with all parties
before such a proposal is presented. But today is not
that day. We're not seeking to do that today.

All FPL is asking at this time is for the Commission to find that its 2015 and 2016 costs were prudently incurred, to allow deferral of the recovery and review of costs beginning with those incurred in 2017, and to find that FPL's decision to complete licensing, protecting the investment made thus far, and securing the opportunity for this project for customers is reasonable.

FPL has done the right thing on this project from day one, and we respectfully ask that you approve our request. Thank you.

CHAIRMAN BROWN: Thank you, Ms. Cano, with four minutes to spare.

All right. Office of Public Counsel.

MS. CHRISTENSEN: Good afternoon,

Commissioners. My name is Patty Christensen with the

Office of Public Counsel. We represent the customers in this matter.

As we see this case, FPL is asking the Commission to approve them spending more money to obtain

the combined operating license and maintaining it without any economic feasibility analysis. Moreover, they want to pause the recovery of the money they have spent for a minimum of four years and possibly up to ten years, possibly 20.

Now they're claiming that because they are not asking from -- asking for the money from the customers now, i.e., during the pause period, they do not need to file an economic feasibility study to show the project remains economically viable, and they do not want to recover this money until later from the customers in a subsequent NRC proceeding.

In addition, FPL seeks a ruling that if the Commission finds continuing to pursue obtaining the COL is reasonable, then customers or other parties cannot argue later that all these COL-related costs should have been disallowed because the project was not feasible as of today.

In addition, FPL wants to be able to earn a shareholder profit on the COL cost through AFUDC during the pause period, however long that may end up being.

OPC believes that FPL's position is not only unreasonable, but that it fails to comply with the intent of the statute and Commission rule that approved advanced cost recovery.

First, the statute specifically contemplates the cost recovery would take place during the project so the customers would not have a large cost plus carrying costs to pay later at the end of the project when the plant went into service. Approving a pause period defeats the purpose by allowing the COL to accumulate carrying costs until some undefined period in the future.

Next, the rule, 25-6.0423(c) -- or (6)(c)(5) of the Florida Administrative Code specifically states that along with the filings required by this paragraph, each year a utility shall submit for the Commission review and approval a detailed analysis of the long-term feasibility of completing the power plant. This rule is not discretionary.

Moreover, FPL has not filed a feasibility study for this proposed project for the past two years, in 2016 or '17. In this year's proceeding, FPL is asking for: One, recovery of its 2016 costs; and, two, the Commission approval to incur costs in 2017 and beyond and to defer those costs for later recovery plus AFUDC.

At the same -- the same Commission rule says that a party may ask for a deferral of cost but not for a period greater than two years. However, in this

docket, FPL here is clearly asking for a deferral period that is longer than two years. In fact, FPL has asked for a minimal deferral period of four years.

OPC submits the Commission should: One, deny FPL's request to make a finding that obtaining the COL is reasonable due to the lack of an -- due to the lack of economic feasibility information; and, two, deny deferring these costs for four years as this is contrary to the Commission's rule.

In addition, the Commission should order FPL to file a feasibility study for 2017 so that the Commission can have the appropriate information it needs to make a decision on whether or not to allow recovery of any future costs for the Turkey Point Units 6 and 7 projects. Thank you.

CHAIRMAN BROWN: Thank you, Ms. Christensen.
Mr. Moyle.

MR. MOYLE: Thank you, Madam, Madam Chair.

On behalf of the Florida Industrial Power
Users Group, I have a few comments I would like to make
about, about today's proceeding. And I think a lot of
times we hear about the rule of law and how our society
is governed by a rule of law or democracy is governed by
the rule of law, and it's often in, you know, in big
context. But I would suggest that the rule applies --

the rule of law applies to your -- what we're doing today. And the rule of law, as you all know, is provided by the legislature and by the rules that you enact.

And, you know, we're dealing with nuclear cost recovery. It's unusual in that most of the time when a utility is building a power plant, they build it and then they come in and say, "We built this power plant. It's used and useful. It's generating electricity. It's a good thing. Please allow us recovery," and that's how it works.

The legislature and the rule of law changed the statute and said, "We're going to treat nuclear costs a little differently. We're going to allow for advanced recovery." So the utility -- not one megawatt has been generated by the new Turkey Point 6 and 7 units. It's still not even gotten its permits yet. But the legislature has said, "We'll allow you, you, FPL, to make some recoveries associated with this, and we'll have the customers pay for it." That was a policy decision.

This Commission, in enacting the legislation, put in effect the rule, the nuclear cost recovery rule, and that's a rule of law that, that you need to apply. You don't have discretion as to should we apply the

rule, should we not apply the rule? You've put that rule in place and need to apply it.

And FPL has failed to comply with the rule in a number of respects. Ms. Christensen talked about the, you know, the two-year limitation with respect to a deferral. They haven't asked for a waiver of that, and they're coming in saying we'd like to defer for an indefinite period, a pause period.

And I think probably more importantly, you know, given the unusual way in which money is recovered, you guys put in place a rule under Section C, recovery for nuclear and integrated gas combined cycle power plant costs — this is at (5), Ms. Christensen cited it, we'll have copies that we can show you — but the sentence says, "Along with the filings required by this paragraph, each year a utility shall submit for Commission review and approval a detailed analysis of the long-term feasibility of completing the power plant."

So that was your rule. I think it was put in place because you all have to make judgments. FPL is in asking for ratepayer money, and before you can make a decision about, yeah, we'll give them ratepayer money, you have to have an understanding about is this project feasible.

So there's a requirement that a feasibility filing be made. FPL admits they didn't make it this year. They didn't make it last year. The one that they made, I think, in 2015, OPC says it was stale. And it's not appropriate to order customers to pay costs, respectfully, if you're having to fly blind and don't have sufficient anything in front of you to make a judgment as to whether this is feasible or not.

I think you'll also hear from Mr. Scroggs that a lot has happened in the nuclear space. You know, Westinghouse has filed for bankruptcy. They were the company that was going to build this, and the design of the AP1000 that was Westinghouse — there's been two AP1000s in this country moving forward, Vogtle and Summer. One of them, after spending billions and billions of dollars and in the middle of construction, I think last month they said, "We're done with this. We're not doing this anymore," and they put a kibosh on it. And I think the other one that's still going on, Vogtle, is in serious trouble and significant cost overruns.

FPL, you'll hear Mr. Scroggs say, even in their quote/unquote stepwise approach, the costs for this thing continue to go up. From this year to last year the high end of their cost has gone up nearly

\$2 billion, you know, so it's not a real pretty picture.

CHAIRMAN BROWN: Thirty seconds.

MR. MOYLE: Thank you. And respectfully we would suggest that as you all are considering this and weighing this, that you focus on your policy, on your rule of law, and apply it.

FPL said it's not necessary in their opening statement. That's, that's an appropriate argument to make in a rulemaking proceeding or in a legislative proceeding, but it's not appropriate to make today. So we would ask that you not allow the costs because FPL didn't comply with the rule. Thank you.

CHAIRMAN BROWN: Thank you, Mr. Moyle.

Retail Federation, Mr. Wright.

MR. WRIGHT: Thank you, Madam Chairman,

Commissioners. I'm Schef Wright, and I again have the

privilege of representing the Florida Retail Federation

in this proceeding before you today.

The Retail Federation is a statewide organization that has more than 8,000 members, many of whom, probably half or so, are Florida Power & Light Company customers. The Retail Federation and I thank you for the opportunity to speak to you today.

This case is fairly simple. Everyone in this room knows what my colleagues Ms. Christensen, Mr. Moyle

have already said and what, what is true. The prospects for building a nuclear power plant based on a technology developed by a bankrupt company is bleak at best, even before the bankruptcy costs ballooned and burgeoned and delay after delay pushed proposed completion dates

The South Carolina utilities that were planning the Summer project have -- which was like FPL, a twin AP1000 project like FPL's Turkey Point 6 and 7, have abandoned their project, reporting the costs had grown from \$14 billion to north of \$25 billion.

further and further and further into an unknown future.

The Vogtle project under construction by a consortium of Georgia utilities is on life support, reportedly now asking for even more federal aid to keep it alive with projected costs greater than 25 billion.

I've seen 27 billion in the press, and we don't know that that's the top end.

In this case, this proceeding, you're asked to rule that it's reasonable for FPL to defer something like 20 or \$25 million that FPL apparently plans to spend over the next two years with FPL's shareholders earning a return on these expenditures for future recovery from Florida Power & Light's customers, including many of the Retail Federation's members even if FPL never builds the Turkey Point project.

much the plant would cost if it were ever built, and you, therefore, do not and cannot know how much it would cost or how much FPL's customers would be called on to pay.

As explained in detail by Ms. Christensen, the citizens' attorney, and Mr. Moyle, Florida Power & Light has not met its burdens under either applicable Florida statutes, under your rules, or under common sense notions of reasonableness and equity to show that it's reasonable to put customers on the hook for unknown costs with earnings sometime in the future even if the plant is never built. And, accordingly, the Commission should, we would argue must as a matter of law based on the statutory and rule provisions involved, deny Florida Power & Light's request in order to protect Florida Power & Light's customers consistent with the statutes and the Commission's rules. Thank you very much.

CHAIRMAN BROWN: Thank you, Mr. Wright.

Mr. Cavros.

MR. CAVROS: Good afternoon, Commissioners.

George Cavros on behalf of Southern Alliance for Clean

Energy.

Southern Alliance for Clean Energy is a regional non-profit organization that strives to move

the state to a lower-cost and lower-risk energy future.

We've been a party to this proceeding since 2009, and we have consistently argued in those proceedings that these reactors are speculative, that they will likely never get built, and Florida's families and businesses that are in FPL's territory shouldn't bear all the financial

risk of those reactors.

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These reactors, we've argued in the past, are speculative. But as we sit here today at this moment, this project is effectively dead, and it's effectively dead for a number of reasons.

Number one, there's no builder. There's no builder. Westinghouse has filed for bankruptcy.

They've announced they're out of the nuclear construction business. And it's not even clear that they'll be available to provide engineering and procurement services. As was stated earlier, the Summer AP1000 reactor, the same model FPL proposes to build, was recently canceled. That was because of cost projections that put it at almost double the cost of what it was originally projected to cost and 41 percent above a contract that was signed less than a year ago. And this is the same project that three months ago FPL -- the FPL witness claimed was making substantial and consistent progress.

Also there's no binding price commitment from FPL. There's no binding in-service date. In fact, there's no commitment to build whatsoever. And to exacerbate matters, the company has not filed the required feasibility analysis. That has been a cornerstone of these proceedings since day one because it provides transparency to the process and it makes sure that Florida families and businesses are getting a good deal.

If you were to approve this request, and let me put it maybe in, in terms that FPL customers could understand, it would be like myself and other FPL customers taking out our credit card, sliding it over to FP&L, saying, "Go ahead, run it up for five, seven, ten years, and go ahead, run it up for 50 million, 75 million, 100 million, whatever you deem is appropriate, and then go ahead and hit us with a bill when you deem it's appropriate and we'll go ahead and pay it, all your costs plus your profit." That does not sound like a good deal to me.

There have been over 400 comments filed in this docket by FPL customers with essentially the same message, and that is that "We've paid \$300 million into this project already, it is effectively dead, and we should not pay another cent towards this project."

Let me just go to, you know, the law that

Mr. Moyle and others have talked about. You established
a nuclear cost recovery rule in response to legislation
that was passed in 2006, and that legislation is now

366.93. It's the nuclear cost recovery statute. It was
amended again in 2013 after the DEF CR3 problems to
provide more customer protection.

The legislature has provided to you a clear legislative direction on how nuclear costs, new -- costs related to new nuclear construction should be recovered. It says, "A utility wishing to recover must comply with the Commission's rules." It's right there in statute. And you've issued rules, and those rules require:

Number one, a feasibility analysis. None has been provided. They require a filing of costs to be recovered in a subsequent year. That has not been provided.

There are avenues by which FP&L could have asked for a waiver. It chose not to. And FPL's request is simply not consistent with the law or Commission rules. It's not consistent with the intent of the law. It's not consistent with what the legislature, I believe, expects of you.

In conclusion, we ask, please, that you reject this request. It's a bad deal for customers. And as a

matter of law, this Commission cannot provide the request that FPL is requesting. Thank you.

CHAIRMAN BROWN: Thank you.

All right. We will go into a few preliminary housekeeping matters before we call the witnesses to the stand. I want to give every party and every witness an opportunity to present their case, but I do ask for your cooperation in a few regards.

First, please be cognizant that irrelevant, immaterial, unduly repetitious questions on cross will not be allowed. If a party has asked a witness questions that you wanted to ask, to the extent possible, please refrain from going down that same line of questions that have been already asked.

And also I know one thing that you all enjoy is with regard to exhibits. In order to facilitate a smoother hearing process, I would like to ask you all to, before you distribute your exhibits, please provide our staff, who will be sitting and accompanied here, with the collated copies of all cross-examination exhibits that you plan to use for the witness testifying, again to the extent that you can, so that they can help distribute them all at one time.

I will instruct each witness to turn them over, the exhibits over when they're passed out until

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the parties are ready to use them on cross. This will be very helpful to the hearing process. Again, it'll be a much more swifter distribution. So I appreciate that.

And now there are a total of four witnesses, actually five, but if you count staff's combined two.

I'm going to swear you all in at the same time. So if you could please stand with me and raise your right hand.

Thank you. Do you swear or affirm to provide the truth in this proceeding?

(Affirmative responses.)

Louder.

(Affirmative responses.)

Thank you. Please be seated.

(Witnesses collectively sworn.)

All right. All -- okay. All witnesses will be called in the order that they appear within the Prehearing Order, except, of course, those who have already been removed from this proceeding.

Pursuant to the Prehearing Order, witnesses have up to three minutes to summarize their testimony, although please don't feel free to use that if you, if you don't need it. Counsel for each witness will be responsible for entering their prefiled testimony and exhibits into the record, as you all know. Prefiled

testimony shall be entered into the record at the 1 beginning of the witness's testimony, and we will admit 2 exhibits into the record at the conclusion of the 3 witness's testimony, barring no objection. 4 The order of cross shall be as follows: 5 Office of Public Counsel, followed by FIPUG, Retail 6 7 Federation, SACE, staff, Commissioners, and then redirect. And I believe that accomplishes all of the 8 9 preliminary matters. Staff, do we have any other matters? 10 11 MS. MAPP: No, there are no further matters. 12 CHAIRMAN BROWN: Thank you. 13 All right. FPL, you may call your first 14 witness. 15 MS. CANO: FPL calls Steven Scroggs to the 16 stand. 17 CHAIRMAN BROWN: Thank you. Good afternoon. 18 19 THE WITNESS: Good afternoon. 2.0 Whereupon, 21 STEVEN SCROGGS 22 was called as a witness on behalf of Florida Power and 23 Light Company and, having been duly sworn, testified as 24 follows:

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EXAMINATION

25

1	BY MS. CANO:
2	Q Mr. Scroggs, were you just sworn?
3	A Yes, ma'am.
4	Q Were you sworn in?
5	Okay. Would you please state your name and
6	business address?
7	A Steven Scroggs, 700 Universe Boulevard, Juno
8	Beach, Florida.
9	${f Q}$ By whom are you employed and in what capacity:
10	A I'm employed by Florida Power & Light Company
11	as a senior director of project development.
12	$oldsymbol{Q}$ Did you prepare and cause to be filed 35 pages
13	of direct testimony in this proceeding on March 1st,
14	2017?
15	A I did.
16	$oldsymbol{Q}$ And did you also prepare and cause to be filed
17	28 pages of direct testimony in this proceeding on
18	May 1st, 2017?
19	A I did.
20	Q Do you have any changes or revisions to your
21	prefiled direct testimony?
22	f A Yes, I do, just a few revisions to the May
23	testimony.
24	On page 14 at line 3 and page 20 at line 1.
25	MS. MAPP: I'm sorry Could you specify if

1 it's your March or May testimony?

2.0

THE WITNESS: This is the May testimony.

MS. MAPP: Thank you.

THE WITNESS: So page 14 at line 3 and page 20 at line 1 I refer to a contested hearing on a remaining contention. The referenced hearing has occurred, and that remaining contention has been dismissed.

The second change, again in the May testimony and again on page 14 at line 4 and page 20 at lines 4 through 7, I refer to the NRC's mandatory hearing, which was preliminarily scheduled for August of this year. That has now been scheduled for October 5th of 2017.

And then the last revision to the May testimony would be on page 15 at line 4. I refer to possible settlements associated with the remanded portions of the site certification. I would let the Commission know that one such settlement has occurred with the City of Miami, so I would add that on July 27th, 2017, the City of Miami commission approved a resolution directing the mayor to enter into a settlement with FPL resolving this issue, among others. That would be the changes I would have.

CHAIRMAN BROWN: Just one moment. Yes, Retail Federation, Mr. Wright.

MR. WRIGHT: Thank you, Madam Chairman. 1 understood everything that Mr. Scroggs said, but it's 2 3 not clear to me exactly how he and Florida Power & Light want his testimony to read as it goes into the record. 4 That would be really helpful, I think. 5 CHAIRMAN BROWN: Ms. Cano. 6 7 MS. CANO: Well, I guess the preference is simply that the statement that was just transcribed just 8 9 now would be added perhaps to his testimony. Otherwise, if you would prefer more of a type-and-strike approach, 10 specific language could be quoted. 11 CHAIRMAN BROWN: Mr. Wright. 12 MR. WRIGHT: I don't care about a 13 14 type-and-strike, but it would be helpful if he would say at page 15, line 6, after the word "issues, period," 15 insert --16 17 CHAIRMAN BROWN: I agree. 18 MR. WRIGHT: -- the statement that, that he 19 said regarding the settlement with the City of Miami or 20 whatever it is he wants to say. 21 CHAIRMAN BROWN: Okay. Let's try this again. 22 Ms. Cano, do you want to try it again? 23 MS. CANO: Sure.

FLORIDA PUBLIC SERVICE COMMISSION

is -- usually when there's witness corrections of

MR. MOYLE: Can I just say something?

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prefiled testimony, it's like, well, this number was
wrong or the syntax. I don't remember it being like,
well, let me insert, you know, a narrative about
something that changes. It's sort of like live

CHAIRMAN BROWN: Mr. Moyle, I am fine with the changes. I believe those are -- are those all of the changes, Ms. Cano?

testimony that we're heading down in some respects.

MS. CANO: Yes.

CHAIRMAN BROWN: I think those are all appropriate with regard to his prefiled testimony, and it is within their discretion to go ahead and do that. But if you could be more specific at this time --

MS. CANO: Sure.

CHAIRMAN BROWN: -- so we can be clear for the record.

BY MS. CANO:

Q Sure. Mr. Scroggs, could you please point out the specific language you would add on each of the pages and for each of the lines referenced? Thank you.

A Yes. So, again, the May testimony, page 14, line 3, following the end of the sentence on line 3, "Water to be used for cooling," I would add -- excuse me. That would be at the end of the sentence beginning on line 3 but ending on line 4, I would just add the

sentence that says, "The referenced hearing has occurred 1 and that remaining contention has been dismissed." 2 3 CHAIRMAN BROWN: Okay. THE WITNESS: At page 20, the sentence that 4 begins on line 1 and ends on line 2, I would add that 5 same phrase: "The referenced hearing has occurred and 6

CHAIRMAN BROWN: Okay.

that remaining contention has been dismissed."

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THE WITNESS: For the second revision, page 14, line 4, the sentence beginning on line 4 and ending on line 5, I would follow that sentence with the phrase: "That hearing has now been scheduled for October 5, 2017."

On page 20, the sentence beginning on line 4 and ending on line 7, I would add the same phrase: "That hearing has now been scheduled for October 5, 2017."

And then the last revision on page 15 of the May testimony --

CHAIRMAN BROWN: I'm going to interrupt you just for a second.

Ms. Cano, Mr. Donaldson, would it -- I think it would be helpful to have an errata and maybe mark it as an exhibit. These are wordy modifications. I think they're relevant and they are timely, but I think an

errata would be more appropriate. Would FPL be willing 1 to offer that at the conclusion of the testimony? 2 MS. CANO: Yes, yes. We'd be happy to do 3 that. 4 5 CHAIRMAN BROWN: Okay. Thank you. MS. CANO: Would you like him to read the 6 7 final one or --CHAIRMAN BROWN: Yeah. Go ahead --8 9 Mr. Scroggs, go ahead and finish. 10 THE WITNESS: Okay. On page 15, the sentence beginning on line 4 and ending on line 6, I would add a 11 sentence to follow, and that sentence would read: "On 12 13 July 27, 2017, the City of Miami commission approved a 14 resolution directing the mayor to enter into a settlement with FPL resolving this issue, among others." 15 16 CHAIRMAN BROWN: Okay. Thank you. 17 BY MS. CANO: Okay. With those edits, if I asked you the 18 same questions contained in your prefiled direct 19 20 testimony today, would your answers be the same? 21 Yes, they would. Α 22 MS. CANO: Chairman Brown, FPL asks that the 23 prefiled direct testimony of Steven Scroggs be inserted 24 into the record as though read with those changes. 25 CHAIRMAN BROWN: We will go ahead and enter

1	into the record Mr. Scroggs' March 1st and May 1st
2	prefiled testimony into the record as though read.
3	BY MS. CANO:
4	Q Are you also sponsoring or cosponsoring
5	exhibits to your testimony?
6	A Yes, I am.
7	Q Okay. And do those consist of Exhibits
8	SDS-1 through SDS-10?
9	A Yes.
10	MS. CANO: Okay. Chairman, I would ask or
11	I would note that those have been premarked for
12	identification as Exhibits 2 through 11. And would you
13	like us to mark the errata at this time as well?
14	CHAIRMAN BROWN: That would be wonderful. We
15	will be starting with
16	MS. DUVAL: 40.
17	CHAIRMAN BROWN: Thank you. Exhibit 40. So
18	we'll just have that marked as Scroggs' errata.
19	MS. CANO: That's fine. Thank you.
20	CHAIRMAN BROWN: Thank you. That makes it
21	much cleaner.
22	(Exhibit 40 marked for identification.)
23	MS. CANO: Okay.
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1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		DIRECT TESTIMONY OF STEVEN D. SCROGGS
4		DOCKET NO. 170009-EI
5		March 1, 2017
6		
7	Q.	Please state your name and business address.
8	A.	My name is Steven D. Scroggs and my business address is 700 Universe
9		Boulevard, Juno Beach, FL 33408.
10	Q.	By whom are you employed and what is your position?
11	A.	I am employed by Florida Power & Light Company (FPL) as Senior Director
12		Project Development. In this position I have responsibility for the
13		development of power generation projects.
14	Q.	Please describe your duties and responsibilities with regard to the
15		development of new nuclear generation to meet FPL customer needs.
16	A.	Commencing in the summer of 2006, I was assigned the responsibility for
17		leading the investigation into the potential of adding new nuclear generation
18		to FPL's system, and the subsequent development of new nuclear generation
19		additions to FPL's power generation fleet. I currently lead the development of
20		FPL's Turkey Point Nuclear Units 6 and 7 (Turkey Point 6 & 7).
21	Q.	Please describe your educational background and professional
22		experience.

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

10 Q. What is the purpose of your testimony?

A.

The purpose of my testimony is to describe FPL's activities and costs incurred in relation to the Turkey Point 6 & 7 project during 2015 and 2016. My testimony describes the deliberate, stepwise process FPL continued to manage so that FPL will have the opportunity to add new nuclear generation capacity for its customers. Specifically, I discuss the progress made on the project, key issues faced in 2015 and 2016, and how those issues were addressed. I also explain the Turkey Point 6 & 7 project internal controls and how those controls, supported by internal and external oversight, provided for diligent and professional project execution. Further, my testimony provides the actual expenditures incurred in 2015 and 2016 and compares those expenditures to the actual/estimates (for 2015) or projections (for 2016) provided to the Florida Public Service Commission (FPSC) on May 1, 2015. Collectively, my

1		testimony demonstrates that FPL's 2015 and 2016 actions and decisions were
2		prudent and the resulting costs were prudently incurred.
3	Q.	Please describe how your testimony is organized.
4	A.	My testimony includes the following sections:
5		1. High Level Project Summary
6		2. 2015 & 2016 Project Activities and Results
7		3. Project Management Internal Controls
8		4. Procurement Processes and Controls
9		5. Internal/External Audits and Reviews
10		6. 2015 Project Costs
11		7. 2016 Project Costs
12	Q.	Please summarize your testimony.
13	A.	During 2015 and 2016, FPL continued to make progress on obtaining the
14		licenses and permits required for the Turkey Point 6 & 7 project, and
15		maintained costs within the annual budget. Notably, in 2016 FPL received a
16		final recommendation letter from the Advisory Committee on Reactor
17		Safeguards (ACRS), the Final Safety Evaluation Report (FSER) and the Final
18		Environmental Impact Statement (FEIS) from the NRC; all supporting NRC
19		approval of the Project on FPL's anticipated timeline.
20		
21		The project was managed by a professional team of engineers, analysts, and
22		managers to ensure process controls were maintained and activities complied
23		with applicable corporate procedures and project-specific instructions. The

project management process was conducted in a well-informed, transparent and organized manner enabling executive oversight and facilitating reviews by internal and external parties.

