

1 BEFORE THE
2 FLORIDA PUBLIC SERVICE COMMISSION

3 In the Matter of:

 DOCKET NO. 130009-EI

4 NUCLEAR COST RECOVERY CLAUSE.
5 _____/

6 VOLUME 3

7 Pages 515 through 649

8
9 PROCEEDINGS: HEARING

10 COMMISSIONERS
11 PARTICIPATING:

 CHAIRMAN RONALD A. BRISÉ
 COMMISSIONER LISA POLAK EDGAR
 COMMISSIONER ART GRAHAM
12 COMMISSIONER EDUARDO E. BALBIS
13 COMMISSIONER JULIE I. BROWN

14 DATE: Monday, August 5, 2013

15 TIME: Commenced at 1:37 p.m.
 Concluded at 2:48 p.m.

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

19 REPORTED BY: JANE FAUROT, RPR
 Official FPSC Reporter
 (850) 413-6732

20 APPEARANCES: (As heretofore noted.)
21

I N D E X

WITNESSES

NAME :

PAGE NO.

STEVEN SCROGGS

Direct Examination by Ms. Cano	518
Prefiled Direct Testimony (3/1) Inserted	521
Prefiled Direct Testimony (5/1) Inserted	559
Cross Examination by Mr. Cavros	602
Cross Examination by Mr. Young	633

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

EXHIBITS

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

NUMBER :		ID.	ADMTD.
113	Platts Article on COL Delays Due to Sequester	613	647
114	Concentric Energy Advisors' Estimate of AP1000 Costs	622	647
2-11			647

P R O C E E D I N G S

1
2 (Transcript follows in sequence from
3 Volume 2.)

4 **CHAIRMAN BRISÉ:** Good afternoon. We are going
5 to reconvene at this time. We are going to go ahead and
6 get ready to take testimony or call witnesses. And if
7 all the witnesses that are going to testify, if you are
8 present, please rise with me so that we can administer
9 the oath. Raise your right hand.

10 (Witnesses sworn.)

11 **CHAIRMAN BRISÉ:** All right. Thank you very
12 much.

13 Okay. Witnesses will have four minutes to
14 provide their summaries, and after that they will be
15 tendered for cross-examination.

16 **MS. CANO:** Thank you. FPL calls Steven
17 Scroggs.

STEVEN SCROGGS

18
19 was called as a witness on behalf of Florida Power and
20 Light Company, and having been duly sworn, testified as
21 follows:

DIRECT EXAMINATION

22
23 **BY MS. CANO:**

24 Q. And, Mr. Scroggs, you were just sworn,
25 correct?

1 A. Yes, that's correct.

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

4 A. My name is Steven Scroggs. I work for Florida
5 Power and Light Company at 700 Universe Boulevard in
6 Juno Beach, Florida.

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

8 A. Florida Power and Light Company as the Senior
9 Director of Project Development.

10 Q. Did you prepare and cause to be filed 38 pages
11 of Prefiled Direct Testimony in this proceeding on March
12 1st, 2013?

13 A. Yes, I did.

14 Q. And did you also prepare and cause to be filed
15 40 page of Direct Testimony in this proceeding on May
16 1st?

17 A. Yes, I have.

18 Q. Do you have any changes or revisions to your
19 Prefiled Direct Testimony?

20 A. No, I do not.

21 Q. If I were to ask you the same questions
22 contained in your Prefiled Direct Testimony, would your
23 answers be the same?

24 A. Yes, they would.

25 **MS. CANO:** Chairman Brisé, FPL asks that the

1 Prefiled Direct Testimony be inserted into the record as
2 though read.

3 **CHAIRMAN BRISÉ:** Thank you. We will enter the
4 prefiled testimony into the record as though read for
5 Witness Scroggs.

6 **MS. CANO:** Thank you.

7 **CHAIRMAN BRISÉ:** Seeing no objections. Okay.

8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

- 1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**
- 2 **FLORIDA POWER & LIGHT COMPANY**
- 3 **DIRECT TESTIMONY OF STEVEN D. SCROGGS**
- 4 **DOCKET NO. 130009-EI**
- 5 **MARCH 1, 2013**
- 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.**

1 A. I graduated from the University of Missouri – Columbia in 1984 with a
2 Bachelor of Science Degree in Mechanical Engineering. From 1984 until
3 1994, I served in the United States Navy as a Nuclear Submarine Officer.
4 From 1994 to 1996, I was a research associate at The Pennsylvania State
5 University, where I earned a Master of Science Degree in Mechanical
6 Engineering. I provided consulting and management services to the regulated
7 and unregulated power generation industry through a number of positions
8 until 2003, when I joined FPL as Manager, Resource Assessment and
9 Planning.

10 **Q. What is the purpose of your testimony?**

11 A. The purpose of my testimony is to describe FPL's activities and costs incurred
12 in relation to the Turkey Point 6 & 7 project throughout 2012. Accordingly,
13 this March 1 testimony contains information with respect to the project as of
14 December 31, 2012. My testimony describes the deliberate, stepwise process
15 FPL continues to manage so that FPL will have the opportunity to add new
16 nuclear generation capacity for its customers. Specifically, I discuss the
17 progress made on the project, key issues faced in 2012, and how those issues
18 were evaluated and resolved. I also explain the Turkey Point 6 & 7 project
19 internal controls and how those controls, supported by internal and external
20 oversight, provide for diligent and professional project execution. Further, my
21 testimony provides the actual expenditures incurred in 2012 and compares
22 those expenditures to the actual/estimated values provided to the Florida
23 Public Service Commission (FPSC) on April 27, 2012. Collectively, my

1 testimony provides the information necessary to demonstrate that FPL's 2012
2 costs for the project 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 and Issues
- 6 2. 2012 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. 2012 Pre-construction and Site Selection Costs

11 **Q. Please summarize your testimony.**

12 A. During 2012, FPL continued to make progress on the licensing and permitting
13 activities required for the Turkey Point 6 & 7 project, and maintained costs
14 well within the annual budget. FPL continued its disciplined pursuit of the
15 approvals and authorizations necessary to establish the opportunity to add the
16 benefits of new nuclear generation for its customers. The benefits of adding
17 new nuclear generation to FPL's system were confirmed by the 2012 annual
18 feasibility analysis approved by Order No. PSC-12-0650-FOF-EI.

19

20 FPL achieved key milestones in the Site Certification Application (SCA)
21 process, for example, by receiving notification that its application was
22 complete and by moving to the next agency review stage. In the Nuclear
23 Regulatory Commission (NRC) licensing process, significant progress was

1 made responding to Requests for Additional Information (RAIs) related to
2 seismic issues and alternative sites and updating the Combined Operating
3 License Application (COLA) with Revision 4. FPL has maintained its
4 disciplined and steady approach in the execution of the project, while
5 displaying a willingness to adapt project timelines to ensure an inclusive and
6 complete review.

7

8 The project is being managed by a professional team of engineers, analysts,
9 and managers to ensure process controls are maintained and activities comply
10 with applicable corporate procedures and project-specific instructions. The
11 project management process is being conducted in a well-informed,
12 transparent and organized manner enabling executive oversight and
13 facilitating reviews by internal and external parties. The Turkey Point 6 & 7
14 project team has the skills, experience, and executive oversight to guide the
15 project through critical decisions using the best available information. This
16 disciplined application of good business process by well-qualified FPL
17 managers and their staff resulted in prudent decisions with respect to project
18 activities and expenditures.

19 **Q. Are you sponsoring any exhibits in this proceeding?**

20 **A.** Yes, I am sponsoring or co-sponsoring the following exhibits:

- 21 • SDS-1, consisting of T-schedules T-1 through T-7 covering the 2012
22 actual period for the Turkey Point 6 & 7 project Site Selection and Pre-
23 construction costs. Page 2 of SDS-1 contains a table of contents listing the

1 T-schedules sponsored and co-sponsored by FPL Witness Powers and by
2 me, respectively.

- 3 • SDS-2, consisting of a table listing all licenses, permits and approvals FPL
4 is preparing to support the Turkey Point 6 & 7 project.
- 5 • SDS-3, consisting of a comprehensive list of procedures and work
6 instructions that govern the internal controls processes.
- 7 • SDS-4, consisting of a list describing various project reports, their
8 periodicity and target audience.
- 9 • SDS-5, consisting of a comprehensive list of project instructions and
10 forms.
- 11 • SDS-6, consisting of summary tables of the 2012 expenditures.