This disciplined application of good business process by well-qualified FPL managers and their staff resulted in prudent decisions with respect to project activities and expenditures. In total, FPL spent \$19.8 million in 2015 and \$18.2 million in 2016 to continue its pursuit of the project-related licenses and approvals, maintain compliance with those received, and continue to improve the decision basis upon which a decision to begin preconstruction work and construction will ultimately be made.

12 Q. Are you sponsoring any exhibits in this proceeding?

- 13 A. Yes. I am sponsoring or co-sponsoring the following exhibits:
 - SDS-1, consisting of True-up (T) Schedules covering the 2015 actual
 period for the Turkey Point 6 & 7 project Site Selection and Preconstruction costs. SDS-1 contains a table of contents listing the TSchedules sponsored and co-sponsored by FPL Witness Grant-Keene and
 by me, respectively.
 - SDS-2, consisting of True-up (T) Schedules covering the 2016 actual period for the Turkey Point 6 & 7 project Site Selection and Preconstruction costs. SDS-2 contains a table of contents listing the T-Schedules sponsored and co-sponsored by FPL Witness Grant-Keene and by me, respectively.

1		• SDS-3, consisting of a table listing all licenses, permits and approvals FPL
2		is preparing to support the Turkey Point 6 & 7 project.
3		• SDS-4, consisting of a comprehensive list of procedures and work
4		instructions that governed the internal controls processes in 2015-2016.
5		• SDS-5, consisting of a list describing various project reports, their
6		periodicity and target audience in 2015-2016.
7		• SDS-6, consisting of a comprehensive list of project instructions and
8		forms utilized in 2015-2016.
9		• SDS-7, consisting of summary tables of the 2015 expenditures.
10		• SDS-8, consisting of summary tables of the 2016 expenditures.
11		
12		HIGH LEVEL PROJECT SUMMARY
13		
14	Q.	What is the Turkey Point 6 & 7 project?
15	A.	The project consists of a two-unit nuclear generating station with associated
16		linear and non-linear facilities. The AP1000 units designed by Westinghouse
17		will each produce 1,100 megawatts (MW). Linear facilities include five
18		transmission lines, a reclaimed water supply pipeline, potable water lines and
19		a series of roadway improvements in the region. Non-linear facilities include
20		a reclaimed water treatment facility, various buildings and facilities on the
21		Turkey Point site and mitigation projects in the region surrounding the plant.

In 2015 and 2016 the project continued to focus on obtaining the licenses,

1	permits and approvals necessary for construction and operation. A list of
2	these licenses, permits and approvals is included in Exhibit SDS-3.

- 3 Q. How has FPL approached the process of pursuing new nuclear
 4 generation, and how has this benefited FPL customers?
- 5 FPL has pursued the Turkey Point 6 & 7 project in a stepwise manner that (i) A. 6 reduces uncertainties by obtaining the licenses and approvals needed to construct and operate the project before initiating construction activities and 7 8 associated costs, and (ii) allows for better post-licensing decisions by 9 incorporating the construction experience of first wave AP1000 projects in the 10 This approach reduces the potential for project cost increases or U.S. 11 schedule delays once construction is initiated and allows the decision to 12 proceed to be made with current data informed by recent relevant experience.

Q. What are the customer benefits that justify the continued pursuit of new nuclear generation?

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A.

Addition of new nuclear generation has a range of potential benefits for FPL customers. The key benefits relate to FPL's core mission of providing reliable electric service at reasonable rates recognizing Florida's unique geography and resource limitations. The fuel required for nuclear generation is not dependent on natural gas pipelines, railroad or maritime distribution systems nor is it subject to volatile energy markets. Therefore, nuclear generation greatly adds to the reliability of a system by increasing fuel diversity, fuel supply reliability and energy security. Nuclear fuel markets provide a stable cost input reducing the impact to monthly customer bills that can result from

1		fossil fuel price volatility. In addition, the location of 2,200 MW of baseload
2		generation in Miami-Dade County helps to maintain a balance of generation
3		and load in Southeastern Florida. Finally, nuclear generation is recognized as
4		an important component of meeting state and national energy goals including
5		addressing greenhouse gas reduction.
6	Q.	How has FPL's estimate of customer benefits changed since beginning the
7		Turkey Point 6 & 7 project?
8	A.	Benefits related to fuel diversity, transmission system reliability, zero
9		greenhouse gas emissions and energy security, described above, remain
10		unchanged and are significant. However, as natural gas prices have continued
11		to move to exceptionally low levels, and due to delays in implementation of
12		compliance costs for attaining carbon dioxide goals, fuel and emission savings
13		associated with new nuclear have decreased relative to prior projections.
14	Q.	Was the economic feasibility of the Turkey Point 6 & 7 project re-
15		evaluated in 2015?
16	A.	Yes. An economic feasibility analysis was conducted to review the
17		economics of the project using updated assumptions for system demand, fuel
18		forecasts, environmental compliance costs, and alternative generation costs.
19		The analysis is a two-step process, consistent with the original analysis
20		supporting the 2008 Need Order.
21		
22		The first step develops a "break-even" cost to determine what the nuclear
23		project could cost while remaining economically competitive with alternative

baseload generation sources. The next step is that the "break-even" cost is compared to the high end of the project cost estimate range. These results confirmed the economic feasibility of the Turkey Point 6 & 7 project. Of the 14 scenarios evaluated, 8 scenarios reflected breakeven costs above the highend of FPL's non-binding cost estimate range, while 6 scenarios were within the range. FPL's 2015 economic analysis was approved by Order No. PSC-15-0521-FOF-EI.

A.

8 Q. Was it necessary to perform an economic feasibility analysis in 2016?

- No. Based on early 2016 developments resetting the schedule for the first wave U.S. AP1000 projects, FPL determined it would not proceed directly from the licensing phase into preconstruction work. Rather, FPL would limit its project activities and costs to those necessary to obtain its Turkey Point 6 & 7 license (and related approvals), maintain the approvals received, and continue to monitor the new nuclear construction projects in the U.S. It was determined that the results of a 2016 feasibility analysis would have no bearing on the logic of finishing the near-term, relatively low-cost activities required to complete the licensing phase of the Project.
- Q. What developments have led FPL to conclude that it should not immediately begin preconstruction work following receipt of the licenses and permits for the project?
- A. In short, renegotiation of construction agreements resulted in revised project schedules for Southern Company's (Southern) Vogtle AP 1000 project and SCANA Corporation's (SCANA) Summer AP1000 project in Georgia and

1		South Carolina, respectively. The revised schedules changed projected
2		completion of these milestone projects to the 2020 timeframe.
3		
4		In light of this development, FPL decided it would "pause" the project
5		following receipt of all necessary licenses, permits, and approvals, and no
6		immediately commence preconstruction work – projected at the time to occur
7		as early as 2017. FPL determined such a "pause" will allow these first wave
8		projects to complete and help us to assess how their experience could translate
9		to the Turkey Point Units 6 & 7 project, before we move forward with a
10		petition for approval to proceed to preconstruction work.
11	Q.	Did FPL continue to assess non-economic factors that could impact the
12		feasibility of the Turkey Point 6 & 7 project in 2015 and 2016?
12 13	A.	feasibility of the Turkey Point 6 & 7 project in 2015 and 2016? Yes. Non-economic factors include the feasibility of obtaining all necessary
	A.	
13	A.	Yes. Non-economic factors include the feasibility of obtaining all necessary
13 14	A.	Yes. Non-economic factors include the feasibility of obtaining all necessary approvals (permits, licenses, etc.), the ability to obtain financing for the
13 14 15	A.	Yes. Non-economic factors include the feasibility of obtaining all necessary approvals (permits, licenses, etc.), the ability to obtain financing for the project at a reasonable cost, and supportive state and federal energy policy
13 14 15 16	A. Q.	Yes. Non-economic factors include the feasibility of obtaining all necessary approvals (permits, licenses, etc.), the ability to obtain financing for the project at a reasonable cost, and supportive state and federal energy policy among others. Nothing occurred in 2015 or 2016 to indicate the Project had
13 14 15 16		Yes. Non-economic factors include the feasibility of obtaining all necessary approvals (permits, licenses, etc.), the ability to obtain financing for the project at a reasonable cost, and supportive state and federal energy policy among others. Nothing occurred in 2015 or 2016 to indicate the Project had become infeasible due to any of these factors.
113 114 115 116 117		Yes. Non-economic factors include the feasibility of obtaining all necessary approvals (permits, licenses, etc.), the ability to obtain financing for the project at a reasonable cost, and supportive state and federal energy policy among others. Nothing occurred in 2015 or 2016 to indicate the Project had become infeasible due to any of these factors. Did FPL have sufficient, meaningful, and available resources dedicated to
113 114 115 116 117 118	Q.	Yes. Non-economic factors include the feasibility of obtaining all necessary approvals (permits, licenses, etc.), the ability to obtain financing for the project at a reasonable cost, and supportive state and federal energy policy among others. Nothing occurred in 2015 or 2016 to indicate the Project had become infeasible due to any of these factors. Did FPL have sufficient, meaningful, and available resources dedicated to the Turkey Point 6 & 7 project in 2015 and 2016?

1		robust system of project controls. These resources worked diligently to make
2		significant progress in the current licensing phase.
3		
4		2015-2016 PROJECT ACTIVITIES AND RESULTS
5		
6	Q.	What were the major activities for the Turkey Point 6 & 7 project during
7		2015 and 2016?
8	A.	The major activities focused on completing the agency reviews of the federal
9		applications, defending the state Site Certification, and obtaining specific
10		authorizations from the US Army Corps of Engineers (USACE). FPL also
11		performed Initial Assessments aimed at further validating construction
12		schedule assumptions for use in future feasibility analyses and continued to
13		monitor other new nuclear construction projects. In 2016, the principle
14		federal reviews (the FEIS and the FSER) were completed by NRC staff with
15		affirmative recommendations that support future issuance of the Combined
16		License. Additionally, in 2016, FPL completed a land exchange with the
17		National Park Service (NPS) resulting in completion of a key step in finalizing
18		the western transmission lines associated with the project.
19	Q.	Please summarize the progress FPL made with respect to obtaining a
20		Combined License (COL) for the Turkey Point 6 & 7 project in 2015 and
21		2016.
22	A.	In 2015, FPL achieved the following milestones in the federal licensing
23		process:

1		• The NRC published its Draft Environmental impact Statement and
2		received comment from a range of stakeholders.
3		• NRC finalized technical information on the Safety Evaluation.
4		
5		In 2016, FPL achieved the following milestones in the federal licensing
6		process:
7		• FPL communicated to USACE that the West Consensus Corridor is our
8		preferred corridor, consistent with Site Certification Conditions of
9		Certification.
10		• The ACRS issued its final letter supporting approval of the Project.
11		• The NRC staff issued its FEIS.
12		• The NRC issued its FSER.
13		
14		These results continued to support FPL's estimate that it would receive a COL
15		for Turkey Point 6 & 7 in 2017.
16	Q.	Please summarize FPL's activities taken in 2015 and 2016 to defend the
17		Site Certification it obtained from the Siting Board in 2014.
18	A.	In 2015, the Third District Court of Appeal (3 rd DCA) heard arguments
19		regarding the appeal of the Site Certification by Miami Dade County, City of
20		Miami, City of South Miami and the Village of Pinecrest. On April 20, 2016
21		the 3 rd DCA reversed and remanded certain elements of the Site Certification.
22		In the Opinion of the 3 rd DCA, the Site Certification was deficient in three
23		areas: the application of local land development regulations, the Siting

1		Board's conclusion that it could not require underground installation of
2		transmission lines, and the Siting Board's interpretation of the nature and
3		applicability of a County regulation. FPL petitioned for rehearing en banc
4		which was denied. The 3 rd DCA Mandate was issued on December 29, 2016
5		FPL sought certiorari review by the Florida Supreme Court in late 2016.
6	Q.	Did FPL comply with Conditions of Certification (COC) in 2015 and
7		2016?
8	A.	Yes. Primarily, compliance at this phase involves the activities related to the
9		western transmission corridors. COCs require FPL to determine if the
10		Western Consensus Corridor can be developed in a timely manner and at a
11		reasonable cost to replace or minimize use of the Western Preferred Corridor
12		Progress made includes (i) the completion of the Final Environmental Impact
13		Study related to the land exchange conducted by the NPS; (ii) execution of a
14		Land Exchange Agreement in early 2016; and (iii) completion of the actual
15		Land Exchange transaction in November 2016. Other activities related to
16		COCs focus on pre-construction, construction and operational activities, so
17		were not undertaken in 2015 or 2016.
18	Q.	Please summarize the progress FPL made toward obtaining necessary
19		authorizations from the USACE.
20	A.	In 2015, the USACE provided authorization for work on or around certain
21		flood control structures necessary to support the installation of linear facilities
22		such as the reclaimed water supply pipeline.

- In 2016, FPL responded to a Request for Additional Information indicating

 FPL would pursue development of the West Consensus Corridor as its
- 3 Preferred choice, consistent with COCs.

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- Q. Please discuss the Initial Assessment activities FPL conducted in 2015 2016.
 - A. The Initial Assessments undertaken in 2015 and completed in early 2016 included reviews of key early construction activities to add confidence to the sequence, timing and resources required to initiate construction. reviews address issues that are unique to the construction of the Turkey Point 6 & 7 project. For example, initial clearing and filling of the site will create logistical challenges for timely construction on a site with limited open areas for laydown and staging. Optimization and coordination of the major activities, including the design and location of key features, will allow FPL higher confidence in the project's construction timeline and a more specific execution plan to utilize in establishing contract scope and obtaining realistic bids. All of this information will better inform the project cost and schedule estimate, enabling higher confidence in future decisions. Likewise, this information will better support a feasibility analysis that would accompany a filing requesting authorization to begin preconstruction work, when it is appropriate to make such a filing.
- Q. Please discuss FPL's nuclear industry and AP1000 monitoring efforts in 2015 and 2016.

1	A.	Project staff continued to monitor industry events and participate in technical
2		reviews to identify potential impacts to the overall Turkey Point 6 & 7 project
3		cost and schedule. Activities included continued involvement in industry
4		groups and site visits at Southern's Vogtle project and SCANA's Summer
5		project.

Q. Have there been any substantive construction lessons learned from U.S.

AP1000 projects?

Yes. Lessons learned can be organized into the following categories: construction oversight, structural module fabrication, concrete execution, and material storage and laydown. Multiple observations were made in each category, recorded and then addressed by the construction teams. Capturing these lessons and incorporating them into a detailed construction execution plan will enable subsequent projects to avoid or minimize related delays and associated costs or quality issues.

A.

As mentioned earlier, in late 2015 and early 2016, the project owners and Westinghouse Electric Company resolved a dispute regarding project scope and cost. The resolution settled disputed charges and allowed for development of a revised construction schedule for both projects. Westinghouse consolidated ownership and control of the construction services portion of the project, offering a more streamlined organization to finish the projects, which are currently approximately 60% complete. As a result of the dispute resolution, a new project schedule was developed in 2015 that

1		supports Vogtle Units 3 and 4 completion in 2019 and 2020, respectively
2		This means that the first wave of AP1000 construction projects in the U.S
3		will not be completed for several more years.
4	Q.	How does the revised schedule for first wave AP1000 project completion
5		impact the timing of the Turkey Point Units 6 & 7 project?
6	A.	The Turkey Point Units 6 & 7 project was conceived and developed to be the
7		first of the second wave of AP1000 projects. This would allow FPL to obtain
8		the benefits of certain lessons learned regarding construction schedule
9		logistical support, contract terms and conditions, and a developed market for
10		contractors and suppliers from the first wave projects.
11		
12		Delays in the first wave projects result in incomplete data to inform the
13		decision to proceed to post licensure activities that will support the ultimate
14		decision to proceed to construction - namely, a more certain construction
15		execution schedule and capital cost. This is a key factor in FPL's decision to
16		pause prior to requesting approval to conduct preconstruction work directly
17		following receipt of all licenses and permits.
18	Q.	Did other considerations impact FPL's 2016 decision to refrain from
19		initiating preconstruction work in 2017?
20	A.	Yes. Another consideration was the remaining uncertainty in the timeline for
21		receipt of the COL, associated USACE 404(b) permits, and resolution of the
22		Site Certification. Additionally, while generally beneficial for FPL's
23		customers, the combination of historically low natural gas price forecasts for

the near term, combined with delays in emission compliance cost implementation reduce the financial imperative for beginning deployment of large new nuclear projects in 2017. Finally, the Nuclear Cost Recovery statute envisions a utility will petition the FPSC for approval to proceed with pre-construction work after receipt of the COL, thus ensuring a "gap" between receipt of the COL and initiation of preconstruction work while such a petition is under consideration.

8 Q. In light of the foregoing, did FPL revise its Project Schedule in 2016?

- 9 A. No. It would be premature for FPL to develop a revised Project Schedule at
 10 this time. The work necessary to undertake such a revision will be informed
 11 by the observations and lessons learned from the completion of first wave
 12 AP1000 construction projects.
- Q. Please describe the negotiation or execution of any commercial or development agreements supporting the Turkey Point 6 & 7 project in 2015.
- 16 A. The Forging Reservation Agreement between FPL and Westinghouse remains 17 in effect with an expiration date of June 2018. There were no changes other 18 than the extension of the expiration date to the agreement in 2015 or 2016.

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In December 2015, the NPS published the Final EIS addressing potential impacts of a land exchange with FPL. The Final EIS recommended the exchange as the best alternative. The exchange is necessary to support the western transmission line corridors. A Record of Decision was provided in

March 2016, followed by a Land Exchange Agreement between FPL and the NPS. The Land Exchange Agreement set forth the two step process to conduct a fee-for-fee exchange of property between FPL and NPS, followed by an effort to maximize development of the West Consensus corridor farther to the east, and transfer of unused exchange property back to NPS. The fee-for-fee exchange closed in November 2016 and FPL has initiated efforts to develop the West Consensus Corridor, in compliance with Conditions of Certification.

PROJECT MANAGEMENT INTERNAL CONTROLS

- Q. Please describe the project management structure that was responsible for the Turkey Point 6 & 7 project in 2015 and 2016.
- 14 A. The management structure for the Turkey Point 6 & 7 project was unchanged
 15 in 2015. In 2016, Mr. Reuwer completed the activities associated with initial
 16 assessments. Given the decision to not pursue pre-construction activities in
 17 the near term, Mr. Reuwer's position was eliminated. William Maher and I
 18 retained management of the NRC licensing and Development aspects of the
 19 project, respectively.
- Q. Please describe the project management and staffing approach employed on the Turkey Point 6 & 7 project in 2015 and 2016.
- A. The project was staffed by a combination of employees fully dedicated to the project, employees from FPL business units who devoted a portion of their

time to the project, and a select group of contractors and subcontractors whose subject matter expertise and skills were required to complete the considerable tasks related to this undertaking. Leading the staff was a project management team charged with monitoring the day-to-day execution and strategic direction of the project. The project management team provided routine, dedicated oversight of the project including a determination of the timing and content of external reviews. Staff roles were managed to begin a transition from obtaining the licenses and permits to maintaining the licenses and permits once obtained. The project management team was supported by project controls professionals that executed the day-to-day project activities and provided direct oversight of procedural compliance. The project also benefited from routine review, supervision, and direction provided by FPL executive management.

- Q. What were the key elements of the project management process used to manage the Turkey Point 6 & 7 project in 2015 and 2016?
- A. FPL routinely evaluated the risks, costs, and issues associated with the Turkey
 Point 6 & 7 project using a system of internal controls, routine project
 meetings and communication tools, management reports and reviews, and
 internal and external audits.
- Q. Please describe the system of internal controls that were applicable to the project in 2015 and 2016.

1 A. The project internal controls were comprised of various financial systems, 2 department procedures, work/desktop instructions and best practices providing

governance and oversight of project cost and schedule processes.

A.

Exhibit SDS-4 provides a list of procedures and work instructions that governed the internal controls processes and expectations. These procedures and work instructions were employed by dedicated and experienced project controls personnel who provided project oversight and analysis. The Project Controls organization helped to ensure appropriate management decisions were made based upon assessment of available information leading to reasonable costs. Accountability was clear and understood throughout the Project Controls organization and was a cornerstone of the services they provided.

14 Q. Please describe the administration of these internal controls.

A Project Controls Manager provided cost and schedule direction and analysis, coordinated internal and external audit requests, held meetings with project management to review cost and schedule performance, and reviewed all cost, scope changes, schedules and performance indicators. The Project Controls Manager also participated in meetings with project management to review cost and schedule performance, provided information regarding cost, scope changes, schedules and performance indicators, maintained cost templates, supported the production of documents and responses to

- information requests, and met monthly or as required with department heads
 on forecasting and commitments.
- Q. Please describe the specific reports that were generated to monitor the
 project and the periodicity and audience for those reports.
- 5 A. The project relied on a series of weekly or monthly reports and had standing
 6 meetings to discuss forward-looking analysis with project managers. Exhibit
 7 SDS-5 provides a list describing the reports, and their periodicity and target
 8 audience.

9 Q. What are Project Instructions and why are they needed?

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In the course of project development, FPL identified a need to develop some business processes unique to new nuclear deployment. These processes involve conducting business in compliance with NextEra Energy, Inc. and FPL policies and procedures, but also recognize project-specific requirements. For example, specific instructions are needed to ensure compliance with additional NRC requirements for quality control and document retention. Direction for such specific areas of focus is provided to project staff through a set of FPL's New Nuclear Project - Project Instructions (NNP-PI). These Project Instructions establish a standard for the project team which provides guidance, sets expectations and drives consistency. In anticipation of receiving the COL, FPL initiated the preparation of procedures in 2016 for maintaining the COL. In addition, the format requirements and numbering of current and new project instructions are being updated. Exhibit SDS-6

provides FPL's comprehensive list of project instructions and forms that were utilized in 2015 and 2016.

3 Q. What processes were used to manage project risk?

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Cost and schedule risk was managed by ensuring the project team recognized and understood the issues facing different sub-teams that comprised the overall project. Weekly and monthly meetings are held to ensure sufficient and timely communication of project status and issues. These meetings result in several reports identified in Exhibit SDS-5. All of these routine meetings allowed project management to obtain updates from key project team members, provide direction on the conduct of the project activities and maintain tight control over project progress, expenditures, and key decisions. Schedule and cost metrics were monitored and reported in standard format reports to allow close monitoring of contractor performance. A monthly project dashboard report was maintained to specifically track risk status and assist in the review. This document allowed for monthly trending of project risk areas unique to the Turkey Point 6 & 7 project. Due to the completion of certain project activities, the use of the Quarterly Risk Assessment was suspended in 2015.

Q. What other periodic reviews were conducted to ensure the project wasappropriately reviewed and analyzed?

A. Internal and external audits occur during the course of the project to ensure the project adheres to all corporate guidelines for financial accounting as well as employing best management and internal controls practices. When a deficiency is identified in an audit, an analysis is conducted to determine the cause of the deficiency and corrective actions are implemented to ensure the deficiencies are mitigated going forward. The 2015 and 2016 audits are described further below.

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What other activities has FPL undertaken to ensure its decision processes are informed by the most current national and international industry information?

FPL is an industry leader in nuclear generation, and as such, has the experience, contacts, and industry presence to engage in many forums for exploration of nuclear industry issues. Nonetheless, the specific challenges of new nuclear deployment have created focus areas requiring additional coordination between entities involved in new plant licensing, construction, and operation. FPL participated in three key industry groups providing value to the Turkey Point 6 & 7 project in 2015 and 2016. The Design Centered Working Group provides coordination among owners, vendors, and the NRC related to design modifications of the AP1000. This critical activity is necessary to ensure design changes for the AP1000 are made through a consensus process with the involvement of the NRC to preserve standardization of design, a cornerstone of new nuclear development. FPL also is a member of the AP1000 owners group (APOG) (a consortium of utilities involved with the AP1000 design) and of the Advanced Nuclear Technology group organized by the Electric Power Research Institute (EPRI). Starting in 2015, William Maher has served as the Chairman of APOG.

These groups are primarily forums to identify and resolve issues that are of primary interest to owners, such as staffing, training and maintenance activities. For example, programs such as Procurement Specification Development, Equipment and Nuclear Fuel Reliability improvements, Advancing Welding Practices, and Modular Equipment Testing and Benchmarking provide FPL increased efficiency in program development and implementation resulting in future cost savings. The principle of standardization through operations and maintenance requires this level of industry coordination and dialogue.

A.

These different groups have unique and important roles in the successful execution of new nuclear deployment in the U.S. Achieving the goal of industry standardization and realizing the associated economic and operational efficiencies requires active participation by industry participants in these venues.

Q. What steps were taken to ensure project expenditures were properly authorized?

For initial commitments, an approved request directed FPL's Integrated Supply Chain (ISC) to go out for bid and formally contract with the selected supplier. Initial commitments required appropriate authorizations including all documentation required by corporate procedures. This included requests for proposal, contracts, purchase orders, notice to proceed, and, if required, a

single or sole source justification. For Contract Change Orders (CCOs), the requests were authorized at the appropriate level and the CCOs executed prior to releasing the supplier to perform the requested scope of work. Tracking systems and processes were used to document and record procurement activities and to obtain the appropriate level of management authorization for expenditures.

Q. How would you summarize FPL's overall approach to Turkey Point 6 & 7 project management in 2015 and 2016?

FPL followed robust project planning, management, and execution processes to manage the Turkey Point 6 & 7 project. These efforts were led by personnel with significant experience in project management and development supported by project management professionals trained in the deliberate execution of critical infrastructure projects through a comprehensive set of internal controls. Additionally, FPL implemented an ongoing internal auditing and quality assurance process to continuously monitor compliance with the controls discussed above. In summary, FPL had the right people with the right tools and oversight making decisions with the best available information. For all of these reasons, FPL is confident that its Turkey Point 6 & 7 project management decisions were well-founded and reasonable.

A.

PROCUREMENT PROCESSES AND CONTROLS

1	Q.	What was FPL's preferred method of procurement and when might it be
2		in the best interest of the project to use another method?
3	A.	The preferred approach for the procurement of materials or services was to
4		use competitive bidding. FPL benefits from its strong market presence
5		allowing it to leverage corporate-wide procurement activities to the specific
6		benefit of individual project procurement activities. Maintaining a
7		relationship with a range of service providers offered the opportunity to assess
8		capabilities, respond to changing resource loads and remain knowledgeable of
9		current market trends and cost of service.
10		
11		However, in certain situations the use of single or sole source procurement
12		was in the best interest of the company and its customers. In some cases there
13		was a limited pool of qualified entities to perform specific services or provide
14		certain goods and materials. In other cases a service provider was engaged to
15		conduct a specific scope of work based on a competitive bid or other analysis
16		and additional scope was identified that the vendor could efficiently provide
17		Circumstances such as the above examples are common in the nuclear
18		industry, and especially on complex long-term projects such as the Turkey
19		Point 6 & 7 project.

- Q. Please describe the single and sole source procurement procedures that applied to the Turkey Point 6 & 7 project in 2015 and 2016.
- A. NextEra Energy, Inc. corporate policy NEE-PRO-1470 requires proper documentation and authorization for single or sole source procurement. Such

1		authorization must be from an individual with a commitment/spend authority
2		at least equal to the value of the goods or services being procured. The
3		procedure also calls for a review of the justification for reasonableness.
4		Throughout 2015 and 2016, FPL maintained its vigilance in creating adequate
5		single or sole source documentation consistent with NEE-PRO-1470.
6		
7		INTERNAL/EXTERNAL AUDITS AND REVIEWS
8		
9	Q.	What audits or reviews have been conducted to ensure the project
10		controls are adequate and costs are reasonable?
11	A.	FPL engaged Concentric Energy Advisors (Concentric) to conduct a review of
12		the project internal controls, with a focus on management processes, as was
13		conducted in 2008 through 2014. FPL's Internal Auditing department
14		engaged Experis to audit the costs charged to the project, as it has in prior
15		years. Additionally, the FPSC Staff conducts a financial audit of the project
16		ledger and accounts and an internal controls audit annually.
17	Q.	What were the results of Concentric's review?
18	A.	For 2015 and 2016, Concentric concluded that FPL's decision making and
19		management actions as they related to project costs were prudent, and thus
20		FPL's 2015 and 2016 expenditures on the Turkey Point 6 & 7 project were

Q. What were the results of FPL's internal audit?

prudently incurred.

1	A.	The FPL internal audit of 2015 costs and controls found no exceptions and
2		that project controls were good. The FPL internal audit of 2016 project costs
3		and controls is currently underway.
4	Q.	What were the results of FPSC Staff's financial and internal controls
5		audits?
6	A.	Staff's 2015 financial audit report had no findings. Staff's 2015 review of
7		internal controls observed that project controls, risk evaluation, and
8		management oversight are adequate and responsive to current project
9		requirements; invoicing policies and procedures are adequate, universally
10		understood and followed; contracts and contract change orders adhered to FPL
11		procedures and included all required justifications; and "the process by which
12		FPL reached its decision to delay pre-construction activities" was reasonable.
13		Staff's financial and internal controls reviews for 2016 are underway.
14		
15		2015 PROJECT COSTS
16		
17	Q.	Describe the costs incurred for the Turkey Point 6 & 7 project in 2015.
18	A.	As represented in Exhibit SDS-7 and Exhibit SDS-1, Schedule T-6, FPL
19		incurred a total of \$19,771,813 in project costs that were necessary for the
20		activities described in this testimony. This is \$1,765,978 less than the May 1,
21		2015 Actual/Estimated costs of \$21,537,791.
22		

- These "pre-construction costs" (as that term is defined by Rule 25-
- 2 6.0423(2)(g)) are broken down into the following subcategories: (1) Licensing
- 3 \$14,778,172; (2) Permitting \$187,118; (3) Engineering and Design
- 4 \$3,326,281; (4) Long Lead Procurement Advanced Payments \$0; (5) Power
- 5 Block Engineering and Procurement \$0; and (6) Initial Assessments
- 6 \$1,480,242.
- 7 Q. Please describe the costs incurred in the Licensing subcategory.
- 8 A. In 2015, Licensing costs were \$14,778,172 as shown in Exhibit SDS-7, Table
- 9 2 and Exhibit SDS-1, Schedule T-6, Line 3. Licensing costs consisted
- primarily of FPL employee labor, contractor labor, and specialty consulting
- services necessary to support obtaining and maintaining the COL and other
- approvals required for construction and operation of the Turkey Point 6 & 7
- project, and the state Certification of the project.
- 14 Q. Please explain the reasons behind the variances between the actual 2015
- 15 Licensing costs and the actual/estimated costs provided in Docket No.
- 16 **150009-EI.**
- 17 A. Licensing costs were \$599,592 lower than estimated in the May 1, 2015 filing.
- This favorable variance was the result of unused contingency, partially offset
- by additional NRC fees and engineering costs associated with completing the
- 20 seismic reviews and additional legal costs associated with addressing the
- single admitted contention at the NRC.
- 22 Q. Please describe the costs incurred in the Permitting subcategory.

1	A.	In 2015, Permitting costs were \$187,118 as shown in Exhibit SDS-7, Table 3
2		and Exhibit SDS-1, Schedule T-6, Line 4. Permitting costs consisted
3		primarily of project employees and legal services necessary to support the
4		various license and permit applications required by the Turkey Point 6 & 7
5		project. Exhibit SDS-7, Table 3 provides a detailed breakdown of the
6		Permitting subcategory costs in 2015, including a description of items
7		included within each category.

- Q. Please explain any variance between the actual 2015 Permitting costs and
 the actual/estimated costs provided in Docket No. 150009-EI.
- 10 A. Permitting costs were \$104,231 lower than estimated in the May 1, 2015 filing due to reduced support and legal requirements, and unused contingency.
- 12 Q. Please describe the costs incurred in the Engineering and Design 13 subcategory.

A. In 2015, Engineering and Design costs were \$3,326,281 as shown in Exhibit SDS-7, Table 4 and Exhibit SDS-1, Schedule T-6, Line 5. Engineering and Design costs consisted primarily of FPL employee services and/or engineering consulting services necessary to support the continued permitting of the Underground Injection Control exploratory well and membership fees for EPRI's Advanced Nuclear Technology working group and the APOG industry group. Exhibit SDS-7, Table 4 provides a detailed breakdown of the Engineering and Design subcategory costs in 2015, including a description of items included within each category.

1	Q.	Please explain	any variance	between the	actual 2015	Engineering	and
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- 2 Design costs and the actual/estimated costs provided in Docket No.
- 3 **150009-EI.**
- 4 A. Engineering and Design costs were \$700,292 lower than planned. The
- favorable variance was caused by lower than anticipated APOG costs, and
- 6 reduced support requirements.
- 7 Q. Did FPL incur any costs in the Long Lead Procurement, Power Block
- 8 Engineering and Procurement, or Transmission subcategories in 2015?
- 9 A. No. In 2015, there were no Long Lead Procurement, Power Block
- Engineering and Procurement, or Transmission costs. Also, there were no
- variances in these subcategories from FPL's estimates provided in Docket No.
- 12 150009-EI.
- 13 Q. Please describe the costs incurred in the Initial Assessments subcategory.
- 14 A. In 2015, Initial Assessment costs were \$1,480,242 as shown in Exhibit SDS-7,
- Table 5 and Exhibit SDS-1, Schedule T-6, Line 8. Initial Assessment costs
- 16 consisted primarily of studies aimed at further validating construction
- schedule assumptions.
- 18 Q. Please explain any variance between the actual 2015 Initial Assessment
- costs and the actual/estimated costs provided in Docket No. 150009-EI.
- 20 A. Initial Assessment costs were \$361,863 lower than estimated in the May 1,
- 21 2015 filing due to Initial Assessment scopes being awarded later than initially
- 22 planned. As discussed by FPL witness Grant-Keene, this amount is not

1		included in the calculation of FPL's 2015 true-up amount for recovery
2		purposes.
3	Q.	Please describe the Site Selection costs incurred in 2015.
4	A.	FPL's Site Selection work was completed in October 2007 with the filing of
5		the Need Petition. The cost of \$160,088 in this category relates to carrying
6		charges. FPL Witness Grant-Keene supports the calculation of carrying
7		charges.
8		
9		2016 PROJECT COSTS
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11	Q.	Describe the costs incurred for the Turkey Point 6 & 7 project in 2016.
12	A	As represented in Exhibit SDS-8 and Exhibit SDS-2, Schedule T-6, FPL
13		incurred a total of \$18,193,089 in project costs that were necessary for the
14		activities described in this testimony. This is \$7,216,831 less than the May 1,
15		2015 Projected costs of \$25,409,920 filed in Docket No. 150009-EI.
16		
17		These "pre-construction costs" (as that term is defined by Rule 25-
18		6.0423(2)(g)) are broken down into the following subcategories: (1) Licensing
19		\$14,056,557; (2) Permitting \$221,004; (3) Engineering and Design
20		\$3,105,727; (4) Long Lead Procurement Advanced Payments \$0; (5) Power
21		Block Engineering and Procurement \$0; and (6) Initial Assessments \$809,801.
22	Q.	Please describe the costs incurred in the Licensing subcategory.

1	A.	In 2016, Licensing costs were \$14,056,557 as shown in Exhibit SDS-8, Table
2		2 and Exhibit SDS-2, Schedule T-6, Line 3. Licensing costs consisted
3		primarily of FPL employee labor, contractor labor, and specialty consulting
4		services necessary to support obtaining and maintaining the COL and other
5		approvals required for construction and operation of the Turkey Point 6 & 7
6		project, and the state Certification of the project.

- Q. Please explain the reasons behind the variances between the actual 2016
 Licensing costs and the projected costs provided in Docket No. 150009-EI.
- 9 A. Licensing costs were \$2,990,618 lower than projected in the May 1, 2015 10 filing. This favorable variance was the result of lower than anticipated 11 software license costs and unused contingency.
- 12 Q. Please describe the costs incurred in the Permitting subcategory.
- 13 In 2016, Permitting costs were \$221,004 as shown in Exhibit SDS-8, Table 3 A. 14 and Exhibit SDS-2, Schedule T-6, Line 4. Permitting costs consisted 15 primarily of project employees and legal services necessary to support the 16 various license and permit applications required by the Turkey Point 6 & 7 Exhibit SDS-8, Table 3 provides a detailed breakdown of the 17 project. 18 Permitting subcategory in 2016, including a description of items included 19 within each category.
- Q. Please explain the variance between the actual 2016 Permitting costs and the projected costs provided in Docket No. 150009-EI.

1 A. Permitting costs we	re \$299,638 lower than j	projected in the May	1, 2015 filing
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- 2 due to reduced Project Development and Legal support needed for the current
- 3 stage of the project, as well as unused contingency.
- 4 Q. Please describe the costs incurred in the Engineering and Design
- 5 **subcategory.**
- 6 A. In 2016, Engineering and Design costs were \$3,105,727 as shown in Exhibit
- 7 SDS-8, Table 4 and Exhibit SDS-2, Schedule T-6, Line 5. Engineering and
- 8 Design costs consisted primarily of FPL employee services and/or engineering
- 9 consulting services and membership fees for EPRI's Advanced Nuclear
- Technology working group and the APOG industry group. Exhibit SDS-8,
- Table 4 provides a detailed breakdown of the Engineering and Design
- subcategory costs in 2016, including a description of items included within
- each category.
- 14 Q. Please explain the variance between the actual 2016 Engineering and
- Design costs and the projected costs provided in Docket No. 150009-EI.
- 16 A. Engineering and Design costs were \$1,578,481 lower than projected in the
- May 1, 2015 filing due to lower than anticipated APOG fees and unused
- 18 contingency.
- 19 Q. Did FPL incur any costs in the Long Lead Procurement, Power Block
- 20 Engineering and Procurement, or Transmission subcategories in 2016?
- 21 A. No. In 2016, there were no Long Lead Procurement, Power Block
- Engineering and Procurement, or Transmission costs. Also, there were no

1	variances	in	these	subcateg	gories	from	FPL's	projections	provided	in	Docket

- 2 No. 150009-EI.
- 3 Q. Please describe the costs incurred in the Initial Assessments subcategory.
- 4 A. In 2016, Initial Assessment costs were \$809,801 as shown in Exhibit SDS-8,
- 5 Table 5 and Exhibit SDS-2, Schedule T-6, Line 7. Initial Assessment costs
- 6 consisted primarily of studies aimed at further validating construction
- 7 schedule assumptions. The Initial Assessment work was suspended in 2016.
- 8 Q. Please explain any variance between the actual 2016 Initial Assessment
- 9 costs and the projected costs provided in Docket No. 150009-EI.
- 10 A. Initial Assessment costs were \$2,348,094 lower than projected in the May 1,
- 2015 filing due to lower than anticipated costs on Category B and C work, and
- the deferment of Category D work, previously scheduled for 2016. As
- discussed by FPL witness Grant-Keene, this amount is not included in the
- calculation of FPL's 2016 true-up amount for recovery purposes.
- 15 Q. Please describe the Site Selection costs incurred in 2016.
- 16 A. FPL's Site Selection work was completed in October 2007 with the filing of
- the Need Petition. The cost of \$159,395 in this category relates to carrying
- charges. FPL Witness Grant-Keene supports the calculation of carrying
- charges.
- 20 Q. Were the 2015 and 2016 project activities prudent and were the related
- 21 costs prudently incurred?
- 22 A. Yes. All costs were incurred as a result of the deliberately managed process at
- 23 the direction of a well-informed, properly qualified management team. The

costs were incurred in the process of obtaining and maintaining the necessary licenses, certifications, permits, approvals or authorizations for the Turkey Point 6 & 7 project. All costs were reviewed and approved under the direction of the Turkey Point 6 & 7 project management team and were made fully subject to project internal controls. Costs were processed using FPL standard procurement procedures and authorization processes, are reasonable and were prudently incurred.

8 Q. Does this conclude your testimony?

9 A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Nuclear Cost)	DOCKET NO. 20170009-EI
Recovery Clause	FILED: August 15, 2017

ERRATA SHEET

MAY 1, 2017 TESTIMONY OF STEVEN D. SCROGGS

PAGE #	LINE #	
Page 14	Line 4	Insert "The referenced hearing has occurred, and that remaining contention has been
		dismissed." after "hearing."
Page 20	Line 2	Insert "The referenced hearing has occurred,
		and that remaining contention has been dismissed." after "contention."
Page 14	Line 5	Insert "That hearing has now been scheduled for
		October 5, 2017." after "COL."
Page 20	Line 7	Insert "That hearing has now been scheduled for
		October 5, 2017." after "COL."
Page 15	Line 6	Insert "On July 27, 2017 the City of Miami
		Commission approved a resolution directing the
		Mayor to enter into a settlement with FPL
		resolving this issue, among others." after
		"issues."
		AND WEST

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
2		FLORIDA POWER & LIGHT COMPANY
3		DIRECT TESTIMONY OF STEVEN D. SCROGGS
4		DOCKET NO. 170009-EI
5		May 1, 2017
6		
7	Q.	Please state your name and business address.
8	A.	My name is Steven D. Scroggs. My business address is 700 Universe
9		Boulevard, Juno Beach, Florida 33408.
10	Q.	By whom are you employed and what is your position?
11	A.	I am employed by Florida Power & Light Company ("FPL" or the
12		"Company") as Senior Director, Project Development. In this position I have
13		responsibility for the development of power generation projects to meet the
14		needs of FPL's customers.
15	Q.	Have you previously provided testimony in this docket?
16	A.	Yes.
17	Q.	Are you sponsoring or co-sponsoring any exhibits in this case?
18	A.	Yes. I am sponsoring or co-sponsoring the following exhibits:
19		• Exhibit SDS-9, Turkey Point 6 & 7 Site Selection and Preconstruction
20		Nuclear Filing Requirement (NFR) Schedules. The NFR Schedules
21		contain a table of contents listing the schedules sponsored and co-
22		sponsored by FPL Witness Grant-Keene and me, respectively.
23		• Exhibit SDS-10, Steps in Turkey Point 6 & 7 Licensing

Q. What is the purpose of your testimony?

A.

A. The purpose of my testimony is to provide a description of how the Turkey Point 6 & 7 project is being managed and controlled in a stepwise manner, particularly as the project nears the end of the Licensing phase. My testimony also provides insight into factors that influence FPL's decisions on the pace of the project and how recent developments in first wave AP1000 projects (Georgia Power's Vogtle project and SCANA Corporation's Summer project) may impact the project in the future. Additionally, my testimony discusses FPL's 2017 project activities, its decision to complete final licensing steps, and plans for the project in the years that follow 2017.

11 Q. Please summarize your testimony.

FPL continues to carefully and methodically create the opportunity for additional reliable, cost-effective and fuel diverse nuclear generation to benefit FPL's customers. The approach applied to the management of the Turkey Point 6 & 7 project provides control of cost risks by being responsive to project-specific and industry-wide developments while maintaining progress through the intensive licensing period. In 2017 FPL will continue its progress on the project primarily by supporting the final stages of the Nuclear Regulatory Commission's (NRC) Combined Operating License Application (COLA) review process, development of the West Consensus Corridor, and completion of the United States Army Corps of Engineers (ACOE) 404(b) wetland permits and Section 408 reviews. FPL currently expects to receive the COL, the ACOE Section 404(b) wetland permit, and Section 408 reviews

in late 2017 or early 2018. FPL will also address the Third District Court of Appeal's (3rd DCA) ruling, which reversed and remanded three aspects of the Site Certification received by the project in 2014. As licenses and approvals are received, the project activities will focus on maintaining the compliance of the approved licenses, permits, and certifications.

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The first wave AP1000 projects have experienced significant challenges in the past two years, reducing the certainty of prior cost estimates and schedules for those projects. This reduced certainty reinforces FPL's cautious stepwise approach overall, and as discussed in my March 1 testimony, its decision to "pause" after completing licensing. The pause period will allow FPL to better observe and understand the challenges faced by those projects as they approach completion, and to continue to monitor broader changes to the nuclear power plant construction industry. While there is a lack of clarity regarding the immediate direction of the first wave projects, it remains clear that FPL should preserve the potential for customer benefits offered by completing the final Licensing steps that remain without making any decisions about entering into the preconstruction phase at this time. Obtaining the COL will create a valuable option to add new nuclear generation to FPL's system in the future, when it is most advantageous to do so. In the interim, FPL has decided not to request contemporaneous cost recovery for obtaining, and then maintaining, the necessary Turkey Point 6 & 7 approvals beginning with the year 2017.

FPL will continue to monitor the new nuclear construction projects underway in the U.S. and will continue to be actively involved in organizations such as the AP1000 Owners Group (APOG) in order to gather lessons learned and improve the basis upon which a decision to begin preconstruction work ultimately will be made. FPL will also conduct activities that will maintain all received permits, approvals, certifications and licenses in a state of compliance that will support a timely transition to preconstruction and construction, once such a determination is made and appropriate approvals are obtained.

FPL's stepwise approach continues to provide customers with the best opportunity to complete a critical milestone in the project and to be ready to move into the pre-construction work phase when it is advantageous to do so. My testimony provides the Florida Public Service Commission (FPSC) with the information necessary to conclude that it is reasonable for FPL to take the final steps necessary to obtain the COL and related federal and state approvals, and for FPL to maintain compliance with those approvals once received.

- 20 Q. Please describe how the remainder of your testimony is organized.
- 21 A. My testimony includes the following sections:
- 22 1. Policy Considerations
- 23 2. Project Approach

- 3. Factors Influencing the Project
- 2 4. 2017 Project Activities
- 3 5. Project Next Steps

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POLICY CONSIDERATIONS

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Q. Please provide background on Florida's Nuclear Cost Recovery statute.

Several key developments led to the establishment of the Nuclear Cost Recovery statute as a means of resolving persistent issues in meeting the need for stable and reasonably priced, reliable electricity for the state of Florida – in a term, "fuel diversity." Primarily, the state's reliance on natural gas-fueled generation to meet the growing electricity needs of Floridians, highlighted by volatile fossil fuel prices and supply reliability issues, created concern that insufficient fuel diversity threatened the long term economic stability of the state. These concerns were reinforced in 2005 by hurricanes Katrina and Rita, which impacted natural gas production in the Gulf of Mexico, threatened FPL's fuel supply reliability, drove up natural gas prices and placed financial strain on FPL customers. Florida's significant and growing reliance on natural gas fueled generation was a result of the difficulty in being able to deploy non-gas baseload alternatives; most commonly fossil fuels (coal or oil fueled generation) or nuclear generation or resolve natural gas supply cost, reliability and diversity challenges. Nuclear Cost Recovery was initiated to directly address some of the challenges associated with deployment of nuclear generation as one tool to help improve fuel diversity and has been successful for FPL customers, as more than 520 MW of new nuclear capacity was successfully added to the system in 2013.

4 Q. How did Florida's reliance on natural gas develop?

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Throughout the last several decades, significant political, economic and technology changes occurred to reshape the state's generation portfolio away from a dependence on foreign oil in the 1970s as existing plants were replaced by plants operating on other fuel sources. During this period the nuclear industry was dealing with significant regulatory, cost and schedule challenges in deploying new nuclear units – essentially keeping new nuclear capacity from being an option in the late 1980s and 1990s. The other traditional baseload alternative, coal, had only been developed in limited amounts in Florida because of the significant logistical challenges and expense in delivering large quantities of coal from supply regions located in the country's interior and concerns related to emissions. These factors opened the door for a new baseload technology. Deregulation of natural gas as a fuel for electric generation and the introduction and continued improvement of large scale combined cycle gas turbine technology evolved to provide a cost-effective, efficient and low emissions alternative. As a result, combined cycle gas turbine plants have been the technology of choice for most generation additions in the state from the 1990s to today. While customers have benefited from these choices, particularly the affordability and lower emissions of domestic natural gas, recurrence of high and volatile fossil fuel

prices or supply reliability issues have impacted customers and the Florida economy in the past and, if unaddressed, could impact the state again in the future.

4 Q. What developments occurred to enable new nuclear generation to be viewed as a deployable alternative?

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In the late 1990s, the NRC instituted a refined regulatory framework for the licensing of new nuclear generating units. This revised process places a high focus on the rigor and detail applied during the licensing process, reducing the opportunity for regulatory delays during construction or prior to operation; complications that severely impacted the prior generation of nuclear power plants. In this way, if regulatory delays occur they do so prior to significant investment reducing the financial risk in the process. Also during the 1980s and 1990s, a new generation of nuclear power plants were developed and poised for U.S. and international deployment. The federal Energy Policy Act of 2005 provided incentives and assurances that further motivated renewed interest in nuclear generation. Consortiums were formed between potential owners and manufacturers that furthered several key projects validating that the new designs and licensing processes would be successful. By 2006, a host of new nuclear projects had been proposed in the U.S. With the passage of the Florida Energy Act of 2006 and the FPSC's adoption of the Nuclear Cost Recovery rule, deployment of new nuclear capacity in Florida to address fuel diversity concerns became a realistic option.