12

13 HIGH LEVEL PROJECT SUMMARY & ISSUES

14

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

17 A. The benefits to FPL customers offered by additional nuclear generation are
18 numerous. The key benefits relate to FPL's core mission of providing reliable
19 electric service at reasonable rates. The fuel required for nuclear generation is
20 not dependent on natural gas pipelines, railroad or maritime distribution
21 systems or subject to volatile energy markets. Therefore, nuclear generation
22 greatly adds to the reliability of a system by increasing fuel diversity, fuel
23 supply reliability and energy security. Nuclear fuel markets provide a stable

1 cost input reducing the impact to monthly customer bills that result from fuel
2 price volatility. In addition, the location of 2,200 MW of baseload generation
3 in Miami-Dade County helps to maintain a balance of generation and load in
4 Southeastern Florida. The feasibility analyses approved by the FPSC in 2008,
5 2009, 2010, 2011 and 2012 demonstrate the robust cost-effective nature of
6 nuclear generation when compared to other baseload generation alternatives.
7 Finally, nuclear generation is recognized as an important component of
8 meeting state and national energy goals in addressing greenhouse gas
9 reduction. By employing an approach that maintains progress, even during
10 dynamic and demanding times, FPL is creating the opportunity to deliver
11 those benefits on the most practicable schedule.

12 **Q. Please expand on the value of FPL's approach to developing new nuclear**
13 **generation.**

14 **A.** Without the approvals, licenses, and permits needed to construct and operate a
15 new nuclear facility, the opportunity and timeline for customers to benefit
16 from this valuable generation source is remote and uncertain. By taking the
17 steps to obtain the licenses and approvals, further defining the specific project,
18 FPL is accomplishing several key objectives. First, the uncertainties around
19 the approval process and the final definition of the project are significantly
20 reduced. Second, the market for providing the equipment and services needed
21 to construct the project is allowed to further mature, leveraging observations
22 from first wave projects. Lastly, a shorter time span between the decision to
23 initiate construction activities and the commercial operation dates reduces

1 uncertainties in the underlying feasibility analysis and provides the best
2 decision basis available.

3

4 By applying this deliberate and flexible approach, FPL is able to maximize
5 progress and the collection of information necessary to make subsequent
6 decisions, while minimizing the current cost exposure of customers.

7 **Q. Please summarize the progress FPL made on the Turkey Point 6 & 7**
8 **project in 2012.**

9 A. FPL made measurable progress in all regulatory processes towards obtaining
10 all necessary licenses, permits, and approvals. The three key processes
11 include the Combined License (COL) process administered by the NRC,
12 wetland permits under the jurisdiction of the US Army Corps of Engineers
13 (USACOE), and the SCA process, coordinated by the Florida Department of
14 Environmental Protection (FDEP). In general, 2012 was another year of
15 information exchange with agencies to ensure all relevant and required
16 information necessary for agency evaluations had been provided.

17

18 During 2012, FPL continued to respond to NRC questions through the RAI
19 process. Specific areas of focus included seismic and geologic issues from a
20 safety perspective, and alternative sites from an environmental perspective.
21 Activities, including public meetings, have resulted in satisfying most of the
22 NRC's requests, with the balance expected to be complete in 2013. The

1 USACOE permitting process, as designed, has maintained pace with the NRC
2 process.

3

4 In the state SCA process, several key milestones were achieved. For the
5 transmission aspects of the project, FDEP completed its Project Analysis
6 Report for FPL's proposed transmission corridors and the SCA process was
7 amended to allow the inclusion of additional alternative corridors. For the
8 plant aspects of the project, all agency reports have been submitted, with the
9 exception of Miami-Dade County's report. An application was developed and
10 submitted for additional zoning approvals required by Miami-Dade County in
11 July 2012.

12

13 Project staff continued to monitor industry milestones and events to identify
14 potential impacts to the overall Turkey Point 6 & 7 project cost and schedule
15 and provide indicators as to when preparation phase activities are warranted.
16 Activities included continued involvement in industry groups and site visits to
17 observe key construction milestones at the Southern Company's (Southern)
18 Vogtle Electric Generating Plant (Vogtle) and South Carolina Electric & Gas'
19 (SCE&G) Summer AP1000 projects in Georgia and South Carolina,
20 respectively.

21 **Q. What key events occurred in 2012 that impacted the national and**
22 **international nuclear industry?**

1 A. As part of its efforts to incorporate lessons learned from the events at
2 Fukushima in March 2011, the NRC issued guidelines and rules for
3 addressing seismic reviews and beyond design basis events. While the NRC
4 has acknowledged that the Westinghouse AP1000 technology (AP1000), the
5 same technology proposed for the Turkey Point 6 & 7 project, is uniquely
6 positioned to be able to withstand the effects of these events, additional
7 reviews and analyses are being requested by the NRC as part of their review
8 of the Turkey Point 6 & 7 project COLA.

9
10 In June, the U.S. Court of Appeals for the D.C. Circuit overruled and
11 remanded the NRC's revised "Waste Confidence" rule. The Waste
12 Confidence rule is a formal NRC finding of its confidence that the federal
13 government will make available a national geologic repository for high level
14 nuclear waste when necessary following the shutdown of reactors. The Waste
15 Confidence rule also reflects the NRC's determination that spent fuel can be
16 safely stored onsite during the period between plant shutdown and the opening
17 of a repository. The NRC uses these generic findings to support its
18 environmental review of individual reactor license and license renewal
19 applications.

20
21 The Court held that: (1) the NRC must perform an environmental review of its
22 Waste Confidence rule; (2) the environmental review must assess the
23 consequences of a failure to establish a repository; and (3) the environmental

1 review must assess the risk of spent fuel pool leaks and fires during the period
2 prior to the establishment of a repository. The NRC has announced that,
3 while its review of pending applications will continue, it will not issue any
4 final COLs for new reactors or reactor license renewals until it has finished its
5 revised rulemaking in response to the remand. The NRC schedule for these
6 activities calls for the revised rulemaking and environmental review to be
7 complete in 24 months, or in the fall of 2014. This is consistent with FPL's
8 current project schedule for receipt of the COL.

9 **Q. What other national level issues are being monitored for the potential**
10 **impact to cost and schedule of the Turkey Point 6 & 7 project?**

11 A. Developments in 1) the economy, 2) energy policy (at national and regional
12 levels), and 3) the progress of international and domestic projects have the
13 potential to affect the project.

14
15 The downturn in the economy and its rate of recovery has the potential to
16 impact facets of the project, including: access to and cost of financing,
17 material and labor cost indices, and the development of national and
18 international supply chains for new nuclear projects. The annual feasibility
19 analyses address these issues in a disciplined and consistent manner each year.
20 During 2012, a general improvement in the economy was observed and
21 continued positive progress was demonstrated in supply chain development as
22 Georgia Power's Vogtle and SCE&G's Summer new nuclear projects moved
23 into full scale construction activities in 2012.

1

2 National energy policy continues to be supportive of nuclear energy in
3 general, and new nuclear energy development specifically, even following the
4 Japanese tsunami and subsequent Fukushima events in March 2011.
5 Domestic and international nuclear construction projects using the AP1000
6 design have continued to make progress in 2012. In China, the Sanmen and
7 Haiyang AP1000 projects are proceeding through the construction phase,
8 projecting operation in 2014 and 2015, respectively. Observations from these
9 projects include lessons regarding logistics and crane design and placement.
10 Significant differences in labor and regulatory schemes limit the
11 transferability of the full construction experience to U.S. projects.

12 **Q. What project specific issues were monitored in 2012 for the potential**
13 **impact to cost and schedule of the Turkey Point 6 & 7 project?**

14 A. Project specific issues include 1) FPL system and regional economic
15 developments influencing the annual feasibility analysis, and 2) the pace and
16 outcome of permit and license application reviews. The economic impact of
17 these factors on the project feasibility is reviewed annually.

18 **Q. Was the feasibility of the Turkey Point 6 & 7 project re-evaluated in**
19 **2012?**

20 A. Yes. A complete feasibility analysis was conducted to review the economics
21 of the project using updated assumptions for system demand, fuel forecasts,
22 environmental compliance costs, and alternative generation costs. The

1 analysis is a two-step process, consistent with the original analysis supporting
2 the 2008 Need Order.

3

4 The first step takes the form of developing a “break-even” cost to determine
5 what the nuclear project could cost and remain economically competitive with
6 alternative baseload generation sources. That “break-even” cost is compared
7 to the high end of the project cost estimate range. The results of the analysis
8 confirmed that the estimated project costs are below the “break-even” costs in
9 5 of 7 fuel and environmental cost scenarios and at the high end of the range
10 in the remaining two scenarios. These results continue to demonstrate that the
11 new nuclear project remains the best economic alternative for FPL’s
12 customers. An updated feasibility analysis will be submitted May 1, 2013.