- Q. What specific considerations are included in the Nuclear Cost Recovery rule as implemented by the FPSC?
- 3 A. A core principle of the Nuclear Cost Recovery rule is that of transparency. In order to satisfy that principle, applicants for cost recovery must satisfy a 4 number of extensive reviews. In order to enter the annual cost recovery 5 6 process, an applicant must first obtain an affirmative need determination verifying that the proposed generation is required to provide cost-effective and 7 reliable electric generation. Annually, within the cost recovery process, the 8 9 applicant must provide a full accounting for all project activities and costs for which a utility is seeking recovery. This transparency allows the FPSC to 10 conduct in-depth oversight of the utility's actions in real time – as the project 11 proceeds, rather than in hindsight decades after decisions are made and money 12 is spent. The FPSC then makes a "reasonableness" determination as to costs 13 14 projected for the project (prior to any recovery of those costs), and reviews historical costs for "prudence." Amendments to the Nuclear Cost Recovery 15 statute in 2013 provide for additional interim review steps as a project 16 17 proceeds from licensing to construction.
- Q. How does the existence of the Nuclear Cost Recovery process assist FPL
 in bringing forward nuclear generation projects?
- A. The statute and associated rule provide the requisite regulatory certainty necessary for FPL to undertake the complex and challenging task of adding new nuclear capacity to its system. The process allows FPL to take the long-lead steps of licensing and pre-construction and pays off interest costs during

1	construction, reducing costs to FPL's customers. Additionally, it enables FPL
2	to go to the financial markets and obtain competitive financing rates for the

large amount of capital required to fund the construction of the project.

- Q. What developments have occurred since the Nuclear Cost Recovery Rule was instituted that influence the decision to proceed with a new nuclear project?
- 7 A. Natural gas supply has increased with the advent of new resources and extraction technologies, reducing the natural gas price to approximately 8 9 \$3/MMBtu - nearly 75% below the peak prices experienced in 2005. Additionally, increased natural gas pipeline infrastructure and supply diversity 10 options have been developed. As we look forward, we can see that the price 11 of solar photovoltaic generation has decreased to a point supporting large 12 scale installations throughout Florida, satisfying a portion of the growing 13 14 demand with a non-traditional, fuel-diverse generation source. We have also observed the lengthy timelines associated with the licensing of new nuclear 15 plants, and challenges experienced by the first wave of AP1000 projects in the 16 17 U.S. It is the combination of these factors that influence FPL's decision to "pause" before proceeding to preconstruction. 18
- 19 Q. Is it possible that factors influencing the decision to proceed with a new nuclear project could change?
- A. Yes. We have seen favorable and significant shifts in generation technology, fuel supply, fuel infrastructure and fuel prices in the past ten years. However, history tells us that unforeseen events can influence fuel supplies, technology,

regulatory or economic policies and markets. The result of these influences could increase the need for, and value offered by, new nuclear generation. Likewise, technological improvements in materials and construction, or impacts to labor markets, could influence construction cost and schedule. In short, the economics of a new nuclear construction project five to ten years from now could support proceeding forward. Possession of a complete set of licenses and approvals would enable timely action to capitalize on such an opportunity.

PROJECT APPROACH

A.

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

FPL continues to develop Turkey Point 6 & 7 through a deliberate and careful process navigating through the four phases of project development: Exploratory, Licensing, Preparation, and Construction. The project is currently focused on the Licensing phase which allows FPL to make progress on obtaining licenses and approvals without taking on the risks and expenditures that would result from committing to a specific construction schedule. For example, through 2016, FPL estimates it will have spent approximately 1.5% of the high end of the estimated project cost range (\$21.87 billion).

A project of this complexity, particularly in the early stages, is subject to external factors that are not under FPL's control. Therefore, FPL's approach has been developed as a step-wise process. Routine monitoring of a wide range of factors and events is accomplished to help increase certainty and predictability, informing each subsequent step.

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- Q. Please expand on the concept of the step-wise process and how the risks related to the Turkey Point 6 & 7 project are controlled by key decisions.
 - A. The project team monitors issues at local, state, and federal levels and across technical, commercial, economic, and regulatory areas of interest. The certainty of cost, schedule, and quality are routinely assessed through tools and reviews. If review indicates the potential for a considerable cost or schedule impact, mitigation actions are identified and are designed to eliminate, reduce, or otherwise manage the potential for impact. If the magnitude of the impact materially affects overall project cost or schedule, a decision is made as to whether such impact is acceptable in light of all current information. Alternative courses of action include continuing with a modified budget and schedule along with available mitigation actions, or halting a portion of the project temporarily while the issue is further assessed or resolved. The alternative of slowing or halting a portion of the project in response to significant events or uncertainties offers a high level of risk control for FPL and its customers.
- Q. Is the plan to pause between the Licensing phase and the Preparation phase an example of this step-wise process?

A. Yes. An important part of the FPL approach to new nuclear generation was to leverage the experience of first wave U.S. construction projects to better inform what FPL should expect for cost, schedule, contracting and procurement challenges in its Turkey Point Units 6 & 7 project. As those projects have experienced delays, FPL recognized that proceeding without this information would reduce certainty in several key areas. In 2016 FPL made the determination to pause after receipt of the COL before proceeding to the Preparation phase.

Q. What activities are undertaken by the project to address industry issues affecting the long term success and execution of the project?

A.

FPL is involved in a number of areas to address issues relevant to new nuclear deployment. FPL participates in three specific groups comprised of new nuclear industry owners and design vendor(s). These include the Design Centered Working Group (DCWG), APOG, and the Advanced Nuclear Technology group. The collective purpose of these groups is to identify and resolve issues potentially affecting the licensing, design, construction, operation, and maintenance of the AP1000 design. Individually, each group provides a collaborative forum for owners to work with each other, the design vendor and the NRC to achieve standardized solutions to the issues facing all owners. This enables the industry to maintain a high level of standardization from the earliest stages of new nuclear deployment. Standardization of designs and processes provides benefits to FPL customers in terms of efficiency and cost control.

FACTORS	INFLUENCING	THE PROJECT

A.

A.

Q. What are the issues being monitored for their effect on the Turkey Point
6 & 7 project?

FPL monitors issues that can affect the overall timeline or feasibility of the project. Several of these factors, directly or indirectly, influence the scope and pace of regulatory reviews. For example, industry events and administrative decisions can impact the NRC resources available to conduct the review of FPL's COLA. Other developments can impact the information that must be incorporated into FPL's decision making process, such as the lessons being gathered at the two U.S. AP1000 construction sites and current economic factors.

Project-Specific Factors

15 Q. What factors in the federal license and permit review processes may

16 affect the overall timeline of the project?

The federal processes include the safety and environmental reviews that inform the NRC COLA process, as well as additional reviews conducted by the ACOE in support of the Section 404(b) wetland permit applications and Section 408 reviews.

The safety and environmental reviews are complete. The FSER and FEIS were both issued in 2016. Next, the NRC process will conclude through a set

of administrative hearings. A single remaining contention in the Turkey Point Units 6 & 7 COLA process focuses on certain constituents in the reclaimed water to be used for cooling. This contention will be addressed through a contested hearing. The NRC will also conduct a "mandatory hearing" to formally approve the FSER and FEIS and approve the COL. Finally, the NRC will meet in final session to vote on issuance of the COL. These proceedings could be completed in 2017, or extend into 2018.

A.

The ACOE conducts a related review that has been performed in parallel to the NRC Environmental Review and uses the FEIS in development of its Record of Decision. The review informs the issuance of Section 404(b) permits related to wetland impacts and Section 408 reviews regarding structural integrity of certain flood control structures impacted by transmission lines associated with the project.

Q. What factors at the state and local levels may affect the pace of the state Site Certification process?

Following the Siting Board Final Order in May 2014, four parties filed appeals in the Third District Court of Appeal. On April 20, 2016 the 3rd DCA reversed and remanded the Site Certification. The 3rd DCA found the Site Certification deficient in three areas: the application of local land development regulations, the Siting Board's conclusion that it could not require underground installation of transmission lines, and the Siting Board's interpretation of the nature and applicability of a County regulation. In early

1	2017, the Florida Supreme Court declined to take jurisdiction to consider the
2	3 rd DCA's finding.

- 3 Q. Is there a path to resolving the issues raised by the 3rd DCA's finding?
- 4 A. Yes. Possible paths to resolution include negotiated settlements with interested stakeholders followed by a return to the Siting Board to address the three issues. Resolution of the Site Certification will be pursued in the near term.

Industry-Specific Factors

9 Q. Does FPL monitor the progress of other U. S. new nuclear energy projects?

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- 11 A. Yes. The new nuclear construction projects at Vogtle and Summer continue
 12 to make progress but have experienced delays, primarily related to the
 13 fabrication and delivery of modules. The advanced status of these projects
 14 offers a reference for FPL's cost estimates and post-licensing schedule. In
 15 general, the status of these projects continues to demonstrate that substantial
 16 progress is being made on deploying the next generation of nuclear projects.
- Q. What significant developments on the first wave AP1000 projects have occurred since 2015?
- A. In late 2015, the project owners and Westinghouse Electric Company resolved a dispute regarding project scope and cost. The resolution settled disputed charges and allowed for development of a revised construction schedule for both projects. As a part of this resolution, Westinghouse consolidated ownership and control of the construction services portion of the project

previously provided by CB&I Stone & Webster. The prior organization provided a combined Engineering, Procurement and Construction (EPC) style arrangement under a consortium of Westinghouse as the EP contractor, and CB&I Stone & Webster as the Construction contractor. The objective of the reorganized project was to put in place a more streamlined organization to finish the projects, effectively an EPC organization wholly under Westinghouse. As a result of the dispute resolution, a new project schedule was developed that estimated Vogtle Units 3 and 4 completion in 2019 and 2020, respectively. This meant that the first projects of the first wave of AP1000 construction in the U.S. would not be completed for several more years.

A.

12 Q. How did this revised schedule for first wave AP1000 project completion 13 impact the timing of the Turkey Point Units 6 & 7 project?

As discussed in my March 1, 2017 testimony, the Turkey Point Unit 6 & 7 project was conceived and developed to be the first project in the second wave of AP1000 projects. This allows FPL to obtain the benefits of lessons learned regarding construction schedule, logistical support, contract terms and conditions, and the market for contractors and suppliers from the first wave projects. As a result of the delays in the first wave projects, there is incomplete information to support the decision to proceed to post licensure activities, namely a more certain construction execution schedule and capital cost. This was a key factor in FPL's 2016 decision to pause prior to

requesting approval to conduct pre-construction work directly following receipt of all licenses and permits.

- Q. What impact, if any, do the recent announcements regarding
 Westinghouse's future participation in nuclear construction have on the
 Turkey Point 6 & 7 project?
 - A. The future impacts of the financial issues facing Westinghouse, and parent company Toshiba, are unknown because they are still unfolding. The principal issue appears to be that the first wave projects will require more capital and time to complete than estimated when Westinghouse consolidated Engineering, Procurement and Construction in late 2015 with the purchase of CB&I Stone & Webster. The overall impact is reduced certainty with respect to the timing, cost, and manner in which the first wave construction projects will be completed.

However, it is FPL's expectation that any decision that would prevent Westinghouse from participating in future projects as the Construction contractor would not preclude them from maintaining the more traditional role of Engineering and Procurement contractor, a position reactor design companies have historically taken in nuclear construction projects. In fact, throughout the recent issues, Westinghouse has continued to support the design and licensing activities associated with existing and pending licenses, unchanged from its position in prior years. Taking the recent reports at face value, FPL would expect that a "turnkey" EPC contract with Westinghouse is

no longer a contracting option. A future project could proceed with a contracting option that would have Westinghouse, or its successor, provide EP services and another qualified company, or consortium of companies, providing Construction services. Alternatively, a reorganization or buyout of Westinghouse by a sufficiently funded entity may place the EPC structure back on the table. So while the Westinghouse events have reduced certainty regarding the schedule and costs of first wave AP1000 projects, they do not have the effect of rendering a future nuclear construction project, such as Turkey Point 6 & 7, infeasible.

A.

10 Q. What do recent developments related to national and regional energy 11 policy indicate with respect to the continued pursuit of the Turkey Point 12 6 & 7 project?

National energy policy remains supportive of nuclear energy in general, and new nuclear energy development in specific as evidenced by the closing of loan guarantees for Vogtle and acknowledgements of nuclear power's contribution to achieving emission reduction goals. In general, while cautious, policymakers continue to recognize the long term benefits of and need for existing and new nuclear generation capacity.

Economic Factors

- Q. What do recent economic developments indicate with respect to the continued pursuit of the Turkey Point 6 & 7 project?
- A. The shift in the supply and demand balance in the natural gas industry has created a near term reduction in natural gas prices and has maintained long

1		range price forecasts at historically low levels. As I mentioned in my March
2		1, 2017 testimony, the historically low trend in natural gas price forecasts
3		places continued pressure on economic benefits to be delivered by the project.
4	Q.	What do recent developments related to national and regional
5		environmental regulations indicate with respect to the continued pursuit
6		of the Turkey Point 6 & 7 project?
7	A.	It remains reasonable to assume that CO ₂ compliance costs will be realized at
8		some point in the future during the projected 60 year operating lives of Turkey
9		Point Units 6 and 7. However, there is continuing uncertainty regarding the
10		level of those compliance costs and exactly when they may take effect.
11		
12		2017 PROJECT ACTIVITIES
13		
14	Q.	What is the focus of the project in 2017?
15	A.	The focus will remain on completing the federal licenses and permits
16		necessary to construct and operate the Turkey Point 6 & 7 project,
17		establishing the necessary staff and resources to maintain compliance with all
18		requirements for licenses and certifications received, and resolving the three
19		outstanding issues associated with the Site Certification. The licensing phase
20		milestones are discussed below and summarized in Exhibit SDS-10.
21	Q.	What specific milestones are expected in relation to completing the NRC
22		licensing process in 2017?

- 1 A. A contested hearing will be held May 2, 2017 in Homestead, FL to address the 2 single remaining contention. The contention addresses certain constituents 3 contained in reclaimed water to be used at the plant and the injection of that water into Underground Injection Control wells. An administrative hearing, 4 referred to as the Mandatory hearing, will be held at NRC headquarters in 5 6 August 2017 where the NRC Commissioners are expected to approve the COL. Upon completion of the administrative and legal processes, the NRC 7 Commissioners will meet later in 2017 or early 2018 to issue the COL. 8
- Q. What specific milestones are expected related to the ACOE Section 404(b)
 and Section 408 processes in 2017?
- A. As described in prior sections, the ACOE will utilize the NRC EIS to support 11 its Record of Decision (ROD) for the Section 404(b) permits. Thus, the 12 completion of the Final EIS in 2016 was a prerequisite for the remaining 13 14 ACOE reviews. The ACOE will complete a review under the Clean Water Act in 2017 to determine the Least Environmentally Damaging Practicable 15 Alternative (LEDPA). This will include a wildlife consultation with the U.S. 16 17 Fish & Wildlife Service. The Section 408 reviews will be conducted in parallel to assure that the placement of transmission infrastructure poses no 18 19 impacts to the structural integrity of flood control structures under the 20 ACOE's authority.
- Q. What specific milestones are expected related to the state Site

 Certification process in 2017?

- As discussed earlier, the remand of the Site Certification will result in several specific activities FPL will undertake to appropriately address the issues identified in the 3rd DCA's Order, while retaining the value that has been created for our customers. Also, FPL will take necessary actions required by Conditions of Certification (CoC) to maintain compliance, including continued development of the West Consensus Corridor.
- Q. What actions does the Land Exchange Agreement require of FPL in2017?
- 9 A. The Land Exchange Agreement requires FPL to pursue development of the West Consensus Corridor, approved in the Site Certification Process and 10 consistent with the COC governing its development. The goal is to maximize 11 the use of the Western Consensus Corridor, and reconvey to Everglades 12 National Park (ENP) any portion of the Exchange Property (formerly ENP 13 14 lands) not required to complete a contiguous corridor. Therefore, FPL is moving forward with the necessary design, surveys and legal reviews to 15 determine if the Western Consensus Corridor can be successfully developed in 16 17 a timely and cost-effective manner. These actions will be conducted in compliance with the Site Certification COC, in order to maintain compliance 18 with that authorization. 19
- Q. What are the next steps in the Turkey Point Units 6 & 7 project, following receipt of the COL?
- A. Receipt of the necessary licenses, permits, certifications and other approvals to construct and operate the Turkey Point Units 6 & 7 project will mark a

milestone in creating the option for new nuclear generation in Florida. Additional activities will be required to maintain the validity of those approvals. These activities include a reorganization of the New Nuclear Project team (staffing and resources) to enable the processing of numerous license amendments generated with the first wave of AP1000 construction, the development and maintenance of a Quality Assurance/Quality Control program to manage the license in compliance with NRC requirements, and activities to maintain compliance with the conditions associated with these approvals.

Activities apart from the COL process include executing all phases of the Land Exchange Agreement between NPS and FPL, including the attempted development of the West Consensus Corridor that would minimize use of lands currently in Everglades National Park, and other actions associated with resolving the three issues remanded to the Siting Board by the 3rd DCA. The West Consensus Corridor activity is in compliance with a specific COC in the State Power Plant Siting Act process.

Q. Will FPL immediately pursue pre-construction planning activities following receipt of the licenses, permits, certifications and approvals needed for construction?

A. No. As discussed earlier, further observations are yet to be made as the first wave projects move through the latter stages of construction. Additionally, the project came about in a period of increased natural gas price forecasts and

expectations for earlier and increasing emissions compliance costs. While generally beneficial for FPL's customers, the combination of historically low natural gas price forecasts for the near term, combined with delays in emission compliance cost implementation, reduce the economic benefits that could be expected from the project. Finally, the Nuclear Cost Recovery statute envisions a utility must first petition the FPSC for approval before proceeding with preconstruction work after receipt of the Combined License.

8 Q. What non-economic factors affect the project's long term feasibility?

Non-economic factors include the feasibility of obtaining all necessary approvals (permits, licenses, etc.), the feasibility of an EPC contractor or EP and C contractors to construct the project, the ability to obtain financing for the project at a reasonable cost, and supportive state and federal energy policy.

A.

Review of permits and approvals continues to show progress. While the review process has taken longer than originally anticipated, the process is proceeding substantively as expected.

The challenges experienced by Westinghouse in the first wave of AP1000 construction projects highlight the importance of the contracting scheme and organization of the implementing team in these large and complex construction projects. As discussed earlier in this testimony, structures other than that implemented in the first wave of projects have historically been

1		feasible for nuclear construction, and qualified companies are available to
2		provide the roles of Engineering, Procurement Lead and Constructor.
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4		Financing will be determined as the project proceeds through approvals to
5		construction. The lead projects, Vogtle and Summer, have successfully
6		obtained financing, and Vogtle has closed on a significant federal loan
7		guarantee. FPL will continue its dialogue with the financial community to
8		help maintain FPL's capability to obtain financing with reasonable terms.
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10		Finally, as discussed earlier in this testimony, state and federal energy policy
1		continues to be generally supportive of new nuclear generation.
12		
13		PROJECT NEXT STEPS
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15	Q.	Does FPL intend to pursue completion of licensing for the Turkey Point 6
16		& 7 project so that FPL is in a position to timely move to preconstruction
17		when conditions warrant?
18	A.	Yes. The ability to deliver the potential benefits of the Project to FPL
19		customers is an opportunity available only if FPL completes and maintains the
20		licenses and approvals necessary to construct and operate the facility. Future
21		market conditions will determine the appropriate timing.

- Q. In light of the reduced certainty surrounding the first wave of new nuclear construction projects, why is FPL continuing to pursue licensing for the Turkey Point 6 & 7 project?
- A. Possession of a valid COL and associated approvals will be a valuable option 4 for FPL's customers to enable FPL to move forward in a timely manner with 5 6 preconstruction at the right time. The license may be acted upon for a period of at least 20 years once issued, providing a significant window of time during 7 which factors influencing a decision to move to construction may change. 8 9 Through 2016, FPL has spent \$260 million (excluding carrying costs) pursuing the COL and other approvals. In FPL's view, it would be short-10 sighted if FPL did not complete the Licensing phase to secure the potential 11 benefits of new nuclear generation for customers. While FPL is not seeking a 12 reasonableness determination from the Commission regarding the costs it is 13 14 spending in 2017, FPL is seeking a Commission determination that FPL's decision to complete these licensing steps (and maintain compliance with 15 approvals received) is reasonable. 16

17 Q. Does FPL have sufficient, meaningful, and available resources dedicated 18 to the Turkey Point 6 & 7 project?

19 A. Yes. FPL has in place an appropriate project management structure that relies 20 on both dedicated and matrixed employees, the necessary contractors for 21 specialized expertise, and a robust system of project controls. These resources 22 enable the project to progress through the current licensing phase.

- Q. What activities are being taken to prepare for the obligations of being an NRC Licensee upon issuance of the COL?
- 3 A. As a Licensee, FPL must comply with NRC standards and conditions related to maintaining the configuration control of the issued license, which is both 4 authorization to construct and operate two AP 1000 units. These requirements 5 6 include standards for Quality Control and Quality Assurance programs and specific administrative and substantive requirements to maintain the License 7 current. Therefore, FPL has begun the process of establishing the required 8 9 programs, personnel and resources to maintain the License in compliance with 10 all NRC standards and requirements. This includes the purchase of specialty software, hiring and training of staff to ensure proper conduct of the necessary 11 activities. 12

Q. What activities are expected to maintain the configuration control of the COL?

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A.

As the first wave projects proceed through construction, they have generated small changes to the lead License documents through the NRC License Amendment Request (LAR) process. Approximately 30 LARs have been processed for the Vogtle and Summer COLs, or will be processed by the time FPL is expected to receive its COL. FPL license engineers will develop and submit LARs for the Turkey Point Units 6 & 7 COL to bring it up to a consistent configuration with the Vogtle and Summer COLs. As the first wave units complete construction, they will likely develop further LARs, decreasing in number to completion. FPL will need to incorporate these

- 1 LARs into its COL to maintain it in a condition that is current and actionable.
- 2 FPL's participation in APOG significantly reduces the cost and time
- associated with processing and obtaining approval for LARs.
- 4 Q. What is the value to FPL's customer of maintaining the configuration
 5 control of the COL current, once received?
- A. By maintaining the COL current, FPL customers will retain the option of the issued COL with a minimal time to be able to move forward with preconstruction and construction. By making the LARs to our COL now, we are maintaining regulatory consistency with the NRC staff who have issued the LARs for first wave units and obtaining these approvals at significantly reduced costs.
- 12 Q. How will this activity change over time?
- A. As indicated, the LARs will be generated in reducing number as the construction concludes. Once first wave units are complete, FPL anticipates a modest annual cost to maintain configuration control.
- Q. What are FPL's estimated costs for the Turkey Point 6 & 7 project during this pause?
- A. In 2017, FPL expects to incur about \$25 million for the Project, including carrying costs. FPL expects costs to decrease to about \$10 million to \$15 million annually, including carrying costs, during the initial years of the maintenance period, and continue to decline as LARs are completed.
- Q. Does FPL intend to seek contemporaneous cost recovery for costs incurred in 2017 or during the "pause" period prior to pre-construction?

- A. No. FPL will not seek contemporaneous cost recovery for costs incurred on the project while we monitor the first wave AP1000 construction experience leading to future decisions on project next steps; instead, FPL is seeking to defer recovery of these costs.
- 5 Q. What factors will FPL monitor to determine when it would be appropriate to request approval for pre-construction work?
- FPL will be intimately involved in the details of the LARs. FPL will also 7 A. maintain an awareness of important cost, schedule and implementation 8 9 information from the first wave projects through our monitoring and participation in industry groups such as APOG and the Designed Centered 10 Working Group. This information will assist in developing a comprehensive 11 review that will provide FPL and the Commission with the necessary 12 information to determine when pre-construction work is warranted to further 13 develop the contractual pricing, terms, conditions and schedule that would 14 form the basis of the construction decision. 15
- 16 Q. Does this conclude your direct testimony?
- 17 A. Yes.

CHAIRMAN BROWN: All right. Are you ready for your summary?

MS. CANO: Yes.

BY MS. CANO:

- **Q** Mr. Scroggs, would you please present your summary to the Commission.
 - A Yes.
 - Q Thank you.
- A Good afternoon, Madam Chairman and Commissioners.

The purpose of my testimony is to describe the activities and managerial decisions associated with the Turkey Point 6 and 7 project. I will cover the time period from January 2015 to the present and plans for the project in the foreseeable future.

Commissioners, the long-sought goal of obtaining the licenses and permits for the Turkey Point 6 and 7 project is now within reach. In the past 30 months our team has completed four key milestones in the federal license and permitting process. These include publication of the draft and final environmental impact statement, publication of the final safety evaluation report, a recommendation for license approval by the NRC's Advisory Committee on Reactor Safeguards, and successfully defending the license application against

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the single admitted contention in the NRC process.

In coming months FPL expects to complete two NRC hearings that will result in receiving the combined license, the principal approval necessary to construct and operate Turkey Point 6 and 7. Completion of the licensing phase will result in an option to construct the facility in the future when economic and project execution factors support such a decision.

In the meantime, FPL will continue to remain in compliance with the approvals it has received and keep those approvals current. FPL will also continue to monitor and learn from the first wave experience of new nuclear construction projects.

The content of my testimony and the accompanying exhibits and detailed nuclear filing requirements I sponsor describe the following: That FPL's actual costs in 2015 and 2016 have been prudently incurred, that FPL's request to defer recovery of costs associated with closing out the licensing phase and maintaining those approvals is appropriate, and that the decision to complete the licensing phase of the project is reasonable.

Commissioners, many external factors have changed since we began this process over ten years ago. Those -- through all those changes, though, FPL's

disciplined and stepwise approach to deploying new nuclear generation has maintained the opportunity and has provided our customers with the best opportunity to obtain benefits of nuclear generation, while at the same time being fully aware of and responsive to the economic and industry factors affecting the timing and moving and appropriateness of moving forward on this project. I look forward to answering your questions. This completes my summary.

CHAIRMAN BROWN: Thank you.

MS. CANO: Mr. Scroggs is available for cross-examination.

CHAIRMAN BROWN: All right. Thank you again. Welcome, Mr. Scroggs, to Tallahassee.

THE WITNESS: Thank you.

CHAIRMAN BROWN: Office of Public Counsel.

MS. CHRISTENSEN: Good afternoon. I have a few exhibits I'd like to hand out at this time.

CHAIRMAN BROWN: Staff. Thank you.

MS. CHRISTENSEN: They have, they have been collated. The first two articles are -- the first two exhibits are ones that I intend to use. The third one is impeachment only. I don't know if you want to go ahead and mark it --

CHAIRMAN BROWN: No.

MS. CHRISTENSEN: -- or just wait until I use 1 it. And I'm not sure when, if at all, I'm going to need 2 to use it, so I've put it to the end. 3 CHAIRMAN BROWN: We'll just wait. We'll wait 4 until you're ready to use them and then we'll number 5 them. 6 7 MS. CHRISTENSEN: Okay. CHAIRMAN BROWN: Ms. Christensen, I'm going to 8 9 say at the onset, thank you for helping. I know how much you all love doing this, so I appreciate you 10 entertaining us and getting this all at once. So thank 11 12 you. 13 MS. CHRISTENSEN: No problem. 14 CHAIRMAN BROWN: Again, I will instruct the witness to just turn those exhibits over until the 15 counsel for Office of Public Counsel cross-examines and 16 17 directs you to use those. 18 THE WITNESS: Will do. 19 CHAIRMAN BROWN: Thank you. 20 All right. Ms. Christensen, we're ready to 21 proceed whenever you're ready. 22 MS. CHRISTENSEN: Thank you. 23 **EXAMINATION** 24 BY MS. CHRISTENSEN: 25 Mr. Scroggs, I'm going to start with your

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March 1st testimony. So if I can ask you to draw your attention there. And the first question I have relates to your testimony on page 4 of that March 1st testimony.

A I'm there.

Q Okay. And on page 4 of your testimony you state that FPL has spent 16.2 million in 2016 in pursuit of the project-related licenses and approvals for maintaining compliance -- and maintaining compliance with those received; is that correct?

A Can you point me to that, please?

Q I believe it's -- I have it as page 4 of your testimony, and maybe --

A I may have misheard you if I --

Q I'm sorry. It might be 18.2 million.

A 18.2 is the correct number, yes.

Q Okay. I had a typo in my testimony or in my questions. Thank you.

And on page 7 of your March 1st testimony you acknowledge that due to the lower natural gas prices and delay in the implementation of the carbon dioxide goals, any fuel and emissions savings associated with the new nuclear have decreased relative to prior FPL projections; is that correct?

A Yes. If you look at the question, it talks about since the beginning of the Turkey Point 6 and

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7 project. So the response is talking about the entire period of the project.

Q Okay. And you would agree that the last updated economic analysis that was conducted on the Turkey Point 6 and 7 units was in 2015; correct?

A That's correct.

Q And in that 2015 analysis, FPL updated assumptions for system demand, fuel forecast, environmental compliance costs, and alternative generation costs; is that right?

A That's correct.

Q Okay. Now these updated costs are the first step in developing a breakeven cost to determine whether the nuclear project would cost -- or would remain economically competitive with alternative baseload generation sources such as a natural gas plant; is that correct?

A That's correct.

Q Okay. And then the next step in the feasibility analysis, and particularly the 2015 analysis, was to compare the breakeven cost to the high end at the projected cost range; is that correct?

A That's correct.

Q Okay. And you indicated in that 2015 analysis that out of the 14 scenarios, eight of those scenarios

reflected the breakeven costs were above the high end of 1 FPL's nonbinding cost estimate range; is that correct? 2 That's correct. 3 Okay. And would you agree that currently the 4 high end of FPL's estimated range of costs have 5 increased since 2015; correct? 6 7 Yes. And if I could explain, specifically the cost estimate range has not changed in overnight cost. 8 9 But because we extended the COD dates for four years further out, the effective escalation is the only change 10 to the cost estimate range. 11 Okay. So with that explanation, the overall 12 13 cost for the project has increased, to the high end of that range has increased. 14 Based on that explanation, yes, ma'am. 15 Okay. And you would also agree that the low 16 17 end of FPL's estimated range of costs would -- have increased since 2015; is that also correct? 18 19 Α Through the same process, yes. 2.0 Okay. All right. The economic feasibility is 21 based on fuel savings and emission cost savings; is that 22 correct? 23 Could you restate your question or say it 24 again, please? 25 Certainly. As part of the economic

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feasibility analysis, you look at fuel savings and emission savings for -- from the nuclear project versus the next alternative baseload generation, which would be a natural gas plant; is that correct?

- A That's correct.
- **Q** Okay. Now you would agree that natural gas prices are currently around \$3 per MMBtu in price.
 - A That's roughly correct.
- **Q** Okay. And when we were having this discussion in June in your deposition, you stated that earlier in the project FPL was pricing against \$6 to \$7 per MMBtu natural gas prices; is that correct?
- A That's correct. And, of course, in 2004 and 2005 natural gas prices experienced a significant increase to almost \$12 per MMBtu, and that was a lot of the forcing function for the nuclear cost recovery statute.
- Q Okay. And you would agree, I think for the last -- 2016 and 2015, the price of natural gas has been at \$3 per MMBtu or below for at least that period; correct?
 - A Yes, for at least the last several years --
 - **Q** Okay.
 - A -- our customers have benefited from that.
 - Q Now currently there is no federal carbon

horizon.

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going forward is not likely.

in the next four years.

but just for clarity of the record, FPL has not

study or analysis in 2016; correct?

Point 6 and 7 units; correct?

That's correct.

submitted -- or did not submit an economic feasibility

For this project, that's correct.

feasibility analysis or study in 2017 for the Turkey

in 2015 and the economic analysis prior to that, FPL has

used the projected cost of the first wave AP1000 plants

as a reasonableness check on the estimated high end of

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but there is no imminent carbon emissions cost on the

four years the prospect of a carbon emission credit plan

I'm not an expert in national carbon policy,

Okay. And you would agree that over the next

That would be correct. I would not expect one

Okay. And I think you've stated this before,

Okay. And FPL has not submitted an economic

Okay. And in the past economic analysis, FPL

emission plan moving forward; is that correct?

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correct?

That -- no, I wouldn't characterize it as

the range that FPL used in its analysis; is that

that. We do monitor the upper end of our cost estimate range against our best estimate of the ongoing first wave projects, but that's not applied to or used within the feasibility analysis.

Q Okay. But you would, I would think, agree that the costs related to the first wave AP1000 plants as they moved forward informs what is a reasonable estimate as to what it's going to cost to build these AP1000 plants; is that correct?

A Again, with some modification. It's a -- it's the best benchmark that we have looking forward. But there are significant differences in the first wave projects in both how they are being executed and in the -- siting specific transmission lines and other project-specific infrastructure. So there are differences, but we certainly look to the first wave projects as, as a strong benchmark of what we should expect.

Q Okay. And I will accept that you use them as benchmarks for your reasonableness cost of the high end.

On page 8 of your March 1st testimony, you state that FPL decided to pause proceeding from the licensing phase to the preconstruction phase because of the development in these first wave AP1000 projects.

And those would be the Georgia Vogtle plant and the

South Carolina Summer plant; is that correct? 1 2 Α Yes. 3 0 Okay. Specifically the pause that was determined in 4 5 2016 was based on the change in schedule when 6 Westinghouse became the constructor in the last quarter 7 of 2015. Okay. 8 Q 9 So that's the specific event that caused us to 10 take a step back and pause the project. 11 Okay. Well, and since that time and also 12 since your March 1st, 2017, testimony was filed, you 13 would agree several significant events have occurred 14 related to these first wave projects; correct? 15 Α Absolutely. Okay. And you would agree Westinghouse is the 16 0 17 company that has designed the AP1000; is that correct? That's correct. 18 Α 19 And Westinghouse is owned by Toshiba; is that 20 right? 21 That's correct. Α 22 Okay. And Westinghouse, who was building the Q 23 Vogtle plant in Georgia, settled with Southern Company 24 on their fixed rate EPC contract; is that correct? 25 Α Could you be more specific? I think there's

been several -- there are ongoing negotiations now. 1 There have been several settlements since 2015. 2 3 Okay. And those settlements would have been reached between Southern Company and Westinghouse and 4 Toshiba, which owns Westinghouse; is that correct? 5 I think that's correct, yes. 6 7 Okay. Now isn't it correct that after the settlements have been reached with Westinghouse and 8 9 Southern Company, Westinghouse has announced that it is going into bankruptcy? 10 11 That's correct. 12 Okay. And as a result of this bankruptcy, 13 this nullified your \$50 million -- or basically you had 14 a \$50 million deposit with Westinghouse that you put down; is that correct? 15 16 Α No. You did not put down a \$50 million --17 18 I believe you may be referring to a Α 19 forging reservation agreement, and the value of that 2.0 forging reservation agreement was about 11.8 million. 21 And did you -- was that a reservation 22 agreement subject to cancellation upon Westinghouse 23 declaring bankruptcy?

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There's a clause in that agreement that gives Westinghouse that option. They have not informed us of

exercising that option, and so at this point in time we consider that agreement in force.

Q Okay. But does that option also exist for FPL? It's not just Westinghouse's option; correct? It also would allow FPL to nullify that agreement; is that correct?

A Well, I -- not quite my understanding, and I'd defer to the actual language of the agreement. But I think the clauses are protective of the individual parties. So if a -- if Westinghouse were to go bankruptcy -- go into bankruptcy, they would have the option. If FPL were to go into bankruptcy, they would have the option. So it's not quite as you describe it.

Q Okay. I think -- and has that forging agreement been provided in this docket? Do you know?

A I don't believe that it's been submitted as a separate exhibit. It's part of the body of the case.

Q Okay. Are you aware that Toshiba announced that Westinghouse will no longer be taking on future construction roles in building nuclear power plants?

A Yes. And my understanding of that statement refers to specifically the role of constructor that Westinghouse assumed in 2000 -- at the end of 2015 when they bought out Chicago Bridge & Iron's role as the constructor.

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testimony, of your May 1st testimony.

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A I'm there.

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Westinghouse events have reduced -- while Westinghouse events have reduced the certainty regarding the schedule

Okay. Now let's turn to page 18 of your

Lines 6 and 7, you state, you state that

and the cost of the first wave AP1000 projects, they do

not have the effect of rendering a future nuclear construction project such as Turkey Point 6 and

7 infeasible; is that correct?

A That's correct.

Q Okay. And when we were discussing this in your deposition, you clarified that the infeasibility in that sentence means that there's nothing about the current events that means that Turkey 6 and 7 project couldn't be built at some point in the future; is that correct?

A That's correct.

Q But you would agree that at the time of your deposition in June, you had not spoken with anyone at Westinghouse about whether or not they would continue in the future to maintain the traditional role of an engineering and procurement contractor; is that correct?

A That's correct.

Q Okay. And have you confirmed with

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Westinghouse that it is still willing to allow FPL to 1 use the AP1000 design? 2 Yes. They are supporting our design and 3 licensing activities before the NRC right now. So they 4 are actively a part of finalizing the licenses. 5 Okay. And have you confirmed whether or not 6 Q 7 they'll continue that support beyond the licensing phase? 8 9 We have not had those specific discussions. Okay. I had handed out two exhibits, and I 10 would ask that you pick the first exhibit entitled 11 "SCANA Article." 12 MS. CHRISTENSEN: And if I could have that 13 14 marked for identification. 15 CHAIRMAN BROWN: We will go ahead and mark as Exhibit 41 -- the title will be "SCANA Article." 16 17 (Exhibit 41 marked for identification.) BY MS. CHRISTENSEN: 18 19 And can you just briefly review this article? 20 Α Okay. 21 Okay. And as we discussed earlier today in 22 this cross-examination, you -- FPL has been monitoring 23 the Georgia and SCANA projects -- correct? -- and to 24 keep informed on those projects? 25 Α Yes, ma'am.

Q Okay. And as you are keeping abreast of that, you are aware, as the article indicates, that SCANA and its partner are no longer going to construct the two plants, the two AP1000 plants in South Carolina?

MS. CANO: Madam Chairman, at this time I'd like to raise an objection to the use of this news article.

CHAIRMAN BROWN: On the grounds?

MS. CANO: It's hearsay to the extent it's being offered to demonstrate the status of another utility's nuclear power plant project, and clearly that's, that's not a correct statement. There is no witness here who can provide sworn testimony on this. And to my knowledge, it's not being used to corroborate or support other evidence that's admissible in this record under the Section 120.57 option to allow hearsay evidence. So for those reasons, I would ask that further questioning on this is not allowed. Thank you.

CHAIRMAN BROWN: Ms. Christensen?

MS. CHRISTENSEN: Well, as you heard, the, the witness is aware of the -- what is happening with the SCANA projects and the Vogtle projects. It's part of his obligation as the director or the project director on the, on the Turkey Point 6 and 7. And as I think Ms. Cano indicated, hearsay evidence may be used for the

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purpose of supplementing or explaining other evidence. And in this case, I'm asking him to use this article to explain or supplement the testimony and the questions that I'm asking him. And, you know, as we all know, hearsay -- there's a broader admission standard in administrative proceedings.

CHAIRMAN BROWN: Thank you. Objection overruled. I'll allow the witness to answer the question to the extent that he can answer it based on his expertise.

MS. CHRISTENSEN: Thank you.

BY MS. CHRISTENSEN:

- **Q** And SCANA investors indicated that one of the reasons they were halting construction is because the total cost of the project could reach as high as 25 billion to finish the project; is that correct?
- A I don't know what SCANA investors would consider, but I see that in the article here.
- **Q** Okay. Were you aware of how much the SCANA project was reported to -- how much it was going to cost to complete the SCANA project?
 - A I'm aware of their estimates, yes.
- **Q** Okay. And what is your understanding of what their estimate to completion is?
 - A Again, it's a combination of their review,

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their due diligence after Westinghouse took over from Chicago Bridge & Iron. They did a significant amount of due diligence and discovered there was quite a bit more work to be done than they originally estimated. 2015 when Westinghouse then declared bankruptcy, I believe these utilities considered taking over the projects themselves as constructors. And in the course of their due diligence, they developed estimates of what they felt it would cost from today's standpoint to go forward and complete the projects.

- Do you know what that number is?
- Again, 25 million -- billion. Excuse me.
- All right. And in halting -- in the -- with Q the halting of the SCANA project, that leaves Southern Company's Vogtle plant as the only AP1000 plant under construction in the United States; is that correct?
 - Correct, two units at Vogtle.
- Okay. And with the ceasing of the SCANA project, who will be left in the working group for the AP1000 design after SCANA halts construction? Do you know?
- I believe that's under discussion right now, but logic would dictate it would be Southern Company and Florida Power & Light.
 - Q Okay. And --

A And perhaps -- excuse me -- and perhaps Duke.

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Q Okay. All right. And let me ask you to reference the other exhibit that I handed out, and if I could have that marked as an exhibit.

CHAIRMAN BROWN: Sure. Is it the Vogtle article or the excerpts?

MS. CHRISTENSEN: The Vogtle article, please.

CHAIRMAN BROWN: Okay. We will go ahead and mark as Exhibit 42 "Vogtle Article."

(Exhibit 42 marked for identification.)

BY MS. CHRISTENSEN:

 ${f Q}$ Okay. And if I could ask you also to briefly review that article.

MS. CANO: Same objection on the use of this article. If Ms. Christensen would like to explore the witness's knowledge of the status of the Vogtle plant, obviously we have no objection to that. But in terms of the facts presented in the article or the statements in the article, we would object to that as hearsay.

CHAIRMAN BROWN: Thank you. Objection noted.

And we are not moving any of these articles into the record at this time. I will allow the line of questioning. To the extent that Mr. Scroggs is an expert in this arena, he may be able to answer questions in that regard.

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BY MS. CHRISTENSEN:

- Q Okay. And let me know when you've had a chance to review the article.
 - A Okay. I've scanned it.
- **Q** Okay. Were you aware that the Georgia Utility Regulatory Commission had put off approving the future of the Vogtle plant until February of 2018?
 - A I was not aware of that specific fact.
- **Q** Okay. And what is your understanding regarding the status of the Georgia Vogtle plant moving forward?
- A Moving forward, I believe Southern Company is considering taking over the construction role in that project.
- **Q** Okay. And do you know whether or not that had -- that move to have Southern Company take over as the lead contractor, has that been approved by the Georgia commission?
 - A I have no knowledge.
- **Q** Okay. Have you been following the Vogtle plant construction process to determine what the likely timeframes are or whether or not this project will move forward?
- A I believe that decision is before -- is in front of the Southern management at this point in time,

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so I don't have an estimate of when they would do that or when they would -- what their decision would be.

Q Okay. So at this time is it possible that the -- or I just want to make sure I'm understanding what you're saying.

Is it your understanding that it's under consideration before the Southern Company board whether or not they are going to continue to move forward with this plant?

A Again, I believe that's a general statement. It's under consideration. I don't know if it's before the board or the timeline necessary for that decision.

Q Okay. Let's take a look at page 25 of your May 1st testimony on lines 12 and 13. You state that while FPL is not seeking a reasonableness determination from the Commission regarding the cost it's spending in 2017, FPL is seeking a determination that FPL's decision to complete the licensing steps and maintain compliance with the approvals received specifically for the COL are reasonable; is that correct?

A That's correct. When you seek to defer costs in 2017 and in the future to a future point in time where we would come back and have the responsibility to itemize those costs and defend the reasonableness of those costs at that point in time. The unfortunate

similarity in language is that in a more practical sense we're just asking the Commission's opinion with respect to whether or not they believe it's reasonable for us within two months of the NRC hearing that would approve the COL to continue to that approval point.

Q Okay. And that reasonableness determination is essentially seeking to find that it's reasonable for FPL to incur costs in 2017 related to obtaining the COL; is that correct?

A Again, if we look at my testimony, the actual -- from line 14 through line 16 after the comma, "FPL is seeking a Commission determination that FPL's decision to complete these licensing steps and maintain compliance with approvals received is reasonable."

Q Right. And as part of that being reasonable, you would agree that it is FPL's position that if the Commission finds that completing the COL is reasonable, that parties — the parties here and future Commission could not argue that getting the COL was not reasonable at the end of the four-year period or whenever FPL comes back; is that correct?

A That's correct, that the parties would agree that the decision to proceed is reasonable. We're not asking for a reasonableness determination on the specific costs. That would be something that would come

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later.

Q Okay. But you would agree that if FPL -- if the Commission were to determine that it was reasonable to get the COL, there would be some cost incurred or some level of cost incurred that FPL would argue was reasonable to be recovered from customers; correct?

A Again, that's not how I would phrase it.

Q I understand that's not how you would phrase it, but is that a correct statement?

A That's not -- no, that is not how I understand our request.

Q Okay. So you're saying that we -- the Commission can come back in four years if they find getting the COL is reasonable but say that it was not reasonable to incur any costs related to getting the COL?

A That is one potential outcome.

Q Okay. So it is FPL's position here today that in four years, even if this Commission finds that it was reasonable to get the COL, that they could in four years say, "But it was not reasonable to spend any money to get the COL"?

A Again, that's an extreme example. I think that it's -- I'm trying to make sure that everybody is clear that we're not asking or expecting the Commission

to commit to the reasonableness of monies that have not been put before them, that we expect that to occur at a later point in time when we -- but we do want to understand from the Commission that they agree or disagree that it's reasonable for us this close to the finish line to go ahead and spend that incremental money to obtain the COL, what we've been trying to do for ten years, so.

Q Well, and you're also asking to find it's reasonable to maintain it. So as far as I can tell, you're also asking the Commission to preapprove incurring expenses related to maintaining that license until you come back. Is that also correct?

A I disagree. We are not asking for pre-approval.

Q Let me ask you this way: If you spend the money today and the Commission finds it is reasonable that you went ahead and got the COL, you are not going to come back in four years and say, "Commission, you said it was reasonable to get our COL. Here's what we spent. Please give us this money." You're not representing today that that is what the position is going to be in four years?

A I think that we would, we would expect that future Commissions would wonder what the Commission at

the time thought, and that by communicating whether or not they feel it's reasonable for us to pursue completion of a 98 percent completed process is reasonable. I think that's, that's, that's all we're asking and trying not to make it more complicated. We know our obligations under recovery and that that comes later.

Q Let me ask you this: Would you agree that even if no nuclear plant is built, the parties could not argue about the reasonableness of obtaining and maintaining the COL in the future if the Commission approves FPL's request that it was reasonable to go forward and obtain and maintain the COL?

MS. CANO: I object. That question is convoluted and vague. It proposes if something does or doesn't happen ten years from now what parties would be arguing today, which is hard to, hard to follow.

CHAIRMAN BROWN: Ms. Christensen, can you restate your question?

MS. CHRISTENSEN: Certainly.

BY MS. CHRISTENSEN:

Q I think, I think it's clear that FPL's position is they want this Commission to make a finding that it's reasonable to get the COL. I think we can agree to that; correct?

A I can, yes.

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Q And I think we can also agree that it's FPL's position that FPL wants to find it reasonable that it is -- or wants the Commission to find that it's reasonable to maintain that COL for some period into the future; correct?

A That's correct.

Q And you would also agree that FPL wants this Commission to make a finding now that it is reasonable for FPL to incur costs to maintain any license amendments that are necessary to maintain that COL in the future; correct?

A That would be a part of maintaining compliance with the --

Q Okay. And you would agree that even if, if -let's put it this way. If in ten years, based on the
facts on the ground, in ten years FPL determines that it
would not be cost-effective to go forward and build the
nuclear power plant, you would agree that FPL could come
in to -- before this Commission and ask to recover the
cost that it incurred when it obtained the COL and that
it used to maintain the license; is that correct?

MS. CANO: And now I'll object because that calls for a legal conclusion about the statutes and obviously assumes a scenario not in evidence today.

CHAIRMAN BROWN: I'm going to allow the witness an opportunity to answer it to the best of his knowledge and ability.

THE WITNESS: My opinion is, yes, that we would have the ability to come in later and ask for cost recovery of those costs incurred and be subject to reasonableness and prudence reviews at that time.

BY MS. CHRISTENSEN:

- **Q** Okay. But isn't it true that a reasonableness test should consider the current estimates of cost?
- A If it is a prospective reasonableness determination, that would be correct.
 - Q Okay.
- A If the reasonableness is asked having the money been spent, that's not correct.
- **Q** Okay. And you have not provided an updated feasibility study to support the statement that FPL's decision to move forward to obtain the COL is reasonable; is that correct?
- A That's correct, because a reason -- a feasibility analysis is not necessary to come to that conclusion. If you were to conduct a feasibility analysis and it told you that the project was wildly economic and beneficial, under today's circumstances we still would not recommend going forward. We would

1 recommend pausing at this critical point in time.

Q Okay.

A If that, if that analysis came out negative, we would still be making our recommendation that it's the right thing to do to complete the licensing process, obtain that option for potential future use.

Q Let's look at page 26 of your testimony, line 9. You mention programs, personnel, and resources -- excuse me -- to maintain the license. Would these be typically recurring and annual costs?

A Yes.

Q Are these costs, are these costs that FPL is asking to be deferred and accumulated for future payment by the ratepayers?

A The request is that we defer those costs now.

Q And those would be the costs that would be deferred and accumulated, and you would be -- and those would be the costs that if FPL -- when FPL comes in at a future date they'd be asking for recovery from the ratepayers; is that correct?

A That's potential, yes.

Q Okay. All right. On lines 15 through 23, you also discuss over 30 amendment requests that you expect FPL to develop and submit for the COL. Are these costs that FPL is asking to defer and accumulate for future

Yes, they are part of the maintaining

- Okay. And on page 25, line 6 and 7, you state, "The license may be acted upon for a period of 20 years"; is that correct?
 - That's our legal estimate, yes.
- Okay. Now you would agree that the pause period FPL is requesting is going to be at least four years; is that correct?
 - That's correct.
- Okay. And this pause period could be as long as 20 years, which would be the life of the license?
 - I don't think that's what we're contemplating.
- Okay. Would you -- could you agree that it could be at least ten years?
- Again, that's not what we're contemplating. I would expect something four to six years.
- All right. And that would be before you would come back before the Commission; is that what you're saying?
 - Again, yes. Α
 - Q Okay.