13

14

2012 PROJECT ACTIVITIES AND RESULTS

15

16 **Q. What were the major activities for the Turkey Point 6 & 7 project during**
17 **2012?**

18 A. The major activities centered around completing the agency reviews of the
19 federal and state applications, obtaining local land use approvals, and
20 activities supporting completion of the Underground Injection Control (UIC)
21 exploratory well at the project site. Additionally, progress was made in
22 several key development areas that may impact the pace of the Turkey Point
23 6 & 7 project.

1 **Q. What were the specific activities and results associated with federal**
2 **licensing processes for the Turkey Point 6 & 7 project in 2012?**

3 A. In 2012, FPL continued to analyze NRC schedule changes, timely respond to
4 requests for information, maintain an open dialogue with its regulators, and
5 otherwise work to enable the federal agencies' continued progress on the
6 approval of FPL's submittals.

7

8 The NRC published a revised COLA review schedule on October 27, 2011.

9 The new schedule added time to the Final Safety Evaluation Report (FSER)
10 and Final Environmental Impact Statement (FEIS) completion dates, but
11 reduced the projected timeline to obtain the final COL. In 2012, FPL
12 conducted a review to determine what effect the changes may have on FPL's
13 overall project schedule. The review indicated that the target in-service dates
14 of 2022 and 2023 for Units 6 & 7 respectively were still achievable, although
15 margin had been reduced.

16

17 In 2011, FPL filed motions with the NRC's Atomic Safety and Licensing
18 Board (ASLB) asking for dismissal of three contentions proposed by
19 interveners. In 2012, FPL continued to participate in the ASLB process. In
20 February 2012, the ASLB dismissed two of the three contentions. This
21 greatly reduces the issues that will be ultimately contested before the ASLB in
22 the final stages of the NRC COL process.

23

1 In December 2012, FPL addressed many of the items raised by the NRC
2 through the RAI process and provided additional updates in its COLA
3 Revision 4. Revision 4 included several key updates, including incorporation
4 of the 2010 Census results, an update to the groundwater model for the project
5 and the inclusion of several updates made to the Reference COL.

6

7 Additionally, the USACOE continued its review of the project as a
8 cooperating agency with the NRC through the RAI process and participation
9 in public meetings. FPL maintained a continuous dialogue with the USACOE
10 to provide requested information.

11 **Q. Please explain FPL's management of the RAI response process in 2012.**

12 A. FPL relied on its qualified contractor, including expert subcontractors, to
13 prepare responses in 2012. FPL closely monitored the quality of responses
14 provided by its contractors and subcontractors. FPL also hired a third party
15 expert to review the responses of its contractors and subcontractors for
16 completeness and quality. In total, FPL responded to 133 RAIs in 2012.

17

18 Throughout early 2012, the NRC continued to pursue a rigorous review of
19 seismic, geologic and geotechnical engineering information (Section 2.5) in
20 the Safety Review and pursued a higher level of detail regarding FPL's
21 Alternative Site analysis (Section 9.3) in the Environmental Review. These
22 areas of particular NRC focus each represent one section of one chapter out of
23 a combined approximately 30 chapters that make up these voluminous

1 documents. In May 2012, the NRC issued a letter to FPL indicating that until
2 revisions were made, the staff would not make further progress in reviews of
3 these sections. The NRC agreed to continue its reviews of other sections, but
4 nonetheless indicated the COLA Review Schedule for the Turkey Point 6 & 7
5 project was “under review”. The May letter further requested additional
6 quality reviews. In July 2012, the NRC had a public meeting to discuss the
7 seismic, geologic and geotechnical engineering questions as well as results
8 and corrective actions as a result of FPL’s quality assurance reviews. In
9 December 2012, a second public meeting was held to address the Alternative
10 Site issues.

11

12 FPL managed multiple initiatives, including internal reviews and contractor
13 audits to ensure FPL’s submissions fully satisfied the NRC staff. A revised
14 COLA Review Schedule for the Turkey Point 6 & 7 project is anticipated in
15 the first half of 2013. Once that schedule is received, FPL will conduct a
16 review to determine any impacts to the project cost or schedule, as was done
17 in early 2012.

18 **Q. What were the specific activities and results associated with the state SCA
19 and permitting of the Turkey Point 6 & 7 project in 2012?**

20 **A.** The state SCA process is generally managed in two tracks: transmission and
21 plant focus areas.

22

1 During 2012 the transmission track moved forward in two key areas. The
2 FDEP reviewed agency reports and published its Project Analysis Report on
3 Transmission, recommending approval of FPL's Preferred Corridors. Two
4 alternative corridors, submitted in 2011, were accepted into the review process
5 in 2012. Through its interactive dialogue with stakeholders, FPL became
6 aware that additional alternative corridors were being considered. Because
7 the SCA process is not currently on the critical path for the overall project,
8 FPL decided that accommodations could be made without impacting the
9 overall project schedule. In coordination with the FDEP, the SCA process
10 was amended to allow for submittal of additional alternative corridors. Three
11 additional corridors were proposed in December 2012 and are now under
12 review for inclusion in the process.

13

14 As of the end of 2012, agency reports on plant and non-transmission related
15 facilities had been submitted by all agencies with the exception of Miami-
16 Dade County. In general, these agency reports support approval of the
17 project, with specific conditions of certification designed to ensure
18 compliance with substantive requirements of each agency. Specifically,
19 Florida Fish and Wildlife Conservation Commission recommended approval
20 of the project and features to avoid, minimize and mitigate impacts to listed
21 species habitat. The South Florida Water Management District (SFWMD)
22 recommended approval of the project, with a particular emphasis on
23 supporting the choice of reclaimed water as the primary source, with radial

1 collector wells providing water from beneath Biscayne Bay as the backup
2 source.

3
4 Within the SCA process the local government authority provides a
5 determination regarding the consistency of the site with zoning and land use
6 policies. Through the completeness process, Miami-Dade County indicated
7 that additional zoning approvals were required for the Reclaimed Water
8 Treatment Facility and the Radial Collector Wells. It is FPL's position that
9 these are ancillary facilities, and as such, these necessary project features were
10 incorporated in the zoning resolution provided in 2007. Nonetheless, in an
11 effort to expedite this additional step, and without waiving its position, FPL
12 submitted a zoning application in July 2012. This resulted in a request to
13 modify the dates for Miami Dade County's Land Use Determination and its
14 Agency Report on plant and non-transmission facilities. Again, because the
15 SCA process is not currently on the critical path for the overall project, FPL
16 determined that this additional process could be accommodated without
17 impacting the overall project schedule.

18 **Q. What were the specific development activities and results observed**
19 **related to the Turkey Point 6 & 7 project in 2012?**

20 A. The UIC Exploratory Well and Dual Zone Monitoring Well were successfully
21 completed in mid-2012. This is an important interim step in obtaining the
22 Construction and Operation permits under the FDEP's UIC program. The
23 project confirmed the geologic expectations and general suitability for use as a

1 disposal well. The next phase is to obtain approvals that will allow FPL to
2 conduct injection testing that will more fully demonstrate the capability of the
3 well system and subsequent additional wells required. These activities will
4 continue in 2013 and 2014.

5 **Q. Please describe any activities associated with the negotiation or execution**
6 **of commercial or development agreements supporting the Turkey Point**
7 **6 & 7 project in 2012.**

8 A. During 2012, the Forging Reservation Agreement was the focus of continued
9 negotiation between FPL and Westinghouse Electric Company. The original
10 agreement was based on the original project schedule. While progress was
11 made, a new agreement was not developed. The term of the current
12 agreement has been extended to March 31, 2013. If an agreement is not
13 reached, the current agreement will likely be extended again.

14
15 Additionally, in support of its western preferred corridor, FPL has been
16 engaged in negotiations with multiple state and federal agencies to exchange
17 its current owned transmission line corridor in the eastern Everglades for a
18 combination of easements and property that would provide a continuous
19 transmission right-of-way between north and south Miami-Dade County that
20 would not be in Everglades National Park (ENP). Collectively, these efforts
21 are referred to as the ENP land exchange. These negotiations are captured in
22 participation agreements, authorized by federal legislation and are undergoing
23 final environmental review by the National Park Service (NPS). In 2011, the

1 NPS began developing an Environmental Impact Statement (EIS) to review
2 the impact of the proposed land exchange. In 2012, NPS staff continued the
3 review, which is now expected to result in a Draft EIS in mid-2013 with the
4 Final EIS and Record of Decision available in late 2013.