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The basics are, you know, we would be looking at information coming out of the projects, making a

decision against the current economics as to whether or 1 not when is the right time to move forward with the 2 3 project, and that would determine when we would come back to the Commission. 4 Okay. So it could be four years but it could 5 conceivably be up to ten years depending on what the 6 7 economics and situation on the ground would be; is that correct? 8 9 It could be. Okay. Now you stated in your testimony that 10 COL has customer value; is that correct? 11 12 Could you --Α 13 Q Okay. 14 -- direct me to where I -- the statement that you're talking about? 15 I believe you say that the COL has value to 16 17 the customers. You don't believe that -- well, let me 18 restate this. 19 Do you believe the COL has value to the 20 customers? 21 It, it has option value, yes. 22 Okay. And I believe you stated that on page Q 23 27 of your testimony. 24 Actually on page 25 at line 4 I believe I make 25 that statement.

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Q Okay. All right. So you, you made that statement. Would you agree that the COL has value to the extent that there is a reasonable and practical expectation that you will build the AP1000 design?

A Yes.

Q Okay. And you would agree that the economic feasibility study demonstrates whether the nuclear plants are economic compared to the next generation alternative; correct?

A Yes.

Q Okay. And I think you would agree that FPL would spend 25 million in 2017 and 10- to 15 million annually after that; is that correct? That's what you expect to spend?

A That -- that's correct with regard to the testimony. As we sit here in August, I can estimate that our 2017 spend will probably be on the order of 18 million for the cost of the project and then carrying costs, for somewhere around 24 million.

Q Okay. So essentially a change of about a million from your previous testimony?

A Correct.

Q Okay. And so for a four-year period, this would be approximately 54 million on the low side if the Commission allows deferral of these costs with carrying

costs?

A That's roughly correct.

Q Okay. And if the pause period extended out to ten years, this would result in an approximate cost to customers of roughly 110 million on the low side? Would that be correct?

A No. I think my testimony indicates that we would expect costs to reduce pretty significantly after the first several years. The first several years, a lot of those costs are related to license amendments and getting those license amendments into the license. And then after that there would be expected very few administrative activities.

Q But you would agree at least over the ten-year period that you'd probably spend approximately \$100 million.

A That's, that's possible, yes.

Q Okay. And for each of these years in the pause period, these deferred costs would be accumulating AFUDC; is that correct?

A Correct.

Q Okay. And you would agree that if, if FPL collects AFUDC during any pause period, FPL will be earning a shareholder profit on the projected power plant balances during that pause period?

Τ	A consistent with the current rule, year.
2	Q And FPL will earn a shareholder profit
3	through AFUDC even if FPL decides in year four, ten,
4	or even 20 years from now not to build the Turkey
5	Point 6 and 7 units; is that right?
6	A There are provisions in the rule that
7	address or the statute that address if a project
8	isn't doesn't move to construction. Yes, that's
9	roughly correct.
10	MS. CHRISTENSEN: Okay. I have no further
11	questions. Thank you.
12	CHAIRMAN BROWN: Thank you, Ms. Christensen.
13	We will not be moving exhibits in, but you
14	had one I think you had one extra one, if you'd like
15	us to just
16	MS. CHRISTENSEN: Yeah, that one I don't need
17	to mark.
18	CHAIRMAN BROWN: Okay.
19	MS. CHRISTENSEN: I'm sorry. That one I don't
20	need to mark, and I guess we'll address, whenever we go
21	to move exhibits, the other two.
22	CHAIRMAN BROWN: That sounds good. All right.
23	Mr. Moyle, good to see you here. I missed
24	you.
25	MR. MOYLE: Thank you. It's good, good to be

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here, good to be here. 1 I do have some exhibits. Your statement about 2 not moving OPC's in --3 CHAIRMAN BROWN: We are not moving them in at 4 this time. 5 MR. MOYLE: Okay. I was not clear whether 6 7 that was a ruling because I have some articles as well. So I'll ask staff to help me pass out my articles, if 8 9 that's all right. CHAIRMAN BROWN: At this time. 10 11 MR. MOYLE: Yeah. Okay. 12 CHAIRMAN BROWN: Staff, could you please 13 assist Mr. Moyle? Thanks. 14 MR. MOYLE: And I don't consider anything in here sensitive. 15 16 CHAIRMAN BROWN: Okay. 17 MR. MOYLE: So there's no worries about the 18 witness taking a sneak peek. CHAIRMAN BROWN: All right. That could help 19 with some time. And I know you probably are all 20 21 wondering what the schedule looks like today since I 22 didn't kind of give you an overview. 23 Seeing that we have four witnesses, I was 24 going to kind of go over the timeframe after we are done 25 with Mr. Scroggs. It really depends on how long

Mr. Scroggs goes today to see how long we will go 1 tonight, but we do have all week. I'd like to be done 2 3 by tomorrow, if we can. But, again, we have, we have all week. My goal, personal goal is to be done before 4 5 noon tomorrow, so. Thank you. 6 7 MR. MOYLE: Madam Chair, would it be okay if we just marked them? 8 9 CHAIRMAN BROWN: If you -- yes, if you would like. 10 Sure. So I have an exhibit 11 MR. MOYLE: 12 entitled "How Two Cutting Edge US Nuclear Projects 13 Bankrupted Westinghouse." 14 CHAIRMAN BROWN: Would you like that first? 15 MR. MOYLE: Yes. It's 41, according to my 16 notes. 17 CHAIRMAN BROWN: 43. 18 **MR. MOYLE:** 43? 19 CHAIRMAN BROWN: Yes, we are at 43. So we're 20 going to go ahead and mark the article "How Two Cutting 21 Edge US Nuclear Projects Bankrupted Westinghouse." It 22 appears to be an article. 23 MR. MOYLE: Okay. And then 44 is another article entitled, "We, Westinghouse, Cannot Fail: CEO, 24

New Documents Give Fuller Picture Of Business."

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CHAIRMAN BROWN: Okay. We are going to go ahead and mark as Exhibit 44 article "We, Westinghouse, Cannot Fail." And then the last one is just our rule, but we will mark it for identification purposes as Exhibit 45, and that's Rule 25-6.0423.

(Exhibits 43, 44, and 45 marked for identification.)

MR. MOYLE: Thank you.

CHAIRMAN BROWN: You're welcome.

EXAMINATION

BY MR. MOYLE:

- Q Good afternoon, Mr. Scroggs.
- A Good afternoon, sir.
- **Q** We've been saying hello to each other every August for how many years now?
 - A A few.
- Q Yeah. You've, you've been the FPL witness responsible for nuclear since, since when?
 - **A** 2008.
- Q 2008. I have some questions for you, but I wanted to start just to clarify something based on one of the corrections you made when you were giving your -- right before you gave your opening statement, you were asked if you had any corrections, and one I wanted to ask you a couple of questions about.

This is on page 15 of your May testimony. Up toward line 3, the question was: "Is there a path to resolving the issues raised by a Third DCA finding?"

And you, and you went on and added a sentence that essentially said that the City of Miami approved a resolution to resolve this issue, among others; is that right?

- A That's correct.
- **Q** Okay. And this Third DCA finding, this was a court case -- is that right? -- that the appellate court, the Third DCA ruled against FPL with respect to certain siting efforts?
- A Actually this was a Third District Court of Appeals opinion with regard to the site certification order issued by the siting board. So it wasn't a ruling against FPL. It was focused on the site certification.
- Q Okay. So what's the status today of the site certification order? Is it, is it valid, good, FPL can rely on it, or because of the court's ruling does additional -- do additional things need to take place?
- A There's a severability clause in the site certification that retains the full force and effect of those portions of the site certification that were not challenged. So at this point in time, the three remanded items focus on the west preferred corridor and

the east preferred corridor in these specific three 1 2 instances. Okay. But the, but the current status of the 3 case is it's not resolved; is that fair? 4 5 It's been remanded to the siting board, and we Α are working to resolve the issues and be back in front 6 7 of the siting board to finalize those. Okay. And -- but that yet has -- that has not 8 9 yet occurred; correct? 10 That's correct. And there are other parties besides the City 11 12 of Miami to this litigation; correct? Yes. 13 Α 14 How many other? Q 15 Α Three. Okay. So when you gave your revision to the 16 Q 17 PSC and you said Miami has approved a resolution, the 18 other three parties have not approved a resolution; 19 correct? That's correct. 2.0 21 Okay. And then the legislature considered 22 trying to address this problem last legislative session 23 as well, did they not? 2.4 I'm not familiar with that. 25 You have no, no information one way or the

other whether there was legislation to address the ruling under the Third DCA with respect to your transmission line project?

A I understand there was some contemplated wording change with regard to the definition of development, but I don't know the status of that other than it didn't proceed.

Q When you say "it didn't proceed," you mean it didn't pass?

A Correct.

Q All right. Well, that, that -- I just wanted to clarify that because you added some new information on that.

In your opening remarks you said that you're testifying today from activity or information from, from January 2015 through today; is that right?

A That's correct.

Q Okay. And let's just break that down a little bit. You're seeking money for 2015; correct?

A We're seeking a prudence review of monies already recovered.

Q Okay. And so you want this Commission to look and, and say, "Yeah, we think that's, we think that's prudent. We bless it. We're good to go on that." Is that fair?

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It's a, it's a result of deferring last year's docket, which was a question before the Commission last year. A deferral means that they take that question up

So this is the time and place where this Commission has to make a call to say, "Is, is what was submitted previously, is that enough information for us to make a prudent decision -- a prudence determination to let FPL recover money spent in 2005" (sic); is that, is that right?

- 2015.
- I'm sorry. 2015.
- That's correct.
- Okay. How much money is at stake for 2015?
- I believe it's in my May testimony. If you give me -- or March testimony, if you give me a minute.
- And you can ballpark it for me if it's already in the testimony.
 - Page 4, line 7, 19.8 million.
 - 19.8. And does that include carrying costs?
 - That would include AFUDC, yes.
- Okay. And AFUDC, that's what you talked about Q with Ms. Christensen and includes profit?
 - It's funds used during construction. Α
 - Okay. So if you had to break that Q

19.8 million down as to, as to how much was for lawyers 1 2 and engineering and consultants and how much was your interest and your profit, how would you do that? 3 I'd look at the filing requirements where that 4 information is broken down as you request. 5 Can you do that? 6 0 7 Sure. So the filing requirements, I believe, are SDS-1. The Schedule T-1, which is page 13, is 8 9 preconstruction true-up costs for 2015. This is 10 actually an exhibit sponsored by -- with Ms. Grant-Keene, but we can talk to it. 11 12 So the pending question is: Out of the 13 20 million, how much is profit and interest and how much 14 is hard expenditures on engineers and things like that? 15 So you can just tell me how much is profit and interest. Well, this --16 17 Out of the 20 million. 18 Yeah, this filing requirement is a true-up 19 going back, so it doesn't present it in those specific 2.0 itemized terms. 21 So you can't answer that question? 22 I can't give you that with these documents, 23 right. 24 Okay. In response to a question from

Ms. Christensen with respect to -- I think it was, was

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it 2018 costs? -- you said there was 18 million that was -- you anticipated it was an 18 million expenditure plus 6 million in carrying costs; is that right?

A No.

Q Do you remember just a line of questioning with Ms. Christensen where she asked you about your projected carrying costs? And you said, "Well, yeah, but I think our projection's changed. It's gone up to 18 million."

A No. I think you misunderstood the conversation. That was about 2017.

Q Okay. So for 2017, I got my year wrong, 2017, you're saying -- and we're in 2017 now; right?

A Correct.

Q So you still continue to have costs. So the increase has gone up to 18 million? That's what you're projecting the spend will be?

A No. I'm saying with being eight months into the year, I can have a better picture of what the end-of-year actual is expected to be. The end-of-year actual is expected to be about 24 million. So 17 million spend, 7 million carrying costs, 24.

Q Okay. Does that ratio -- is that a ratio that you could apply to the 20 million if we were trying to figure out what the split between carrying costs and

hard dollar numbers were? The 20 million that you're 1 seeking for 2015, would that ratio equally apply to the 2 20 million? 3 My accountants would dissuade me from making 4 5 such a thumb rule. Okay. So, so 20 million for '15, you're 6 7 seeking that today. How much are you seeking for '16? I believe that's 18.7. Again, it's in my 8 9 March testimony. Okay. And how much are you seeking for '17? 10 11 None. 12 You have expenditures, I guess, but you're not 13 just -- you're just not asking that it be recovered 14 today? That's part of the deferral request. 15 16 Okay. So before the Commission today, if my 17 math's right, they're being asked to make a judgment with respect to nearly \$40 million; is that right? 18 19 That's correct. Α Okay. And for 2016 you did not file a 20 21 feasibility study or a feasibility analysis; correct? 22 Α Correct. 23 Okay. But you did file a waiver, a rule waiver -- is that right? -- that the Commission waive 24 25 its rule with respect to?

1	A I believe that was a part of the overall
2	petition.
3	Q So that would be yes?
4	A Yes.
5	Q Okay. And that rule waiver request, didn't
6	you withdraw it eventually?
7	A My understanding was the entire 2016
8	proceeding was deferred.
9	${f Q}$ Okay. So you don't you know the Commission
10	didn't rule on your waiver request; correct?
11	A That's my understanding.
12	${f Q}$ You said that's your understanding, they did
13	not rule?
14	A Yes, that's my understanding.
15	${f Q}$ Okay. And then did you or FPL make a
16	representation in the 2016 proceeding that, "Yes, we
17	would be filing a feasibility analysis in 2017"?
18	A I believe somebody made that statement on
19	behalf of the company, but factors change.
20	$oldsymbol{Q}$ Okay. So notwithstanding that the Commission
21	was told that there would be a 2017 feasibility study,
22	one was not filed; correct?
23	A That's correct. I believe I've described the
24	very significant circumstances that have occurred since
25	then to render such an analysis moot and un and not

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Q Was that your decision?

A No.

required.

- **Q** Who decided that?
- A Again, it was -- I work with the combined executive management of Florida Power & Light and brief them on the situation and we come to a consensus decision.
 - Q So senior management made that decision?
- A It was a joint decision based on legal input, project input, accounting, senior management, all factors.
- Q Okay. So I want to go back to the point in time -- the last time that this Commission had the benefit of a feasibility analysis was when?
 - **A** In 2015.
 - Q Okay. Do you know what month in 2015, when --
- A It was filed with the May 1st testimony in 2015.
- Q Okay. So, so the last feasibility analysis is more than -- that the Commission has been provided is more than two years -- was more than two years ago; is that fair?
 - A Correct.
 - Q When you're making decisions, do -- on behalf

of, of the company for this project, do you like to have 1 up-to-date real-time information? 2 I like to have the information necessary to 3 make the decision before me. 4 Okay. And does that include trying to get 5 real-time pertinent, relevant information? 6 7 Everything necessary to make the decision, 8 yes, sir. 9 Okay. So, so to -- back on the little bit of 10 discussion about the feasibility analysis, you consider a number of factors in that feasibility analysis like 11 the projection for natural gas prices and what carbon 12 13 prices will be; is that right? 14 That's one side of the equation, yes. Okay. So you've been asked a couple of 15 Q questions, and I don't want to dwell into it, but it's 16 17 true -- is it not? -- that, that lower natural gas 18 prices make the nuclear evaluation less economic, all 19 other things being equal; correct? 20 All other things being equal, lower natural 21 gas is less economically favorable. It doesn't address 22 the qualitative benefits of fuel diversity and zero gas 23 emissions that nuclear offers. 24 Right. But you know this Commission staff has

a lot of accountants. You had mentioned an accountant

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quantitative analysis; right?

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A Yes.

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Q What's the difference?

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have been identified as important to decisions, exist in

Qualitative analysis deals with factors that

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the statute specifically about fuel diversity, and zero

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greenhouse gas emissions, system reliability, cost

stability to customers. Economic factors or

earlier. I mean, there's qualitative analysis and

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quantitative factors are the results of analyses of cost

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benefit.

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Q Right. And you're aware that when the Commission makes decisions typically about rates and whether to, you know, grant a need determination, that they have a lot of quantitative information before them — this is the best power plant, the most reasonable power plant for ratepayers at this point in time — is that right?

A Yes. They make those decisions at that point in time. The decision here is whether or not to grant FPL's request to defer cost recovery, not recover costs.

 ${f Q}$ And the last piece of quantitative information with respect to Turkey Point 6 and 7 was provided in May of 2015?

A That's correct.

1	Q Okay. I asked you that question about, about	
2	what low gas prices do to a feasibility analysis. The	
3	same question with respect to not having any carbon	
4	regulation. Isn't it true that not having any carbon	
5	regulation makes a nuclear option less attractive, all	
6	other things being equal?	
7	A That's correct.	
8	Q Oaky. And I think you've already agreed	
9	there's no carbon regulation at this point; correct?	
10	A There's none imminent.	
11	Q Do you keep up with, with FPL's load forecast	
12	for future energy requirements?	
13	A I'm generally aware, yes.	
14	Q Okay. Isn't it true that FPL's peak load	
15	forecasts and energy load forecasts have declined	
16	roughly to the extent of the capacity and energy of one	
17	of the nuclear units?	
18	A I don't know what period of time you're	
19	speaking of or what information you're basing that on,	
20	so it would be difficult for me to answer.	
21	Q So you weren't aware of that statement,	
22	statement? This is the first time you've heard that?	
23	A Yes, sir, that's the first time I've heard of	
24	it.	

FLORIDA PUBLIC SERVICE COMMISSION

Q Okay. Did you read the testimony filed by

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the, by the Miami witness? 1 2 Α Yes. And you don't recall, you don't recall him 3 making a statement like that? 4 MS. CANO: Objection. That, that testimony 5 was withdrawn and that witness was not here to swear it 6 7 in. CHAIRMAN BROWN: Objection sustained. 8 MS. CANO: Thank you. 9 10 CHAIRMAN BROWN: Mr. Moyle, if you could 11 please move along with your questions, line of questions. 12 BY MR. MOYLE: 13 14 So if I understand, FPL's approach is you're now looking to learn lessons from the first movers in, 15 in nuclear; is that right? 16 17 We have always been doing that. By design we chose to be the first of the second wave of nuclear 18 19 plants in the US, not part of the first wave. 20 Okay. 21 So by design that's how we've approached the 22 project. 23 And when you first set that out as an 24 objective, there were a lot of proposed nuclear plants 25 on the table; correct?

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movers, maybe one, Vogtle?

Certainly more than today.

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Yeah. And today, am I correct in that we're Q down to one or two nuclear plants that would be first

I would push back a little bit on your characterization. There have been multiple projects that have obtained licenses and are in the same position as FPL is recommending to wait, to pause while the information and lessons learned from the first wave are developed.

So there is -- there are two projects under construction. One has announced that they'll abandon. But there are multiple projects that have received licenses and are in that same position that FPL is proposing to be in.

Are any of the projects that have received licenses moving forward at this point?

I believe I just said they're all pausing, as Α we have described.

Right. Duke has a license for, for Levy, don't they?

Yes, sir.

Yeah. Have you talked to them at all about, you know, whether they might be interested in selling you their license?

A No.

Q I asked you about low gas and I asked you about carbon. FPL is embarking on a, on a significant solar expansion program as well; correct?

A That's correct.

Q How many megawatts of solar?

A It depends over the time period, but over the next four years approximately 600 megawatts of solar will be installed.

Q Okay. Are there plans for more solar beyond that?

A We're looking for every option that's beneficial to our customers.

Q Okay.

A So we definitely think that's possible.

Q And additional solar will help with respect to fuel diversity; correct?

A It does to some extent, but it actually has about maybe 25 percent of the effect as compared to a nuclear plant. So 2,200 megawatts of the nuclear project would change fuel diversity, decrease our reliance on natural gas by about 13 percent; however, it would take about 6,500 megawatts of solar to have that same fuel diversity effect. That would take about 35,000 acres, which is about half the size of

Tallahassee.

Q Florida has 67 counties with a lot of land in them, don't they?

A That's a lot of land that would have to be covered with photovoltaic.

Q Yeah. All right. Let's switch up a little bit. I want to ask you -- I'll show you the news story. Let me see here.

CHAIRMAN BROWN: Mr. Moyle, we've got two, 43 and 44. Which would you like him to look at?

MR. MOYLE: Let's start with -- let's stay in numerical order, start with 43, if we could.

BY MR. MOYLE:

Q Okay. And, Mr. Scroggs, you've said that your -- part of your challenge and your task is to keep up with what's going on in other jurisdictions with other nuclear projects; correct?

A That's, that's part of what we're trying to do is obtain whatever lessons learned we can from our vantage point, not being part of the contracts.

Q Right. And you actually have taken trips both to Vogtle and Summer. I saw that that was part of, of your job responsibility; right? You've taken trips up there and met with them and talked to them?

A Myself and others in my project.

Q Yeah. Do you do that every quarter or every year?

A I do not personally go annually, but we -- as participants in the AP1000 Owners Group, we have meetings at different locations, and somebody from our project is on the Vogtle or Summer site at least once or twice a year.

Q Okay. And I assume you have points of contact. If you have questions, you can call somebody at Summer or Vogtle and say, "Hey, this has come up. Can we talk about it?"

A We certainly have points of contact. Whether or not they are at liberty to have those discussions with us is a matter of their contracts.

Q If there's -- if it's not a confidential matter, they can talk about it. If it is, maybe they can't?

A That's correct.

Q Okay. All right. This story down on the, the fifth paragraph states that problems have led to an estimated 13 billion in cost overruns and left in doubt the future of two plants: One in Georgia and the other in South Carolina. Do you have any information as to whether that 13 billion number is, is accurate or not?

A No, sir.

O You don't?

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paragraph, there's a statement that says, "Even though Westinghouse's approach of prefabricated plants was untested, the company offered aggressive estimates of the cost and time it would take to build its AP1000 plants in order to win future business from US utility companies."

Flipping to the next page, the second

Do you have any information as to whether Westinghouse offered FPL aggressive estimates of costs and time that it would take to build the AP1000?

A Well, Mr. Moyle, I haven't been able to fully review this article, so I'm reviewing it as you point me to different paragraphs.

The paragraph you just quoted, second paragraph, page 2, sounds like an opinion, but I don't see it assigned to any expert that is making that opinion. It wouldn't be an opinion that I would adopt.

Q Well, I think we can maybe explore that and see whether, whether it might be supported by facts.

So is it your testimony that, that you don't think -- you don't have any information or you don't think Westinghouse provided you an aggressive estimate of cost and time?

A Again, "aggressive" is a word that is --

requires some educated perspective. The term in here "untested" applies some educated perspective. The use of prefabricated modules is not an untested engineering process. Large naval ships, large tankers, large physical equipment for other industrial processes are produced in a modular manner and have shown higher productivity rates.

So, again, I -- this is very difficult for me to assess Tom Hals' and Emily Flitter's expertise in this arena.

Q All right. Let me, let me focus you on the estimates of cost and time. You've been -- you said -- you and I have been talking for about nine years now every, every August. Isn't it true since we've been talking that just about every year we've had conversations that the cost estimates have gone up and the time estimates for an in-service date have gone up?

A I'll, I'll take your representation, if that's your statement.

Q I, of course, am not going to look at my representation and give it, give it the weight of the evidence because I'm not, I'm not sworn. You're, you're the witness on that and --

A I can say that FPL's cost estimates have increased as the COD dates have moved out in time

because the effective escalation has the effect of 1 2 increasing the overall project cost estimate. So that would be a yes to my prior question? 3 I believe so. 4 5 Okay. And I made a comment in my opening statement that even from last year to this year there's 6 7 nearly a 10 percent increase in your projected costs. Is that right? 8 9 Yes, for the reasons I've described. 10 Okay. And on the high end that's nearly a \$2 billion increase; correct? 11 12 That's correct. 13 So, so as we sit here today, at the top end, 14 what's the top end number? I believe it's 21.87. 15 16 Q Okay. It's in my May testimony, if you'd like to 17 look at it. 18 19 And with respect to what you're proposing that this Commission consider, this pause approach, do you 20 21 expect that that number will go up or down? 22 That's the high end of our cost estimate Α 23 range. If we stay on that same COD schedule, I would 24 still stand by that cost estimate. Understanding what 25 caused the cost increases in the first wave is a key

input to making a prediction or estimate of what FPL would expect.

Q So if you assume ten years -- Ms. Christensen asked you how long you were going to pause. You said, "Four, maybe six, could be up to ten." If you assume ten years, you think that your high-end cost estimate of \$21.87 billion would, would be the same?

A It very well could be, yes.

Q In your experience in the, in the energy business, don't -- when contracting, don't companies apply a CPI, Consumer Price Index, or an inflation index to jobs typically?

A Yes. I think you're oversimplifying the entire situation. We, we have a cost estimate range, high and low. We have kept that cost estimate range consistent since the beginning of this project and simply escalated it by 2.5 percent, which is actually a little more aggressive than actual inflation just to be conservative in our estimate. That doesn't mean that we would blindly act on that number at some future point in time.

The key is to get to a license and then get the information that would tell us what it would cost FPL to build the Turkey Point 6 and 7 project. That's, that's the decision point, and that's in the future, as

we've described.