5 **Q. Please describe FPL's decision making related to the timing of initiating
6 certain Pre-construction activities and the implications of those decisions.**

7 A. In early 2012, FPL prepared its projections for expenditures in 2013.
8 According to the current project schedule (Rev. 6), certain Pre-construction
9 activities were due to be initiated in 2013. These activities support early stage
10 contracting and design work that precedes actual construction activities onsite.
11 The decision was made in early 2012 to maintain these activities in 2013
12 given the expected pace of the regulatory reviews.

13

14 **PROJECT MANAGEMENT INTERNAL CONTROLS**

15

16 **Q. Please describe the project management structure responsible for the
17 Turkey Point 6 & 7 project.**

18 A. The management structure for the Turkey Point 6 & 7 project reflects the dual
19 nature of the project relying on a working combination of two key groups:
20 Project Development and New Nuclear Projects. The organization of the
21 project into these two key groups helps maintain a consistent management and
22 reporting structure with specific focus and areas of responsibility, while

1 allowing the project the flexibility to grow and adapt over time. During 2012,
2 William Maher (Director of Licensing – New Nuclear Projects) and I reported
3 to William Yeager, Sr. Vice President of Engineering, Construction and
4 Corporate Services (ECCS).

5
6 Project Development, which I lead, has the primary responsibility for the
7 execution of development and licensing activities not within the purview of
8 the NRC, as well as all project communication activities and FPSC interface.
9 Similar to the way other generation development projects are executed within
10 FPL, Project Development utilizes matrix relationships with key business
11 units in the company to provide essential support. For example, legal and
12 environmental services are provided by those business units through assigned
13 personnel.

14
15 Recognizing the need for specific nuclear-based skills and experience, FPL
16 established the New Nuclear Project team within ECCS to manage the
17 complex and specialized nature of the COLA process and the engineering,
18 procurement and construction activities. This team is managed by Mr. Maher.
19 The New Nuclear Project team has direct responsibility for the production and
20 management of the COLA as well as the engineering, procurement, site
21 preparation, construction, and start-up aspects of the project. The project team
22 will adjust staffing as the project evolves, ensuring access to the necessary

1 skill sets are maintained to accomplish project objectives in the most cost-
2 effective manner.

3 **Q. Please describe the project management and staffing approach employed**
4 **on the Turkey Point 6 & 7 project.**

5 A. The project is staffed by a combination of employees fully dedicated to the
6 project, employees from FPL business units who devote a portion of their time
7 to the project, and a select group of contractors and subcontractors whose
8 subject matter expertise and skills are required to complete the considerable
9 tasks related to this undertaking. Leading the staff is a project management
10 team charged with monitoring the day-to-day execution and strategic direction
11 of the project. The project management team provides routine, dedicated
12 oversight of the project including a determination of the timing and content of
13 external reviews. The project management team is supported by project
14 controls professionals that execute the day-to-day project activities and
15 provide direct oversight of procedural compliance. The project also benefits
16 from routine review, supervision, and direction provided by FPL executive
17 management.

18 **Q. What are the key elements of the project management process used to**
19 **manage the Turkey Point 6 & 7 project?**

20 A. FPL routinely and methodically evaluates the risks, costs, and issues
21 associated with the Turkey Point 6 & 7 project using a system of internal
22 controls, routine project meetings and communication tools, management

1 reports and reviews, internal and external audits, and an annual feasibility
2 analysis.

3 **Q. Please describe the system of internal controls applicable to the project.**

4 A. The project internal controls are comprised of various financial systems,
5 department procedures, work/desktop instructions and best practices providing
6 governance and oversight of project cost and schedule processes.

7

8 Exhibit SDS-3 provides a list of procedures and work instructions that govern
9 the internal controls processes and expectations. These procedures and work
10 instructions are employed by dedicated and experienced project controls
11 personnel who functionally report through ECCS Project Controls and provide
12 project oversight and analysis. The Project Controls organization helps to
13 ensure appropriate management decisions are made based upon assessment of
14 available information leading to reasonable costs. Accountability is clear and
15 understood throughout the controls organization and is a cornerstone of the
16 services they provide.

17 **Q. Please describe the specific reports generated to monitor the project and
18 the periodicity and audience for those reports.**

19 A. The project relies on a series of weekly or monthly reports and has standing
20 meetings to discuss forward-looking analysis with project managers. Exhibit
21 SDS-4 provides a list describing the reports, and their periodicity and target
22 audience.

1 **Q. Please describe the staff responsible for administering these internal**
2 **controls and their specific responsibilities.**

3 A. The internal controls staffing for the project is comprised of four personnel.
4 A Project Controls Director provides functional leadership, governance, and
5 oversight. A Project Controls Manager provides cost and schedule direction
6 and analysis, coordinates internal and external audit requests, holds meetings
7 with project management to review cost and schedule performance, and
8 reviews all cost, scope changes, schedules and performance indicators. A
9 Project Controls Analyst participates in meetings with project management to
10 review cost and schedule performance, provides information regarding cost,
11 scope changes, schedules and performance indicators, maintains cost
12 templates, supports the production of documents and responses to information
13 requests, and meets monthly or as required with department heads on
14 forecasting and commitments. A Construction Capital Cost Estimator
15 manages the master schedule and maintains the master project estimate
16 template.

17 **Q. How were the internal controls developed?**

18 A. Many of the internal controls procedures, processes or work instructions were
19 pre-existing FPL company or department processes. However, due to the
20 unique characteristics of the Turkey Point 6 & 7 project, cost templates were
21 specifically developed for monitoring expenditures to support FPSC filing
22 requirements and to facilitate associated reviews. FPL has contractually
23 placed significant reporting requirements on contractors by requiring trend,

1 tracking and performance indicators. This allows the internal controls team to
2 monitor events and trends on a forward-looking basis. As the project evolves,
3 additional controls will be developed as necessary.

4 **Q. What are Project Instructions and why are they needed?**

5 A. In the course of project development, FPL identified a need to develop some
6 business processes unique to new nuclear deployment. These processes
7 generally involve conducting business in compliance with NextEra Energy,
8 Inc. and FPL policies and procedures, but also recognize project-specific
9 requirements. For example, specific instructions are needed to ensure
10 compliance with additional NRC requirements for quality control and
11 document retention. Direction for such specific areas of focus is provided to
12 project staff through a set of FPL's New Nuclear Project - Project Instructions
13 (NNP-PI). These Project Instructions establish a standard for the project team
14 which provides guidance, sets expectations and drives consistency. Exhibit
15 SDS-5 provides FPL's comprehensive list of project instructions and forms.

16 **Q. What processes are used to manage project risk?**

17 A. Cost and schedule risk is managed by ensuring the project team recognizes
18 and understands the issues facing different sub-teams that comprise the overall
19 project. A mix of weekly meetings with small teams, monthly meetings with
20 select members of the project team, and routine executive briefings ensure the
21 project benefits from sufficient and timely communication. Further, the
22 information flow begins at the working level and is integrated as it moves to
23 the project management team to ensure the issues are adequately captured and

1 the interaction with other portions of the project is properly assessed. These
2 meetings result in several reports identified in Exhibit SDS-4. These routine
3 meetings allow project management to obtain updates from key project team
4 members, provide direction on the conduct of the project activities and
5 maintain tight control over project progress, expenditures, and key decisions.

6
7 Each week the project team holds multiple status meetings. These meetings,
8 held by teams within the project, track project activities at a level that allows
9 most issues to be identified, discussed, and resolved at the working team level.
10 Examples include the COLA team, the SCA team consisting of plant and
11 transmission sub-teams, and others. For those issues that cannot be resolved
12 at the working team level, project management has provided a multi-step
13 process to elevate the issue to the appropriate level for resolution. Contractor
14 performance is also tracked on a weekly basis. Schedule and cost metrics are
15 monitored and reported in standard format reports to allow close monitoring
16 of contractor performance.

17
18 The project team meets monthly to review project schedule, budget
19 performance, and key project issues. Project risk is specifically tracked and
20 reviewed. The monthly Cost Report meeting provides an opportunity to drill
21 down on project cost issues and expectations. Project management also
22 provides a routine update to FPL executive management. Normally once per
23 month, this update provides the opportunity for robust dialogue between the

1 project management team, Business Unit leaders and executive management.
2 While the executive team is always available for consultation on developing
3 issues and opportunities, the routine meetings ensure a broad range of topics
4 are regularly reviewed and discussed.