Q And that's the type of information that if you had performed a feasibility analysis would be in the feasibility analysis; correct?

A No. There's no access to the information that we're seeking to inform that capital cost estimate at this point in time. We have unfinished first wave projects. We have no insight specifically into the actual causes of cost increases in those first wave projects or how that experience translates to a potential future Turkey Point 6 and 7 project. That's one of the reasons why a feasibility analysis offers no meaningful information at this point in time, but it's not necessary to make the decision that it's worthwhile to go that extra bit, obtain the option, rather than making an irreversible decision at the 98 percent complete point on licensing and nullify all that work.

- **Q** Do you have an understanding of sunk costs?
- A Yes.
- **Q** Okay. And sunk costs are money you've already spent on something? You can't get the money back; right?
 - A That's correct.
- **Q** And when making a decision about whether to move forward or not with a project, you don't consider

sunk costs; correct?

A As an accountant, there may be a different answer. As a project manager, looking at the decisions we've made, this is exactly why the cost recovery program is designed as it is. It's a stepwise process. We look at it in that manner.

Q You didn't answer my question. I'm asking you as someone who's involved in projects whether you consider sunk costs when you're making an analysis as to whether a project makes financial sense going forward.

A In an accounting statement, no. In a project feasibility analysis, you would consider the costs that you've already spent because that's part of the total project cost.

Q Let me show you -- direct you to the next article, Exhibit 44. And I'm not going to ask you to read the whole thing because I'm only going to ask you about a couple of sections, so I'll just refer you to the sections. But the eighth paragraph down starts with Mr. Gutiérrez -- I might not be saying that name right.

- **A** Mr. Gutiérrez?
- Q Yeah.
- A Sure.
- Q He said, "Other countries, other countries" -he emphasized countries not companies because

Westinghouse's major competitors are subsidiaries of governments such as Russia, China, and South Korea -"can't be allowed to usurp the leadership of the US

Is -- do you have any information with respect to major competitors of Westinghouse being subsidiary companies of other governments such as Russia, China, or South Korea?

A No.

nuclear industry."

- Q No information one way or the other?
- A (Indicates negatively.)
- Q So who -- if, if Westinghouse is not there, who's going -- would be other possibilities to build this thing for you?
- A Well, let's, let's talk about that. The Westinghouse design, the AP1000 design is specific, and the COL that we receive is specific to that design. So we would rely on Westinghouse or a successor to Westinghouse to continue to support that design.

Historically the designer of the technology has not been the constructor. Westinghouse stepped into that role late in 2015 because the first two folks -- Shaw and Chicago Bridge & Iron -- opted out. So Westinghouse by design absorbed the constructor role in an effort to keep these projects moving.

Q And that's something that the Southern Company is considering now? They're going to all the sudden become a contractor on Vogtle or considering that?

- A Well, if you'd let, if you --
- Q I'm sorry.

A If you'd entertain just a minute. So your question was who would we get to build; right? So if you're talking about the designer, we would rely on Westinghouse or Westinghouse's successor. If you're talking about a constructor, we would rely on a multinational engineering firm with enough experience and financial fortitude to fill that role. That could be Black & Veatch; that could be Bechtel. There's a number of large engineering firms that could play that role. Again, it's all part of looking at an execution plan that would support a better process than what we're seeing in the first wave.

Q How are you keeping abreast of what's happening with Westinghouse in the bankruptcy proceeding?

- A Our legal counsel follows that.
- Q And they, and they brief you on that?
- A Yes.
- Q So on the second page there's a statement that references, I think, new documents being filed in the

bankruptcy that says, "In new documents" -- this is paragraph one, two, three, four, five, six down -- "In new documents Westinghouse disclosed a litany of lawsuits, including those stemming from its AP1000 construction projects."

Do you have any information about that, about a litany of lawsuits being filed against Westinghouse?

A No, and I, I don't have direct information about that. And I would ask if we're going to get into more detail, I'd like the opportunity to read the whole article rather than just select sentences.

Q The -- I had one other question for you on that. There's a couple of sentences down or paragraphs down, it says, "Westinghouse is mulling an action against its Japanese parent company, Toshiba, for breach of contract." Do you have any information about that?

A No.

Q All right. The -- how many people currently are assigned to Turkey Point 6 and 7? What's your staffing levels, your headcount approximately?

A We have four full-time staff, Mr. Marin, myself, six full-time, and then we have a handful of contract support.

Q And you told Ms. Christensen that the average maintenance cost of this license, assuming the

1	Commission says, you know, "Retire" they say, "Go	
2	ahead and get the license," and don't say, "Retire, you	
3	know, this nuclear stuff," is 10 to 15 million bucks a	
4	year; is that right?	
5	A That's approximately correct, yes.	
6	Q So you're ten staffers, so that's not a	
7	significant part of that 10 to 15 million, is it?	
8	A Correct, it is not. Most of those costs are	
9	related to NRC fees to support the license amendment,	
10	revisions or fees to the AP1000 Owners Group which we're	
11	sharing information to reduce our costs. So we only pay	
12	a fraction of the overall costs.	
13	Q What are the AP1000 fees to the owners group?	
14	A Specifically or in general?	
15	Q If you know. I mean, is it a million bucks,	
16	100,000 bucks, 10,000 bucks?	
17	A They're on the order of a million to a million	
18	and a half. That funds the ongoing group work on the	
19	license amendments that we benefit from rather than	
20	paying fully on our own pocket.	
21	MR. MOYLE: Can I have a second?	
22	CHAIRMAN BROWN: Sure.	
23	BY MR. MOYLE:	
24	Q Something caught my eye in one of your, one of	
25	your exhibits, SD-3, and it had a line item about	

radioactive waste going to Tennessee. Is that part of 1 the plan, that radioactive waste from, from this would 2 go to Tennessee? 3 Yes. As a part of our license responsibility, 4 we're required to have plans for low-level radioactive 5 waste and how that low-level radioactive waste is 6 7 appropriately handled by a certified waste handling facility. The nearest one is in Tennessee. 8 9 And radioactive materials go to Utah? I'm sorry? 10 On that same document there's a line item that 11 says, "Radioactive materials to Utah." Is there a 12 difference between radioactive waste and radioactive 13 14 materials? 15 MS. CANO: I'm sorry, Mr. Moyle. Could you 16 please specify the page and the exhibit number? MR. MOYLE: Sure. It's SD-3, page 7 of 8. 17 18 CHAIRMAN BROWN: SD-3, page 7? 19 MR. MOYLE: Seven, right. 20 CHAIRMAN BROWN: Mr. Scroggs, it's towards the 21 back of your SD-3. It says "Page 7 of 8" at the top. 22 THE WITNESS: Yes, these are actually under 23 foreign state authorizations. Again, these are 24 requirements for a license holder to have a contract, an

authority for shipment of radioactive waste to a

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certified facility. These facilities are identified and
we have relationships with those utilities -facilities.

Q Okay. And on page 6 it talks about Utah;
right?

A Correct.

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Q Is it the same thing or are they different? Because one says "materials" and one says "waste."

A Yes, I'm sure there's some difference. Each facility is certified to handle certain specific types of radioactive materials.

Q Is this new? Because I thought currently the radioactive waste was stored onsite at Turkey Point.

A This is not new. This has been part of the project from the beginning. The -- what you're probably confusing is spent fuel is stored in spent fuel storage facilities onsite, but there are also radioactive materials and waste materials, towels, that have some level of radioactive waste on them. Those are to be compiled, packaged, and handled in a very specific manner. So it's -- there's different types of radioactive materials.

Q All right. It's fair to say there's a lot of uncertainty presently with respect to cost estimates and uncertainty with respect to timing and schedules;

correct?

A That's correct.

Q And there was a statement made earlier about to date FPL customers or shareholders have paid approximately 300 million for -- in advanced cost recovery; is that right?

A That's correct through 2016.

Q Okay. And today you're seeking an additional 40 million approximately?

A No. The 40 million would be inclusive of that 300. What we're asking is a prudency determination on that 40 million that's already been recovered.

Q Okay. So just say if the Commission said, you know, "We believe that you didn't comply with the legal requirements. We're not going to allow you the recovery of this 40 million," how would, how would that, how would that be processed, if you know?

A As everything FPL does, we'd look at the Commission's direction and we'd make our determination at that point.

Q Because what you're saying is you've already collected the money and it would be a refund or a credit back; is that right?

A That's not what I'm saying.

Q Well, tell me your understanding with respect

to when you say, "It's 300 million and 40 million is 1 inclusive of that." I don't understand that. 2 3 Through the end of 2016, the Turkey Point 6 and 7 project has collected approximately \$300 4 million. What we're asking for today is a prudence 5 determination on monies collected in 2015 and 2016. So 6 7 the 40 million, your number, would be part of that 300 million. 8 9 Okay. How much has FPL's shareholders spent to date on Turkey Point 6 and 7? 10 Through the cost recovery rule we've complied 11 12 with and those costs have been recovered. So have shareholders spent anything? 13 14 Again, what our record is with the Commission Α identifies the costs associated with the project. 15 I understand. But the question is have -- has 16 17 FPL spent any money that hasn't been recovered from customers? 18 19 I think there's been small amounts, but 2.0 largely it's been recovered through the cost recovery. 21 And FPL believes in the rule of law, do they 22 not? 23 Α Yes, Mr. Moyle. 24 MR. MOYLE: Thank you for your time. 25 CHAIRMAN BROWN: Thank you.

All right. We will take about a five-minute 1 2 break, stretch our legs, and reconvene at that time 3 at -- let's say 3:55. Thank you. We are in recess. (Recess taken.) 4 5 CHAIRMAN BROWN: All right. We are back on the record. And we concluded with FIPUG's cross, and 6 7 now we will move on to Retail Federation. MR. WRIGHT: Thank you, Madam Chairman. 8 9 **EXAMINATION** BY MR. WRIGHT: 10 11 Good afternoon, Mr. Scroggs. 12 Α Good afternoon, sir. 13 We've known each other a long. 14 We have. Α 15 Q Haven't seen each other a lot, but it's good 16 to see you again. 17 Thank you, sir. Thanks. I have a few questions following 18 Q 19 along with some questions and answers with the previous 20 interrogators, and then I have a few questions of my 21 own. 22 Okay. Α 23 You were discussing with Ms. Christensen 2.4 Westinghouse's continued support of licensing, and I 25 think you said that you -- that Westinghouse is

presently supporting FPL's efforts through the licensing 1 2 Did I get that right? process. 3 Yes, sir. Do you have a contract in place with 4 Westinghouse pursuant to which they're performing that 5 service? 6 7 Yes, we do. You said that you hadn't had conversations, or 8 9 talks, I think, was the word you used, regarding 10 assistance post-licensing. Did I get that right? That issue has not been brought up, no. 11 12 And would I be correct to infer from that that 13 you don't have a contract for any support beyond getting 14 the license with Westinghouse? 15 I believe the current contract actually does 16 extend beyond, and it could relate to the license 17 amendment revisions that we plan to assimilate into the 18 combined operating license. The contract doesn't 19 terminate once we receive the COL. Does the contract of which you speak pertain 20 21 to the licensing process, including post-licensure 22 amendments? Is that the scope of the contract?

> In general the scope of the contract is engineering support for the design, so whether it be in the COL process or in a license amendment process that

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follows.

Q Okay. Thank you. I think this will be real quick. Mr. Moyle asked you a question about how much profit there is in the AFUDC carrying charges that accrue on, on your -- on FPL's spending on the project. Would Ms. Keene be the better person to ask that question to?

A Yes, I believe she could give a more precise answer.

Q I noticed she was the clause accounting person, so I thought she might be better. Thank you.

You testified in some conversation with Mr. Moyle that FPL looks to first movers in the first wave on the AP1000 projects. Did I get that right?

A As a benchmark, as an experience to be relevant, yes, sir.

 ${f Q}$ Do you look to Duke Energy Florida as a first mover in that population?

A No. Particularly we're talking about first wave of construction.

Q So the only first movers you look to are the South Carolina utilities and the Georgia consortium?

A As US construction, yes, sir.

Q Are -- you also look to whatever is going on in China?

A Yes, we are keeping our eye on that.

Q Thanks. You were discussing the impacts on fuel diversity of the nuclear project with Mr. Moyle, and you said that the -- I think you said that Turkey Point 6 and 7 would displace 13 percent of, of FPL's natural gas consumption, assuming that it worked at its projected capacity factor; is that accurate?

A Correct. I think that's as of 2017's Ten-Year Site Plan. That's the type of information that was in there.

Q And you then went on to offer the statement that it would take about 6,500 megawatts of solar to do the same; correct?

A That's correct.

Q Are you aware of FPL's cost for its solar projects on a per kilowatt basis?

A I don't have that number off the top of my head.

Q Would you accept, subject to check, and you could check FPL's own filings, that it's about \$1,500 per kilowatt?

MS. CANO: Excuse me. I object to this line of questioning. The fuel diversity point was directly responsive to the question asked, but the cost of FPL's solar facilities is outside the scope of this witness's

testimony in the case.

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CHAIRMAN BROWN: Mr. Wright?

MR. WRIGHT: Madam Chairman, I think he completely opened the door to this question by opining -- by responding to Mr. Moyle's question about "Couldn't solar do the same?" And he said, "Well, it would take a lot more solar to do the same." I think asking him how much that solar would cost is completely relevant and he opened the door.

CHAIRMAN BROWN: I agree. Objection overruled.

MR. WRIGHT: Thank you.

BY MR. WRIGHT:

So, I mean, I will aver to you that you can check FPL's SoBRA filing for March 1st of this year and you will find that it's about \$1,500 a KW. Does that sound about right to you?

I would -- subject to check, I would accept that.

Okay. I did the arithmetic, and I calculated 1,500 a kW times 6,500 megawatts of solar would come out to be about \$10 billion. Is that -- do you want to check that, or do you agree with that?

- Again, I assume you can do math.
- That sounds like a good number to you? Q

A Subject to check, yeah.

Q Okay. I have a couple -- several -- most of my questions actually are going to relate to your -- it's actually -- I think it's what's part of your Exhibit SDS-9. Although it's not labeled, it's an exhibit to your May 1 testimony, and it's almost at the back. It's Schedule TOR-7 to NCRC --

- A I'm there.
- Q -- MFRs or TORs, I guess you call them.

You, you had some conversations with Mr. Moyle and Ms. Christensen, but I'll just get to it. Your total high range projected cost now is \$21.875 billion; correct?

- A That's correct.
- **Q** I notice that the heading to that table says "Estimated In-Service Costs"; correct?
 - A Correct.
- **Q** So would I be correct that that amount would include AFUDC?
 - A I believe that's correct, yes.
- **Q** Would it also include amounts paid by customers pursuant to the Nuclear Cost Recovery Clause charges during the construction process?
 - A Yes.
 - Q Okay. So as we sit here today, your estimated

range of cost is 14.9 billion to \$21.9 billion?

A Again, consistent with how we've -- yes, and consistent with how we've proceeded in this project with a dollar-per-KW overnight capital cost escalated appropriately to the COD date.

Q Will Florida Power & Light guarantee its customers that it will not seek to recover more than \$21.875 billion for Turkey Point 6 and 7 if those plants are built?

A No, I don't believe that's consistent with the cost recovery rule.

Q The answer to the question is no with the brief explanation; correct?

A Correct.

Q Okay. I'm sure the answer to this question is, is no, but I'm going to ask it anyway. Does Florida Power & Light have contracts to construct the plant at this cost?

A No.

Q If I read your testimony correctly, the total project cost, the total project includes certain transmission lines and other linear and nonlinear facilities; is that correct?

A That's correct.

Q So am I -- can I infer from that testimony

combined with this table that this total project cost also includes the cost of the transmission lines and other facilities?

A Yes. This estimated cost range includes linear facilities as well as the project itself.

Q Thank you. Do you -- can you give me a ballpark estimate of how much of this cost is for transmission lines?

- A Approximately 1 billion.
- Q One billion?

- A One billion.
- **Q** Thank you.

You had some conversation, mostly with Mr. Moyle, regarding expenditures in 2017 and '18, and I'm -- I just couldn't quite follow. I was trying to relate the numbers you were saying to the numbers in the table, on TOR-7. So bear with me, I apologize to the extent these are redundant, but I think they won't take long.

Reading your table, it appears to me that FPL expects -- or when you filed this TOR-7 back in May, FPL's projected spending for 2017 was around \$15 million; is that accurate?

A No. I believe our estimate for 2017 was 25 billion.

You're right. Yeah. Sorry. That was my bad 1 Q 2 arithmetic. Thank you. 3 Okay. And now do I understand correctly from your answer to Mr. Moyle or Ms. Christensen it's now, 4 like, 24 million? 5 Yes. We're looking to project an unused 6 7 contingency for the end of the year. Okay. Thank you. And what's the 8 9 corresponding number for 2018? I think my testimony estimates \$10- to 10 11 \$15 million per year for the next several years to 12 accommodate the license amendment requests and other 13 costs, carrying costs. 14 And it was those two numbers, the plus or minus 10- to 15 million plus 24 million, that you more 15 or less rounded to roughly 40 million that you expect to 16 17 spend over 2017 and 2018? I don't recall. The 40 million number was a 18 19 product of the discussion of the 2015 and 2016 amounts that we're seeking prudence review on. 2.0 21 Okay. Using the numbers you just gave me, 22 though, for 2017 and '18, the projected spend is 23 somewhere between 34 and 39 million? 24 Α That'd be correct. 25 MR. WRIGHT: Okay. Thank you. That's all I

1	have.	
2	CHAIRMAN BROWN: All right. Thank you,	
3	Mr. Wright.	
4	Moving on to SACE, Mr. Cavros.	
5	MR. CAVROS: Madam Chair, I have some exhibits	
6	which I'll be using in my cross-examination.	
7	CHAIRMAN BROWN: Thank you. Staff, could you	
8	please distribute?	
9	Mr. Cavros, at your pleasure, we will number	
10	them when you would like.	
11	You may begin.	
12	MR. CAVROS: Thank you.	
13	EXAMINATION	
14	BY MR. CAVROS:	
15	Q Good afternoon, Mr. Scroggs.	
16	A Good afternoon.	
17	MR. CAVROS: The I think I'll number them	
18	as I as we bring them up.	
19		
	CHAIRMAN BROWN: Fair enough. And we will be	
20	CHAIRMAN BROWN: Fair enough. And we will be starting at 46.	
20 21		
	starting at 46.	
21	starting at 46. MR. CAVROS: Thank you. Yes.	
21 22	starting at 46. MR. CAVROS: Thank you. Yes. BY MR. CAVROS:	

questioning and then also have some questions of my own as well.

I want to really understand sort of the exchange that went on between you and, and Ms. Christensen. Is it -- as I understand it, it's your opinion that it is appropriate to incur costs to pursue a COL and potentially recover that from customers even if a feasibility analysis were to show that sitting here today the project is no longer feasible.

A I don't believe I've made that statement.

Q Okay. Then I'll ask you the question. In your opinion, is it appropriate for FP&L to -- for this Commission to grant FPL its request for FP&L to incur costs related to obtaining and maintaining a COL if a feasibility study today showed that the completion of the project was economic -- was not economically feasible?

A That's a hypothetical, but, yes, I think it's absolutely appropriate that when we are within months of obtaining a COL, that -- and we have stated that a feasibility analysis right now wouldn't be fully informed because we haven't been able to obtain all the lessons learned and understand how the costs of the first wave projects would translate into costs for Turkey Point 6 and 7. So any feasibility analysis that

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was put forth today I don't think would be something that we would recommend the Commission rely on.

What we're saying is the logic of moving forward to obtain that option and not make an irreversible decision to abandon what's been done to date is self-evident without a feasibility analysis.

Q Well, let's get to your, your opinion that this would be an irreversible decision. You're seeking a reasonableness determination in this docket; correct?

A No.

Q You're seeking a determination from the Commission to find that activities related to pursuing a COL and maintaining a COL are reasonable.

A That's correct. In my understanding, a reasonableness determination is specific to cost recovery. We are not asking the Commission to make a reasonableness determination to specific costs. That is something that we're asking to defer until a later point in time.

Q But you're asking for a reasonableness determination to pursue the COL license.

A We are asking for the Commission to give us their opinion as to whether or not that's reasonable. I think -- again, it may be a semantic issue between us.

Reasonableness to us means they have looked at the costs

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and they feel those specific costs are reasonable. We haven't presented those costs, so we're not asking for that information -- that request.

Q But there are costs associated with moving forward; correct?

A Yes.

Q So it's implicit in your request that there will be costs accrued; correct?

A No.

Q You're not going to accrue any costs moving forward?

A It's implicit that there will be costs. We have stated that there will be costs. We are not asking for a reasonableness determination of those costs in this docket.

Q Let's talk about the irreversibility of the decision. Were you not grant -- if the Commission found that it was not reasonable for you to move forward with actions related to your pursuing a COL license and maintaining it, that decision would not stop the company from continuing to pursue its COL; correct?

A We would have to look at the language of the order that the Commission provides and understand what that means for us going forward.

Q But by definition, if that order does not

preclude the company from pursuing its COL, that 1 decision is not irreversible; correct? 2 That's a compound question. Could you ask 3 it -- say it again, please? 4 5 Q Sure. CHAIRMAN BROWN: Break it up, Mr. Cavros. 6 7 BY MR. CAVROS: Let me break it up. 8 9 If the Commission issued -- if the Commission 10 issues an order not precluding the company from -- it's possible that the Commission could issue an order not 11 12 precluding the company from pursuing the COL on its own; 13 correct? There are -- yes, there are a lot of 14 Α possibilities out there. That's one. 15 So by definition it's not an irreversible 16 17 decision. You could -- the company could still pursue the COL on its own. 18 19 In that hypothetical situation that you're Α 2.0 postulating, perhaps that's correct, that would be a 21 correct logical conclusion from that. 22

But we have not seen an order -- again, I stand by my original thing. I'd have to understand what the Commission is telling us, and then I'd have to consult with our legal counsel and senior management to

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understand what we think our opportunities and 1 2 obligation are. 3 And you would agree there's a probability, at least a probability, we can argue about the, the, you 4 know, the chances of the company moving forward on its 5 own, but there is a probability that, depending on the 6 7 Commission's order, the company could move forward on its own? 8 9 Definitely that's what we're here recommending in our strongest terms. We recommend moving forward. 10 Okay. Is there anything keeping the company 11 from moving ahead on its own to seek the COL and not 12 13 seek cost recovery -- not seek a reasonable determination from the Commission? 14 Again, I would have to base that answer in 15 Α what we see in the order from the Commission. It's too 16 17 hypothetical for me to give you a yes/no. But it's not, but it's not a no? 18 19 Α Again --2.0 CHAIRMAN BROWN: Mr. Cavros, that was asked 21 and answered. 22 THE WITNESS: It's not a yes/no. 23 BY MR. CAVROS: 24 Just a couple of more follow-up questions to 25 some of the discussion that you had with the other

parties. You haven't had any formal discussions with 1 any -- on constructing the plant; correct? 2 No, those would be preconstruction activities 3 beyond licensing, so we have not engaged in that 4 5 activity yet. You would generally agree as a utility planner 6 7 that making projections in the near-term years can be predicted with more certainty than years that are 8 9 further out? 10 That's the general principle, yes. The feasibility analysis that was conducted in 11 12 2015, that was conducted two years prior to the bankruptcy of Westinghouse; correct? 13 14 Correct. Α And you would agree that losing a primary 15 construction contractor adds more uncertainty to the 16 17 completion of the project? 18 Yes. I believe the projects are on their Α 19 fourth constructor. And since the study was conducted in 2005, the 2.0 21 VC Summer project was canceled; is that correct? 22 Again, I think the term is "abandoned" in Α 23 specific language in the South Carolina Public Utility 24 Commission. 25 Okay. And in your testimony, page 15, line

14, you -- and I'll let you get there, but it's just 1 2 simply a reference to the --3 Is that May? That's May. Right. 4 I'm there. 5 Α Okay. It's a reference to the Summer project 6 7 where you state that that project is making substantial progress. Do you see that? 8 9 Yes. Would you agree that the abandonment of a 10 11 project does not indicate substantial progress in 12 deploying a nuclear project? I would agree. 13 14 And if you could turn to your May testimony, Q page 10, line 19. And we looked at this figure before, 15 but there you have your estimated costs. That's a 16 17 high-end to -- that's your high-end estimate to complete the reactors; correct? 18 19 Α Correct. And that includes carrying costs as well; 20 21 right? 22 Α Yes. 23 And that cost is predicated on a 24 2032 in-service date; is that right? 25 2031 for Unit 6, 2032 for Unit 7. Α

1	Q And the low end of that band is
2	14.962 billion; is that correct? I think
3	A Yes, that's correct.
4	Q And that high amount also has a certain price
5	cushion embedded in it does it not? for, for
6	unforeseen price escalations?
7	A If you're referring to contingency, yes.
8	Q And what is that contingency?
9	A Approximately 15 percent.
10	${f Q}$ Okay. And at this point I'd like to introduce
11	the Santee Cooper 7/31 press release.
12	CHAIRMAN BROWN: All right. We will go ahead
13	and mark that as Exhibit 46. Again, it's Santee Cooper,
14	the July 31st my birthday press release.
15	(Exhibit 46 marked for identification.)
16	MR. WRIGHT: Happy belated birthday.
17	CHAIRMAN BROWN: Thank you. It counts.
18	THE WITNESS: What's the number? I'm sorry.
19	MR. CAVROS: And I apologize, that's Exhibit
20	46.
21	THE WITNESS: 46?
22	CHAIRMAN BROWN: Yes.
23	MR. CAVROS: Yes. And also we might as well
24	do, at the same time, a Santee Cooper press release
25	August 11th, which we would mark as 47.