5
6 The project utilizes a quarterly risk assessment tool to identify, characterize and
7 track project risks. Six areas are assessed to identify key issues, estimate
8 probability or likelihood of occurrence (high, medium, and low), and the
9 magnitude of potential consequences (high, medium, and low). Further,
10 mitigation actions or strategies to be employed to manage the risk are described.
11 A monthly project dashboard report complements the Quarterly Risk Analysis.
12 This document allows for monthly trending of project risk areas unique to the
13 Turkey Point 6 & 7 project.

14 **Q. What other periodic reviews are conducted to ensure the project is**
15 **appropriately reviewed and analyzed?**

16 **A.** Internal and external audits occur during the course of the project to ensure
17 the project adheres to all corporate guidelines for financial accounting as well
18 as employing best management and internal controls practices. When a
19 deficiency is identified in an audit, an analysis is conducted to determine the
20 cause of the deficiency and corrective actions are implemented to ensure the
21 deficiencies are mitigated going forward.

22

1 The project is reviewed annually to determine its continued economic
2 feasibility. This analysis is conducted in the same framework as the analysis
3 accepted during the Need Determination proceeding, but is updated to reflect
4 what is currently known regarding project cost, project schedule, and the cost
5 and viability of alternative generation technologies. The analyses presented in
6 the April 2012 Nuclear Cost Recovery (NCR) filings demonstrate the project
7 remains feasible. An updated feasibility study will be filed on May 1, 2013.

8 **Q. What other activities has FPL undertaken to ensure its decision processes**
9 **are informed by the most current national and international industry**
10 **information?**

11 A. FPL is an industry leader in nuclear generation, and as such, has the
12 experience, contacts, and industry presence to engage in many forums for
13 exploration of nuclear industry issues. Nonetheless, the specific challenges of
14 new nuclear deployment have created focus areas requiring additional
15 coordination between entities involved in new plant licensing, construction,
16 and operation. FPL participates in four key industry groups providing value
17 to the Turkey Point 6 & 7 project. For several years, the NuStart Consortium
18 has provided FPL access to the Reference COL (Southern's Vogtle Plant) and
19 associated information developed by other AP1000 applicants necessary to
20 maintain the Turkey Point 6 & 7 project COLA. In 2012, NuStart was also
21 responsible for supporting the design finalization of the AP1000 technology.
22 This involvement was essential in supporting the federal licensing process,
23 which has resulted in the successful NRC authorization of the issuance of a

1 COL for the Vogtle 3 and 4 project. In addition, the Design Centered
2 Working Group was formed to provide coordination among owners, vendors,
3 and the NRC related to design modifications of the AP1000. This critical
4 activity is necessary to ensure design changes for the AP1000 are made
5 through a consensus process with the involvement of the NRC to preserve
6 standardization of design, a cornerstone of new nuclear development. FPL
7 also is a member of the AP1000 owners group (APOG) (a consortium of
8 owners of the AP1000 design) and of the Advanced Nuclear Technology
9 group organized by the Electric Power Research Institute (EPRI). These
10 groups are primarily forums to identify and resolve issues that are of primary
11 interest to owners, such as staffing, training and maintenance activities. For
12 example, programs such as Procurement Specification Development,
13 Equipment and Nuclear Fuel Reliability improvements, Advancing Welding
14 Practices, and Modular Equipment Testing and Benchmarking provide FPL
15 increased efficiency in program development and implementation resulting in
16 future cost savings. The principle of standardization through operations and
17 maintenance requires this level of industry coordination and dialogue. These
18 different groups have unique and important roles in the successful execution
19 of new nuclear deployment in the United States. Achieving the goal of
20 industry standardization and realizing the associated economic and operational
21 efficiencies requires active participation by industry participants in these
22 venues.

1 **Q. What steps were taken to ensure project expenditures are properly**
2 **authorized?**

3 A. For initial commitments, an approved request directed Integrated Supply
4 Chain (ISC) to formally contract with the selected supplier. Initial
5 commitments required appropriate authorizations including all documentation
6 required by Corporate Procedures. This included contracts, purchase orders,
7 notice to proceed, and, if required, a single or sole source justification. For
8 Contract Change Orders (CCOs), the requests were authorized at the
9 appropriate level and the CCOs executed prior to releasing the supplier to
10 perform the requested scope of work. Tracking systems and processes were
11 used to document and record procurement activities and to obtain the
12 appropriate level of management authorization for expenditures.

13 **Q. How would you summarize FPL's overall approach to project**
14 **management in relation to the Turkey Point 6 & 7 project?**

15 A. FPL followed robust project planning, management, and execution processes
16 to manage the Turkey Point 6 & 7 project. These efforts were led by
17 personnel with significant experience in project management and development
18 supported by project management professionals trained in the deliberate
19 execution of critical infrastructure projects through a comprehensive set of
20 internal controls. Additionally, FPL capitalized on the experience of its other
21 power generation development projects by implementing lessons learned by
22 those project teams. Finally, FPL implemented an ongoing internal auditing
23 and quality assurance process to continuously monitor compliance with the

1 controls discussed above. In summary, FPL had the right people with the
2 right tools and oversight making decisions with the best available information.
3 For all of these reasons, FPL is confident that its Turkey Point 6 & 7 project
4 management decisions were well-founded and reasonable.

5
6 Further, FPL recognizes the unique nature of new nuclear deployment
7 demanding a continuous watch be maintained to monitor developments in
8 policy, regulatory and economic arenas. An ongoing analysis and
9 incorporation of these events is necessary to ensure the appropriate actions are
10 taken at the right time to establish the option for new nuclear generation. The
11 application of sound project management fundamentals and critical
12 questioning provides the best results.

13

14 **PROCUREMENT PROCESSES AND CONTROLS**

15

16 **Q. What was FPL's preferred method of procurement and when might it be**
17 **in the best interest of the project to use another method?**

18 A. The preferred approach for the procurement of materials or services was to
19 use competitive bidding. FPL benefitted from its strong market presence
20 allowing it to leverage corporate-wide procurement activities to the specific
21 benefit of individual project procurement activities. Maintaining a
22 relationship with a range of service providers offered the opportunity to assess

1 capabilities, respond to changing resource loads and remain knowledgeable of
2 current market trends and cost of service.

3

4 However, in certain situations the use of single or sole source procurement
5 was in the best interest of the company and its customers. In some cases there
6 was a limited pool of qualified entities to perform specific services or provide
7 certain goods and materials. In other cases a service provider was engaged to
8 conduct a specific scope of work based on a competitive bid or other analysis
9 and additional scope was identified that the vendor could efficiently provide.
10 Circumstances such as the above examples are common in the nuclear
11 industry, and especially on complex long-term projects such as the Turkey
12 Point 6 & 7 project.

13 **Q. Do you anticipate the use of single or sole source procurement practices**
14 **will change over the course of the project?**

15 A. Yes. As the project moves through various phases, the proportion of single
16 source procurement will shift based on the nature of the major expenditures
17 associated with each phase. During the licensing phase, the majority of the
18 costs are expended on the federal licensing activities, which have been or will
19 be competitively bid. In contrast, the next phase of the project will involve
20 proprietary engineering and procurement activity that FPL must contract from
21 the equipment provider, a sole source of these goods and services. Then, as
22 the project moves to construction, FPL is taking steps to develop credible
23 providers who can competitively bid specific scopes of the construction work.

1 Developing a set of credible competitors, especially for the very large and
2 complex construction phase, requires a concerted effort, but is expected to
3 result in reduced costs regardless of which vendor is selected.

4 **Q. Please describe the single and sole source procurement procedures that**
5 **applied to the Turkey Point 6 & 7 project.**

6 A. NextEra Energy, Inc. corporate policy NEE-PRO-1470 requires proper
7 documentation and authorization for single or sole source procurement. Such
8 authorization must be from an individual with a commitment/spend authority
9 at least equal to the value of the good or service being procured. The
10 procedure also calls for a review of the justification for reasonableness.
11 Throughout 2012, FPL maintained its vigilance in creating adequate single or
12 sole source documentation consistent with NEE-PRO-1470.

13 **Q. What is a Predetermined Source (PDS) and how has FPL used this type**
14 **of source to ensure procurement decisions are prudent and costs are**
15 **reasonable?**

16 A. A PDS is a source that has demonstrated through a competitive evaluation
17 and/or other documented economic analysis to be the preferred source for
18 particular goods or services. A PDS is designated by the FPL ISC in
19 accordance with the Predetermined Sources section of the FPL Procurement
20 Process Manual. The New Nuclear Project sourcing team determined PDS
21 designations would be appropriate for certain project sources, primarily to
22 streamline the process being used for CCOs. Previously, all CCOs were
23 handled as single or sole source justifications, even if the underlying initial

1 commitment was competitively bid. Such procurement management is a
2 standard trade practice used to increase procurement efficiency.

3

4 For additional work beyond authorized limits, the full FPL requisition and
5 procurement process requirements must be met in order to increase the limits
6 as required by additional work scope being authorized. Other work awarded
7 to the same supplier for different scopes of work are still subject to the full
8 FPL procurement process requirements.

9

10 In 2012, FPL had five vendors under PDS status for the New Nuclear Project.
11 Bechtel, Westinghouse, Environmental and Consulting Technology, Inc.
12 (ECT), Golder Associates, Inc., and McNabb Hydrogeologic Consulting, Inc.
13 each provided a specific scope of services to the project. Because of their
14 specific expertise and the evolving nature of the services provided, these
15 vendors remain good candidates for PDS selection.

16

17 INTERNAL/EXTERNAL AUDITS AND REVIEWS

18

19 **Q. What external audits or reviews have been conducted to ensure the**
20 **project controls are adequate and costs are reasonable?**

21 A. Concentric Energy Advisors (Concentric) has been engaged to conduct a
22 review of the project internal controls, with a focus on management processes,
23 as was conducted in 2008, 2009, 2010 and 2011. FPL has addressed all of

1 Concentric's recommendations from prior year reviews. Concentric's 2012
2 review is discussed by Witness Reed.

3

4 The FPSC Staff conducts a financial audit of the project ledger and accounts
5 and an internal controls audit annually. The 2012 audits are currently
6 underway.

7 **Q. What internal audits or reviews were conducted to ensure the project
8 controls are adequate and costs are reasonable?**

9 A. An annual FPL internal audit focuses on ensuring that costs charged to the
10 project are for Turkey Point 6 & 7 project related activities and are recorded in
11 accordance with Rule 25-6.0423. This audit is underway to review the project
12 costs for the period January 1, 2012 to December 31, 2012, the results of
13 which will be available to the Commission, Commission Staff, and other
14 parties upon completion in the second quarter of 2013.

15

16 **2012 PRE-CONSTRUCTION AND SITE SELECTION COSTS**

17

18 **Q. Describe the Pre-construction costs incurred for the Turkey Point 6 & 7
19 project in 2012.**

20 A. As represented in Exhibit SDS-6 and Exhibit SDS-1, Schedule T-6, FPL
21 incurred a total of \$29,565,631 in Pre-construction costs. This is \$5,341,794
22 less than the April 27, 2012 Actual/Estimated costs of \$34,907,425. The costs
23 are broken down into the following categories: 1) Licensing \$22,569,505; 2)

1 Permitting \$1,004,335; 3) Engineering and Design \$5,991,791; 4) Long Lead
2 Procurement advanced payments \$0; and 5) Power Block Engineering and
3 Procurement \$0.

4 **Q. Please describe the costs incurred in the Licensing subcategory.**

5 A. In 2012, Licensing costs were \$22,569,505 as shown in Exhibit SDS-6 Table
6 2 and Exhibit SDS-1, Schedule T-6, Line 3. Licensing costs consist primarily
7 of FPL employee, contractor labor, and specialty consulting services
8 necessary to develop the COLA required for construction and operation of the
9 Turkey Point 6 & 7 project and the state SCA providing state certification of
10 the project. The largest portion of these expenditures, \$11,430,903, was a
11 result of costs incurred supporting the COLA process. This value is a
12 combination of COLA Team Costs and Bechtel COLA contract payments.

13

14 The permit and license applications contain project specific information,
15 assessments and studies required by the NRC, FDEP, and other federal, state,
16 and local entities to support the reviews leading to decisions on the technical,
17 environmental and social acceptability of the project. Some activities are
18 common between applications, and therefore offer opportunities to coordinate
19 efforts and manage costs. However, each application analyzes each issue
20 from a unique perspective and may require differing levels of detail.

21 **Q. Please explain the reasons behind the variances between the actual**
22 **Licensing costs and the costs projected in the 2012 Nuclear Cost Recovery**
23 **filing in Docket No. 120009-EI.**

1 A. Licensing costs were \$5,236,064 below plan primarily as a result of the
2 protracted SCA schedule. This was partially offset by higher than projected
3 COL costs due to an underestimation of NRC fees.

4 **Q. Please describe the costs incurred in the Permitting subcategory.**

5 A. In 2012, Permitting costs were \$1,004,335 as shown in Exhibit SDS-6 Table 3
6 and Exhibit SDS-1, Schedule T-6, Line 4. Permitting costs consist primarily
7 of project employees and legal services necessary to support the various
8 license and permit applications required by the Turkey Point 6 & 7 project.
9 Exhibit SDS-6, Table 3 provides a detailed breakdown of the Permitting
10 subcategory costs in 2012, including a description of items included within
11 each category.

12 **Q. Please explain any variance between the actual Permitting costs and the
13 costs provided in the 2012 Nuclear Cost Recovery filing.**

14 A. Permitting costs were \$459,633 below plan in 2012 primarily due to reduced
15 support requirements caused by the protracted SCA schedule.

16 **Q. Please describe the costs incurred in the Engineering and Design
17 subcategory.**

18 A. In 2012, Engineering and Design costs were \$5,991,791 as shown in Exhibit
19 SDS-6 Table 4 and Exhibit SDS-1, Schedule T-6, Line 5. Engineering and
20 Design costs consist primarily of FPL employee services and/or engineering
21 consulting services necessary to support the UIC exploratory well. Exhibit
22 SDS-6 Table 4 provides a detailed breakdown of the Engineering and Design

1 subcategory costs in 2012, including a description of items included within
2 each category.

3

4 In 2012, the majority of costs in the Engineering and Design subcategory were
5 related to the installation of the UIC exploratory well. The exploratory well is
6 a necessary interim step to obtaining the UIC operating permit, required for
7 plant operations. Costs associated with EPRI's Advanced Nuclear
8 Technology working group and membership in the APOG industry group are
9 also included in the Engineering and Design category.

10 **Q. Please explain any variance between the actual Engineering and Design**
11 **costs and the costs provided in the 2012 Nuclear Cost Recovery filing.**

12 A. Engineering and Design costs were \$353,903 above plan primarily due to
13 modifications to the drilling and testing plan for the UIC well and the need to
14 provide for EPRI costs.

15 **Q. Please describe the costs incurred in the Long Lead Procurement**
16 **subcategory.**

17 A. In 2012, there were no Long Lead Procurement costs.

18 **Q. Please describe the costs incurred in the Power Block Engineering and**
19 **Procurement subcategory.**

20 A. In 2012, there were no Power Block Engineering and Procurement costs.

21 **Q. Was there a variance between the actual Long Lead Procurement or**
22 **Power Block Engineering and Procurement costs and the costs provided**
23 **in the 2012 Nuclear Cost Recovery filing?**

1 A. No.

2 **Q. Were any costs expended in the Transmission category or during 2012?**

3 A. No.

4 **Q. Please describe the Site Selection costs incurred in 2012.**

5 A. FPL's Site Selection work was completed in October 2007 with the filing of
6 the Need Petition. The cost of \$180,883 in this category relates to carrying
7 charges. FPL Witness Powers supports the calculation of carrying charges.

8 **Q. Were the 2012 project activities prudent and were the related costs
9 prudently incurred?**

10 A. Yes. All costs were incurred as a result of the deliberately managed process at
11 the direction of a well-informed, properly qualified management team. The
12 costs were incurred in the process of conducting the necessary Pre-
13 construction activities such as obtaining the necessary licenses and permits for
14 the Turkey Point 6 & 7 project. All costs were reviewed and approved under
15 the direction of the Turkey Point 6 & 7 project management team and were
16 made fully subject to project internal controls. Costs were processed using
17 FPL standard procurement procedures and authorization processes, are
18 reasonable and were prudently incurred.

19 **Q. Does this conclude your testimony?**

20 A. Yes.

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **FLORIDA POWER & LIGHT COMPANY**

3 **DIRECT TESTIMONY OF STEVEN D. SCROGGS**

4 **DOCKET NO. 130009-EI**

5 **May 1, 2013**

6

7 **Q. Please state your name and business address.**

8 A. My name is Steven D. Scroggs. My business address is 700 Universe
9 Boulevard, Juno Beach, Florida 33408.

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

11 A. I am employed by Florida Power & Light Company (FPL or the Company) as
12 Senior Director, Project Development. In this position I have responsibility
13 for the development of power generation projects to meet the needs of FPL's
14 customers.