FLORIDA PUBLIC SERVICE COMMISSION

CHAIRMAN BROWN: Okay. Again, I just want to reiterate that we are not necessarily entering these in, so use caution in your cross. Please make sure you set the proper predicate, albeit there'll be an objection that may be sustained.

(Exhibit 47 marked for identification.)

BY MR. CAVROS:

- **Q** Mr. Scroggs, I'll just give you a second to look it over.
 - A Okay. Thank you.

 I've scanned it.
- Q Very good. Thank you. I just want to draw your attention to the third paragraph on the first page.

 Do you see where it says that Santee Cooper had a

 45 percent share of the nuclear project?
 - A Yes.
- **Q** And do you see the sentence below that where it -- they did an analysis that showed the project would not be finished until 2024?
 - A Yes.
- **Q** Okay. And the final sentence in that paragraph says it "would end up costing Santee Cooper customers a total of 11.4 billion"?
 - A Yes.
 - Q And would you agree that 11.4 billion of a

45 percent share in a project would equal \$25.3 billion? 1 2 Subject to check, yes. Α 3 And would you agree that 25.3 billion is more than 21.87 billion? 4 5 Α Yes. And would you agree that it's more than 6 7 \$3 billion higher, subject to check, than 21.87 billion? I would agree, but I don't know that it's 8 9 relevant specifically as presented. 10 0 Would you agree that the Santee Cooper projection in this document is \$10 billion more than the 11 FPL low estimate for the same -- a similar reactor 12 13 project? 14 If you're going through the 25.3 calculation, yes, I would agree with that. I don't believe that 15 16 number is presented in this document. 17 And actually can we turn -- let's turn to the August 11th document, if we could. 18 19 CHAIRMAN BROWN: Exhibit 47. MR. CAVROS: Exhibit 47. 20 21 CHAIRMAN BROWN: Are you there, ready? 22 MR. CAVROS: Yes, great. 23 THE WITNESS: I'm just scanning. Let me -- go 2.4 ahead. 25 BY MR. CAVROS:

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Q I just want to direct your attention to the very last paragraph on page 2 where it references the projected cost, and it starts on the second sentence:

"Santee Cooper's analysis of cost and schedules following Westinghouse's bankruptcy showed the cost to complete" --

A I am not with you. Okay. So you're -- the second sentence in that paragraph.

- Q I'm sorry. The second sentence in the --
- A Got it, got it. I'm with you.
- **Q** And I apologize. It's the second to last full paragraph on page 2.
 - A I see it. I got it.
 - Q There are no line numbers. My apologies.

And it states on line 2: "Santee Cooper's analysis of costs and schedule following Westinghouse's bankruptcy showed the cost to complete both units would be \$11.4 billion including interest. That represents a 75 percent increase over the original plan and a 41 percent increase over a fixed price contract agreed to by all parties that took effect in November 2016."

As part of the working group that you're part of, you would have at least some information on, on these contracts?

A No. The AP1000 Owners Group addresses

activities that all joint owners do separate from their construction activities. So we don't have a seat at the table, an insight into their particular contract structure or clauses.

Q Would you have insight into the cost of the contracts?

- A The cause of the contract?
- O The cost.
- A Well, again, we -- again, that's part of the lessons learned that we are hoping to gain as time goes by.

I think what's important here and what the oversimplification is, is if the first wave projects cost 20 million -- 20 billion or 25 billion, then the second wave projects would cost 25 billion. That's not an accurate assumption.

I think, as I've described, Westinghouse, as the engineering lead, has had two different contractors, construction contractors before they took over the project, and you now have an issue where Southern or SCANA have looked at taking over as the fourth constructor.

If you were building a house and you went through four constructors, you would expect that'd be a fairly inefficient process and you would expect that

that would result in higher costs than an efficiently run program.

So I think what I'm trying to make sure people understand is the lessons we're wanting to learn are what created those cost overruns, what created that inefficiency, and what then is translatable to an FPL Turkey Point 6 and 7 project experience. We would -- you know, we had resisted the concept that we needed to sign an EPC contract that was pushed several years back because we were concerned about this type of activity.

So I just want to make sure that people understand that we wouldn't take the blanket result from first wave and plug it in and see how it goes because that's kind of a mindless exercise. We need to understand what's in there, what made it what it is.

- **Q** Right. But the first wave informs your decision; correct?
 - A Absolutely.
- **Q** And had you had this information, you may have come to the Commission in May with a different number to complete the project; is that correct?
- A No. I believe you're misunderstanding the story line I was providing, that we need to have the passage of time, the collection of information off this first wave experience, and be able to get in and

understand how did it go from a project expected to be
15 billion or 16 billion at one point to a project that
the latest estimate is 25 billion. You know, that's the
question. What, what would -- if somebody was able to
come in and do it correctly at a later point in time,
could they avoid these costs?

Q But the way -- does it give you pause?

A Absolutely. That's why we have paused our project.

(Laughter.)

Q Uh-huh. And I apologize, I did not -- I left Exhibit 46 just a little bit early. That's the, that's the six -- that's the July 31st. If we could go back to that for a minute, Mr. Scroggs.

A I'm there.

Q Great. I'm at the bottom of page 2, the very last sentence. It says, "Natural gas plummeted after fracking began, and the current political landscape has reduced the urgency for emissions-free baseload generation." That sounds very familiar to the predicament that the -- the conditions that you've described in your testimony; right?

A I would -- with one exception. The natural gas prices falling very rapidly over a period of years because of fracking is a fact. That's absolutely a

emissions-free, FPL has long been pushing to lower and we have the benefit for our customers of low emissions overall. That's always been important to us. I don't know how to interpret the current political landscape statement, but I would subscribe that FPL doesn't support that.

fact. The political landscape around the urgency for

Q Talk to me real quickly about your overnight cost. How was your overnight cost developed?

- A The overnight cost was --
- Q For your 20 -- for this docket.

A Yes. We conducted a detailed cost estimate back in the 2007 timeframe that was informed by the best information on a TVA project, a study done by the Department of Energy at the time, and some very specific cost estimating for our transmission, pipelines, water infrastructure, other project-specific infrastructure. So the combination of those were put together. We looked at things that could change to make those, those cost estimates differ, and that's how we developed a range of costs, a high-end and a low-end cost.

Since that time we've essentially retained that overnight cost estimate. We did a check in 2010 against then current information, and we've been looking at project costs for Vogtle and Summer compared

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to that cost estimate range since then.

How have you been increasing those cost Q estimate ranges?

Α We make an estimate of 2.5 percent per year escalation. We apply that 2.5 percent to each year as it escalates out to COD. So we make a project spend curve, an estimate of when we expect to spend what dollars, we make the escalation appropriate for that time period, and then the sum of dollars.

So you had an escalation last year from 2016 to 2017 of 2.5 percent -- is that correct? -- in overnight costs?

Again, it is -- it's an analytical tool that Α we use when we assume, as a conservative assumption, that 2.5 percent per year escalation is an accurate escalator for the project from '16 to '17, from '17 on out through the end of -- to its in-service date.

And so the answer to the question is, yes, you Q escalated it by 2.5 percent from 2016?

- Which costs are you talking about?
- Overnight, overnight costs.
- Again, it's applied to the overall. It's not Α from '16 to '17 specific.
 - I understand that.
 - Α Okay.

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Q But from the costs you had -- that you're using for 2016, the 2017 overnight cost would represent a 2.5 percent increase; is that correct?

A That's a correct statement.

Q Okay. And you realize -- we just went through the Santee Cooper press release, and they had a signed contract with, with Westinghouse, which in that -- within a year, based on their projections, the costs increased by 41 percent. You would agree that a 41 percent increase in one year is much larger than a 2.5 percent increase?

A I would agree with your math, but I don't think you give credit to the fact that there was probably a significant amount of information that was discovered by Santee Cooper post-assumption or post-Westinghouse bankruptcy. And it's also a different estimator with a different expectation of what they expect it would cost Santee Cooper to finish the project. So there's a lot of variables beyond a simple escalator estimate.

Q Mr. Scroggs, you have -- with your testimony you have not filed any natural gas projections; is that correct?

A No.

Q And you have not filed any updated fuel cap --

fuel costs whatsoever; is that right? 1 That's correct. 2 Α 3 And you haven't provided an amount of costs that you want recovered in the subsequent year in this 4 docket; is that correct? 5 I provided estimates in my testimony. 6 Α 7 You have not provided specific costs that you want recovered in the subsequent year; is that correct? 8 9 That's correct. And you have not provided a long-term 10 11 feasibility analysis; is that correct? 12 That's correct. Α 13 And you have made references to some Q 14 qualitative benefits. You have not quantified those benefits for the Commission, have you? 15 By their nature they're qualitative benefits, 16 Α 17 so, no. You haven't asked for a waiver, have you, for 18 Q 19 the filing of a feasibility analysis in this docket? 2.0 To my knowledge, no such waiver is needed. 21 You haven't provided load projections for the 22 Commission to consider related to the reasonableness of 23 this project in this docket; correct? 24 That's correct. So you don't have load projections for 2040; 25

right? 1 2 Α Correct. 3 And you don't have load projections for 2050? Q Α Not in this docket. 4 Load projections for 2060? 5 6 Α No. 7 And going out to 2070? Q No. 8 Α 9 0 No? 10 I just want to touch on the timeline for a 11 The earliest that you could build this project 12 or at least begin construction, is it fair to say 2021? 13 The earliest we would initiate preconstruction Α 14 activities? Yes, 2021. And it would take you about -- what? -- 10 to 15 Q 13 years to construct a nuclear project? 16 17 Α Ten years. It took Santee -- Santee Cooper was projecting 18 19 13, I believe. Did they start in 2009? Would you know that? Do you know when they started construction? 20 21 I believe they started earlier than that,

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but --

Because they were projecting in the release we Q just read a completion date of 2024.

Α I understand. That is not our, our estimate

of construction schedule. 1 2 So let's say you start construction in 2021. The reactor is in service in 2031. You get a 40-year 3 license. That takes you out to 2071. Does that sound 4 reasonable? 5 That's correct. 6 7 Now FPL's load projections are in part based on population growth; is that right? 8 9 Α In part. 10 Great. 11 MR. CAVROS: I'd like to mark --12 CHAIRMAN BROWN: We'll be at 48. 13 MR. CAVROS: -- yeah, another exhibit, 48, and 14 that would be the Southeast Florida Regional Climate Compact Sea Level Rise Excerpt. 15 CHAIRMAN BROWN: Okay. We will go ahead and 16 17 mark it for identification purposes. Again, that's 18 Southeast Florida Regional Florida Climate Compact Sea 19 Level Rise Excerpt. (Exhibit 48 marked for identification.) 20 21 Mr. Scroggs, please take a moment, if you 22 will, to review what he has passed out -- counsel has 23 passed out. 24 THE WITNESS: I will. 25 CHAIRMAN BROWN: Whenever you're ready,

Mr. Scroggs.

THE WITNESS: I'm familiar with it or I perused it.

BY MR. CAVROS:

- Q Mr. Scroggs, what I've handed out is an excerpt from the Southeast Florida Regional Climate Change Compact. It's a unified sea level rise projection. I've introduced it because it goes to the reasonableness of, of the project. Are you -- you are familiar with the fact of sea level rise -- is that, is that correct? -- in South Florida?
 - A Yes, I'm familiar with sea level rise.
 - Q Okay. Let me, let me take a step back.

Some of your -- FPL has a broad service territory, but its, its most populated counties consist of the counties in South Florida -- Palm Beach County, Broward County, Miami-Dade County -- is that accurate?

- A They are part of the FPL service territory, yes.
- **Q** And this, this plant, if it were ever built, would be built primarily, primarily to serve load in South Florida; is that accurate?
 - A That's not a correct statement, no.
- Q Okay. I'm just looking -- you know, I'm just thinking back to past, past dockets where it was

indicated that there was a load, a generation source required in South Florida; otherwise, transmission lines would have to be built into South Florida to get the power there. Does that ring a bell or --

A Yeah, I think what you're referring to is the generation load imbalance, and it does have -- the Turkey Point 6 and 7 project and any other baseload project in southeastern Florida has extra benefits beyond the load it serves. And one of those additional benefits is it helps solve a generation load imbalance due to the population and load density in Southeast Florida. So that's an additional value that generation in South Florida brings with it.

Q Okay. And are you familiar with the Southeast Florida Regional Climate Compact generally?

A I'm familiar with the organization and -- but I'm not intimately familiar with the products they produce.

Q Sure. Sure. Would -- do you know that it's a collaboration between Broward County, Miami-Dade County, Palm Beach County, and Monroe County to, to adapt and mitigate for the impacts of climate change?

A I'm familiar with its members and its mission.

Q Okay. Great. And even in your site certification application for Turkey Point you assume

some level of sea level rise in South Florida; is that correct?

A In both our combined operating license application and our site certification we have assumptions for that, and those were thoroughly reviewed in both of those dockets.

Q And I want to --

MS. CANO: Excuse me. At this point I'm going to object. The questioning has gone on for some time. I fail to see how this is related to any request made or issue presented in this docket. It's certainly outside the scope of the witness's testimony and at best may be leading to a collateral attack on the need determination in addition to being hearsay. So I would object to further questioning on this document.

CHAIRMAN BROWN: Mr. Cavros?

MR. CAVROS: Sure. So this goes to the reasonableness of the load projections, which is what I'm getting to. I'd like to lay a foundation, if I could, on the reasonableness of the load projections related to how sea level rise might impact those.

CHAIRMAN BROWN: I'm trying to, I'm trying to give you some latitude here with cross, but if you could keep it within the scope of his prefiled testimony, I'll allow a little bit of leniency. But you're bordering on

a completely different docket and, and something that's 1 2 already occurred, so --MR. CAVROS: Sure. Okay. Thank you, Madam 3 Chair. 4 MS. CANO: Madam Chair, may I, may I briefly 5 respond? 6 7 CHAIRMAN BROWN: Sure. MS. CANO: I was actually about to object to 8 9 the questioning related to the load projections, and I 10 thought that he had switched on to a new topic. There are no load projections filed in this docket. That is 11 12 also not related to any request made or issue presented 13 to the Commission in this docket. So if that's the 14 basis for the use of this document, I continue to object. 15 16 CHAIRMAN BROWN: Mr. Cavros. 17 MR. CAVROS: Madam Chair, if I could respond. 18 CHAIRMAN BROWN: Yes. 19 MR. CAVROS: You were not here, present during the prehearing conference, but we tried to 2.0 21 frame the reasonableness request by FP&L to apply to 22 Section 366.82 and the Commission's rule, and FP&L 23 strongly objected to that, said they wanted to leave it

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the umbrella of reasonableness. So that's what I'm

open, any party was free to argue what it wanted under

doing here.

CHAIRMAN BROWN: So that was one of the issues that was dropped and subsumed?

MR. CAVROS: Correct, Madam Chair.

CHAIRMAN BROWN: Legal?

MS. MAPP: One moment, please, while I turn to the page in the Prehearing Order.

CHAIRMAN BROWN: Sure. Six, Issue 6A that was dropped.

MS. MAPP: Yes. I believe the issue to which Mr. Cavros was alluding was Issue 5A, and the issue is stated as: "Is FPL's decision to continue pursuing a combined operating license from the Nuclear Regulatory Commission for Turkey Point Units 6 and 7 reasonable?" That was the only -- that was the issue as to whether or not to include statutory language or leave it out.

There is no load forecast related to this issue. This issue is limited specifically to pursuing -- continuing to pursue the combined operating license from the NRC.

CHAIRMAN BROWN: All right. Mr. Cavros, objection sustained. Can you please move along with your questions?

MR. CAVROS: Yes. I'd like to mark the 2008 order, PSC-08-0237.

CHAIRMAN BROWN: Sure. We will mark that just 1 for identification purposes as Exhibit 49 as you stated. 2 (Exhibit 49 marked for identification.) 3 CHAIRMAN BROWN: Mr. Scroggs, you got a copy 4 of it? 5 THE WITNESS: I do. 6 7 CHAIRMAN BROWN: Thank you. All right. You may proceed whenever you're 8 9 ready. MR. CAVROS: Thank you, Madam Chair. 10 11 BY MR. CAVROS: 12 Mr. Scroggs, I'd like to point you to the last 13 page, which is page 27, in this excerpt and the 14 Commission's guidance in this order. 15 Do you see the second paragraph where it states: "FPL shall provide a long-term feasibility 16 17 analysis as part of its annual cost recovery process, which in this case shall also include updated fuel 18 19 forecasts, environmental forecasts, breakeven costs, and capital cost estimates"? 20 21 I'm sorry. Can you point me to the paragraph? 22 Apparently I've lost you. 23 Yeah. Okay. So this is Exhibit 49. Q 24 Order --25 Α I'm on page 27.

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Q You're on page 27. And I'm on the second -- the first full paragraph.

A Oh, okay.

Okay. I've read it.

Q I'm not going to repeat it, but -- what it says. I think you can see it there for yourself.

In your counsel's opening testimony, she said that FPL's request, and I'm paraphrasing here, is aligned -- aligns recovery of costs with its project approach.

Where in this paragraph does it say "with the exception that this does not align with a request that's consistent with a project approach"?

A I apologize but you've lost me. I don't understand why an order from 2008 helps -- a partial order that I see the last -- the first portions of it removed, I don't understand how that relates to the petition or opening statements we made today.

Q Yeah, okay. Well, let me, let me try to help you explain. This is guidance from the Commission on what should be included to the Commission in a feasibility study. It lists what it expects to see from a company petitioning for cost recovery. And my question to you is does it say in there anywhere is there an exception for a pause like the kind FPL is

requesting in this docket?

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A On its black and white face it does not say that. But I don't know that this excerpt has any bearing when I have been advised by counsel we are looking at the rule and the statute, not 2008 cases, so --

Q You're familiar with 366.93 -- are you not? -- Mr. Scroggs, the statute?

A I'm familiar, but I'm not a lawyer here.

Q Sure. Is there, is there a provision that provides an exception for a pause regarding compliance with Commission rules?

A I don't believe that there's any such specific language.

Q And is there any specific language in the Commission's rule that provides that for a pause a feasibility analysis need not be filed?

A I'll leave the legal interpretation to my counsel, but my understanding is just, the project manager, is that all those requirements for a feasibility analysis are under the section where an applicant is seeking cost recovery. And the fact that we are not seeking cost recovery at this point is what we're pointing to, meaning that it's not a relevant section of the rule if we are not seeking cost recovery.

1	That's my simple understanding of where we're here
2	where we are here.
3	Q Mr. Scroggs, are there any joint owners for
4	the proposed project?
5	A No. For Turkey Point 6 and 7, no.
6	MR. CAVROS: I have no further questions.
7	CHAIRMAN BROWN: Thank you, Mr. Cavros.
8	All right. Staff?
9	MS. MAPP: Yes, staff has a few questions. We
10	also have an exhibit that will be passed out.
11	CHAIRMAN BROWN: Okay. Ms. Mapp, this will be
12	Exhibit 50, and we're going to entitle it we're going
13	to title it "FPL's Responses to Staff's First Set of
14	ROGS" for identification purposes.
15	(Exhibit 50 marked for identification.)
16	You made proceed whenever you're ready.
17	MS. MAPP: Thank you.
18	EXAMINATION
19	BY MS. MAPP:
20	Q Good afternoon, Mr. Scroggs.
21	A Good afternoon.
22	Q In your May testimony you testify that FPL has
23	decided not to request contemporaneous cost recovery
24	beginning with the year 2017; correct?
25	A That's correct.

And if you could turn with me to page 13 of 1 Q 2 your May testimony. 3 I'm there. Beginning here and continuing on to page 19, 4 you discuss several factors influencing the project. 5 Why do you discuss factors influencing the project if 6 7 FPL is not seeking cost recovery at this time? Again, it's just a part of a general update 8 9 for the Commission to understand where we are in the 10 process, how close we are to obtaining the licenses and 11 approvals, and essentially why we believe it's the 12 appropriate thing to do to move forward and obtain the licenses. 13 14 Q And can you turn to your Exhibit SDS-9, page 12. 15 16 Α Okay. I'm there. 17 This document is labeled "Turkey Point Okay. 18 6 and 7 Site Selection, Preconstruction Costs, and 19 Carrying Costs on Construction Cost Balance, True-up to 2.0 the Original Budgeted and Actual Power Plant In-Service 21 Costs." 22 Yes. Α 23 Does this document provide a high level 24 summary and estimate of the sunk costs and to-go costs?

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Yes, it does.

1	Q And	line 1 of this document is titled "Site
2	Selection."]	s that activity completed?
3	A Yes.	
4	Q Line	e 2, which is labeled "Preconstruction
5	Costs," is tha	at activity completed?
6	A Coul	d you restate your question? I'm sorry.
7	Q Line	e 2 of this document labeled
8	"Preconstruction Costs"	
9	A Yes.	
10	Q a	are the activities associated with
11	preconstruction completed?	
12	A No.	
13	Q Does	s this amount include costs beyond those
14	just to secure	e the combined operating license?
15	a I be	elieve these costs don't, but the
16	definition of	preconstruction costs could extend to
17	costs beyond	ust obtaining a license.
18	Q Is i	t your understanding that FPL is seeking a
19	determination	that this estimated amount is reasonable?
20	A That	t is not our request.
21	Q Okay	Can you turn to page 27 of your May
22	testimony?	
23	A I'm	there.
24	Q Begi	nning on line 18, you provide an estimate
25	of the 2017 of	rnonsos totaling 25 million. To that

amount just to secure the combined operating license?

A That's the amount we expect to spend in 2017, and we expect that we will either receive the license at the end of 2017 or within the first month or two of 2018.

Q So that cost is just related to obtaining the COL?

A No, ma'am. That cost is based on a calendar date. It's based on our expectation through actual costs of 2017. We also expect to receive the COL by that point in time. However, if that is delayed by a month or two, we may have costs in 2018 that would be necessary to receive the COL.

Q So does this dollar figure include costs associated with licensing and permitting activities?

A Absolutely, yes.

Q Okay. You haven't provided a detailed breakdown of the specific costs that FPL will incur to secure the COL, have you?

A That is correct. Through -- for 2017 or beyond, no, we have not.

Q Okay. If you could turn back to your Exhibit SDS No. 9 to page 14 this time.

A Okay. I'm there.

Q Okay. This TOR-6 schedule, can you please

turn your attention to columns L and M on the right side
of the page labeled "2017" and "2018"?

A Yes.

Q This schedule does not provide any insight as to the possible magnitude of the 2017 and '18 expenses. Can you explain why that is?

A Again, we are not seeking cost recovery, so we are not providing an itemized breakdown; however, my testimony on page 27 does provide a general estimate.

Q And can you turn to SDS-10?

A I'm there.

Q As we sit here today, has FPL resolved all the site certification pending matters for the transmission aspect of this project?

A No.

Q What is the status of the permit required from the Army Corps of Engineers? Has it been issued?

A It has not been issued. The record decision is being developed. We have been working with the Army Corps. We meet with them weekly. They have asked us for input and essentially give us figures that we can put into our record of decision. So we know that they're very close to completing that record of decision, but we would expect by the end of this year that would be when we would receive that.

1	Q Okay. Could you turn to Exhibit 50 that was
2	handed out, and the second page of that document?
3	A This is
4	Q I'm sorry. The third page, I believe, the one
5	labeled "Interrogatory No. 6."
6	A Okay. I'm there.
7	Q Can you explain the general topic that these
8	questions are exploring?
9	A The question asked FPL to whether it
10	believes it would be reasonable to provide annual
11	project status reports if during the pause period
12	when there's no cost recovery.
13	(Transcript continues in sequence in
14	Volume 2.)
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1	STATE OF FLORIDA) : CERTIFICATE OF REPORTER
2	COUNTY OF LEON)
3	
4	I, LINDA BOLES, CRR, RPR, Official Commission
5	Reporter, do hereby certify that the foregoing proceeding was heard at the time and place herein
6	stated.
7	IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the
8	same has been transcribed under my direct supervision; and that this transcript constitutes a true
9	transcription of my notes of said proceedings.
10	I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor
11	am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I
12	financially interested in the action.
13	DATED THIS 23rd day of August, 2017.
14	. 1
15	Linda Boles
16	LINDA BOLES, CRR, RPR
17	FPSC Official Hearings Reporter (850) 413-6734
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