15 **Q. 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-7, Turkey Point 6 & 7 Site Selection and Pre-construction
20 Nuclear Filing Requirement (NFR) Schedules consisting of the 2013
21 Actual/Estimated (AE) Schedules, the 2014 Projection (P) Schedules
22 and the 2014 True-up to Original (TOR) Schedules. The NFR

1 Schedules contain a table of contents listing the schedules sponsored
2 and co-sponsored by FPL Witness Powers and me, respectively.

- 3 • Exhibit SDS-8, consisting of summary tables presenting the 2013
4 actual/estimated and 2014 projected Pre-construction costs for the
5 Turkey Point 6 & 7 project.
- 6 • Exhibit SDS-9, Turkey Point 6 & 7 Project Benefits at a Glance.
- 7 • Exhibit SDS-10, New Nuclear Energy Timeline.

8 **Q. What is the purpose of your testimony?**

9 A. The purpose of my testimony is to provide a description of how the Turkey
10 Point 6 & 7 project is being managed and controlled. The project undertakes
11 the steps necessary to license, construct, and operate two Westinghouse
12 designed AP1000 nuclear reactors (AP1000) and associated transmission and
13 ancillary facilities at the Turkey Point site near the existing Turkey Point
14 3 & 4 nuclear units in southern Miami-Dade County. My testimony will
15 provide insight into how project activities are managed given the near term
16 focus on obtaining all licenses, authorizations, and approvals needed and the
17 factors influencing key decisions affecting the nature, cost, and pace of that
18 effort. I will also describe the projected expenditures for 2013 and 2014
19 allowing FPL to support and defend the applications requesting the required
20 licenses and permits. FPL's 2013 and 2014 cost recovery requests, as in past
21 years, include only amounts that are associated with the licensing activities
22 currently underway. Notably, the request does not include any construction
23 costs for the Turkey Point 6 & 7 project. No such costs are being incurred,

1 and such costs are not permitted to be recovered pursuant to the Nuclear Cost
2 Recovery Rule.

3 **Q. Please summarize your testimony.**

4 A. FPL continues to carefully and methodically create the opportunity for
5 additional reliable, cost-effective and fuel diverse nuclear generation to
6 benefit FPL's customers. The approach applied to the management of the
7 Turkey Point 6 & 7 project provides control of cost risks while maintaining
8 progress towards delivery of new nuclear generation under the earliest
9 practicable deployment schedule. The unique qualitative benefits of fuel
10 diversity, energy security and zero greenhouse gas emissions offered by
11 nuclear generation continue to compliment the persistent quantitative benefits
12 projected for the project. Progress in other nuclear industry milestones
13 (AP1000 international and U.S. construction) continues to provide positive
14 indicators for progress in new nuclear plant deployment.

15
16 In 2013 and 2014 FPL will continue its progress on the project by concluding
17 the state Site Certification Application (SCA) process and moving to the
18 report review stage in the Nuclear Regulatory Commission's (NRC)
19 Combined License Application (COLA) process. Expenses requested are
20 related to obtaining the licenses and permits. Estimates covering planning and
21 design studies needed to support the project schedule have been identified, but
22 are not requested for recovery. Delays in the regulatory review process have
23 been accommodated, maintaining the projected commercial operation dates

1 (CODs) of 2022 for Unit 6 and 2023 for Unit 7, however further delays are
2 possible. Recognizing that the experience to date is a likely indicator of the
3 remainder of the licensing phase, FPL's stepwise approach continues to
4 provide FPL customers with the best opportunity to make steady progress on
5 the project but avoid making premature commitments to engineering and
6 materials costs.

7 **Q. Would you please provide an overview of the expected benefits of the**
8 **Turkey Point 6 & 7 project for FPL customers?**

9 A. Yes. Taking into account the updated project information provided in this
10 testimony, FPL expects the Turkey Point 6 & 7 project will:

- 11 • Provide estimated fuel cost savings for FPL's customers of
12 approximately \$804 million (nominal) in the first full year of operation
13 based on a Medium Fuel Cost forecast;
- 14 • Provide estimated fuel cost savings for FPL's customers over the life
15 of the project of approximately \$78 billion (nominal) based on a
16 Medium Fuel Cost forecast;
- 17 • Diversify FPL's fuel sources by decreasing reliance on natural gas by
18 approximately 18% beginning in the first full year of two unit
19 operation;
- 20 • Reduce annual fossil fuel usage by the equivalent of 28 million barrels
21 of oil or 177 million MMBTU of natural gas; and

- 1 • Reduce CO₂ emissions by an estimated 265 million tons over the life
2 of the project, which is the equivalent of operating FPL's entire
3 generating system with zero CO₂ emissions for over 6 years.

4 These quantifications are based on the May 2013 project feasibility analysis set
5 forth in FPL Witness Sim's testimony and Exhibit SRS-1. The Turkey Point
6 6 & 7 project benefits are also included in my Exhibit SDS-9.

7 **Q. Please describe how the remainder of your testimony is organized.**

8 A. My testimony includes the following sections:

- 9 1. Policy Considerations
10 2. Project Approach
11 3. Process and Risk Management
12 4. Issues Potentially Affecting the Project
13 5. Key Decisions and Milestones
14 6. Project Cost and Feasibility
15 7. 2013 & 2014 Pre-construction Costs
16

17 POLICY CONSIDERATIONS

18

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

20 A. Several key developments led to the establishment of Nuclear Cost Recovery
21 as a means of resolving persistent issues in meeting the need for stable and
22 reasonably priced, reliable electricity for the state of Florida. Primarily, the
23 state's growing reliance on natural gas-fueled generation, highlighted by

1 volatile natural gas prices and supply reliability issues, created concern that
2 insufficient fuel diversity threatened the long term economic stability of the
3 state. These concerns were highlighted by hurricanes Katrina and Rita in
4 2005, which impacted natural gas production in the Gulf of Mexico and
5 threatened FPL's fuel supply reliability. However, the growing reliance on
6 natural gas fueled generation was a result of the difficulty in successfully
7 being able to deploy baseload alternatives; most commonly fossil fuels (coal
8 or oil fueled generation) or nuclear generation. For example, FPL's proposal
9 in 2006 to build a clean coal power plant was denied by the Florida Public
10 Service Commission (FPSC) due to uncertainties surrounding the future cost
11 of carbon emissions. Nuclear Cost Recovery was initiated to directly address
12 some of the challenges associated with deployment of nuclear generation to
13 help improve fuel diversity. The act was subsequently amended to include
14 Integrated Gasification Combined Cycle coal generation. A timeline
15 depicting these events, and FPL's delivery of additional nuclear generation in
16 fulfillment of the legislature's policy, is provided in Exhibit SDS-10.

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

18 A. Throughout the last several decades, significant political, economic and
19 technology changes occurred to reshape the state's generation portfolio away
20 from a dependence on foreign oil in the 1970's to other fuel sources. At the
21 same time, the nuclear industry was dealing with significant regulatory, cost
22 and schedule challenges in deploying new units – essentially keeping nuclear
23 from being an option in the 1980s and 1990s. The other traditional baseload

1 alternative, coal, had only been developed in limited amounts in Florida
2 because of the significant logistical challenges and expense in delivering large
3 quantities of coal from supply regions located in the country's interior and
4 concerns and costs related to emissions. These factors opened the door for a
5 new baseload technology. Deregulation of natural gas as a fuel for electric
6 generation and the introduction and continued improvement of large scale
7 combined cycle gas turbine technology combined to provide a cost-effective,
8 efficient and low emissions alternative. As a result, combined cycle gas
9 turbine plants have been the technology of choice for most generation
10 additions in the state from the 1990s to today. While customers have
11 benefited from these choices, recurrence of high and volatile natural gas prices
12 or supply reliability issues would undoubtedly negatively impact customers
13 and the Florida economy.

14 **Q. What recent developments occurred to suggest nuclear generation would**
15 **be a deployable alternative?**

16 **A.** In the late 1990s, the NRC instituted a refined regulatory framework for the
17 licensing of new nuclear generating units. This revised process front-loads
18 and streamlines the licensing process, avoiding or minimizing many of the
19 issues that created licensing complications for the prior generation of nuclear
20 power plants. During that same period, a new generation of nuclear power
21 plants were developed and poised for U.S. and international development.
22 The federal Energy Policy Act of 2005 provided incentives and assurances
23 that further incentivized renewed interest in nuclear generation in the U.S.

1 Consortiums were formed between potential owners and manufacturers that
2 furthered several key projects to validate that the new designs and licensing
3 processes would deliver the required certainty. By 2006, a host of new
4 nuclear projects had been proposed in the U.S. With the passage of the
5 Florida Energy Act of 2006 and the FPSC's adoption of the Nuclear Cost
6 Recovery rule, deployment of new nuclear capacity in Florida to address fuel
7 diversity concerns became a realistic option.

8 **Q. What specific considerations were included in the Nuclear Cost Recovery**
9 **rule as implemented by the FPSC?**

10 A. A core principle of the Nuclear Cost Recovery rule is that of transparency. In
11 order to satisfy that principle, applicants for cost recovery must satisfy a
12 number of extensive reviews. In order to enter the annual cost recovery
13 process, an applicant must first obtain an affirmative need determination
14 verifying that the proposed generation is required to provide cost-effective and
15 reliable electric generation. Annually, within the cost recovery process, the
16 applicant must provide a full accounting for all factors of the project,
17 including cost, schedule, decisions, and ongoing feasibility. This transparency
18 allows the FPSC to conduct in-depth oversight of the utility's actions in real
19 time – as the project proceeds, rather than in hindsight years after decisions
20 are made and money is spent. The FPSC then makes a “reasonableness”
21 determination as to costs projected for the project (prior to any recovery of
22 those costs), and reviews historical costs for “prudence”.

1 **Q. How does the existence of the Nuclear Cost Recovery process assist FPL**
2 **in bringing forward nuclear generation projects?**

3 A. The statute and associated rule provides a stable and fair playing field for FPL
4 to undertake the complex and challenging task of adding new nuclear capacity
5 to its system. The process allows FPL to take the long-lead steps of licensing
6 and pre-construction and pays off interest costs during construction, reducing
7 costs to FPL's customers. Additionally, it enables FPL to go to the financial
8 markets and obtain competitive financing rates for the large amount of capital
9 required to fund the construction of the project.

10 **Q. Does the implementation of the Nuclear Cost Recovery Clause (NCRC)**
11 **provide savings for FPL customers?**

12 A. Yes. Nuclear Cost Recovery enables customers to avoid paying for
13 compounded interest during the approximately eight year construction period
14 and reduces the overall amount that would be recovered from customers under
15 normal rate base treatment by billions of dollars.

16

17

PROJECT APPROACH

18

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

20 A. FPL continues to develop Turkey Point 6 & 7 through a deliberate and careful
21 process navigating through the four phases of project development:
22 Exploratory, Licensing, Preparation, and Construction. The project has
23 completed the Exploratory phase, and is currently focused on the Licensing

1 phase prior to initiating Preparation phase activities. The approach allows
2 FPL to make progress on obtaining licenses and approvals without taking on
3 the risks of committing to a specific construction schedule and the associated
4 expenditures. For example, through 2014, FPL projects it will have spent a
5 total of \$218 million on the Turkey Point 6 & 7 project – approximately 1% of
6 the total estimated project cost.

7
8 FPL's approach has been developed as a step-wise process. Routine
9 monitoring of a wide range of factors and events is accomplished to help
10 increase certainty and predictability, informing each subsequent step.

11 **Q. Please expand on the concept of the step-wise process and how the risks
12 related to the Turkey Point 6 & 7 project are controlled by key decisions.**

13 **A.** The project team monitors a host of issues at local, state, and federal levels
14 and across technical, commercial, economic, and regulatory areas of interest.
15 The impact on cost, schedule, and quality are routinely assessed through a set
16 of tools and reviews. If review indicates the potential for a considerable cost
17 or schedule impact, mitigation actions are identified and are designed to
18 eliminate, reduce, or defer the impact. If the magnitude of the impact
19 materially affects cost or schedule, or changes the feasibility of the project, a
20 decision is made as to whether such impact is acceptable in light of all current
21 information. Annually the FPSC reviews the results of these changes.
22 Alternative courses of action include continuing with a modified budget and
23 schedule along with available mitigation actions, or halting a portion of the

1 project temporarily while the issue is further assessed or resolved. The
2 alternative of slowing or halting a portion of the project in response to
3 significant events or uncertainties offers a high level of risk control for FPL
4 and its customers.

5
6 For example, the events of Fukushima in March 2011 and federal budget
7 issues in 2012 and 2013 have placed a significant unexpected burden on the
8 resources of the NRC. By deferring expense associated with pre-construction
9 activity such as engineering, procurement, and planning, FPL controls the
10 impact of schedule delays that can occur during licensing thereby lowering the
11 project risk profile.

12

13 PROCESS AND RISK MANAGEMENT

14

15 **Q. How is the Turkey Point 6 & 7 project management organized to**
16 **maintain an on-going risk management focus?**

17 A. The Turkey Point 6 & 7 project requires a wide range of skilled team
18 members with experience in the development, design, construction and
19 licensing of nuclear generation. There is also a significant volume of
20 information generated as issues unique to new nuclear generation deployment
21 are identified and evaluated. The project management structure of the Turkey
22 Point 6 & 7 project provides for dedicated teams with the requisite subject
23 matter expertise to be coordinated at all levels. This is accomplished through

1 a project organization and reporting structure that effectively identifies and
2 applies resources to issues while maintaining transparent and open
3 communications.

4
5 As described in my March 1, 2013 testimony, the project organization relies
6 on two principal organizations jointly responsible for the integrated execution
7 of the project. William Maher, Director of Licensing, manages the New
8 Nuclear Plant (NNP) organization with responsibility for NRC licensing and
9 project engineering and construction. I lead the Development organization for
10 all other facets of project development, such as state Site Certification, local
11 zoning approvals, public relations, and FPSC regulatory issues. As of April
12 2013, both Development and NNP began reporting to Mano Nazar, Executive
13 Vice President of Nuclear and Chief Nuclear Officer. Each organization is
14 supported by FPL business units with specific, recent success in the
15 certification, NRC re-licensing, and permitting of multiple power generation
16 units in Florida and is complemented by our national operating experience
17 with renewable, natural gas, and nuclear generation assets.

18
19 FPL also gives careful consideration to how it contracts for support of the
20 many license and permit applications. A combination of competitive bidding
21 and single/sole source procurement is used, in compliance with FPL policies,
22 to manage augmentation of FPL staff with qualified and experienced specialty
23 contractors and service providers.

1 **Q. What process and risk management tools does FPL apply to manage cost,**
2 **risk, and schedule objectives?**

3 A. FPL uses industry accepted project controls, systems, and practices to obtain a
4 high level of control over the expenditures incurred and projected for all
5 projects. The primary means of control are 1) the project budgeting and
6 reporting process, 2) project schedule and activity reporting processes, 3) the
7 contract management process for external service providers, and 4) internal
8 and external oversight processes. These processes were fully described in my
9 March 1, 2013 testimony and continue to be utilized in the oversight of the
10 project.

11 **Q. How are these tools reviewed over time and what new tools are being**
12 **employed as a result of these reviews?**

13 A. Effectiveness measures are included within some mechanisms and provided
14 by external review processes. As an example, the Engineering &
15 Construction Division Project Dashboard presents issues and the current
16 trends for those issues. Over time, if a problematic issue continues to trend
17 down or remains neutral, the effectiveness of the project management controls
18 are investigated to determine if changes in approach can create improvement,
19 or if mitigation measures are adequate. This tool is being employed to
20 spotlight and trend issues presented by the Turkey Point 6 & 7 project.

21

22 Project Memoranda, describing the background and analysis considered in
23 project decisions, are an example of a tool developed to ensure a higher level

1 of documentation and transparency in the management of the project. These
2 memoranda document decisions made with respect to project features,
3 contracts, cost estimates, and schedules.

4

5 Additionally, a quarterly risk summary tracks the assessment of project risks
6 over time. This summary qualitatively gauges the probability of occurrence
7 and impacts to implementation, cost, and schedule aspects of the project.

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

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

23

1 **ISSUES POTENTIALLY AFFECTING THE PROJECT**

2

3 **Q. What are the international, national, and regional indicators being**
4 **monitored for their effect on the Turkey Point 6 & 7 project?**

5 A. These can be generally grouped into four areas. First, the NRC's response to
6 the March 2011 Japanese earthquake and tsunami has increased review in
7 certain areas. Second, progress of international and domestic new nuclear
8 projects are important inputs to inform management decision-making for the
9 Turkey Point 6 & 7 project. Third, developments in regional and national
10 economy and energy policy have the potential to affect the feasibility of the
11 project. Finally, there are several project specific issues that may impact the
12 project.

13 **Q. What impact has the NRC's response to the events of Fukushima had on**
14 **the nuclear industry in general, and the Turkey Point 6 & 7 project**
15 **specifically?**

16 A. As described in my March 1, 2013 testimony, the NRC has taken actions and
17 communicated plans that maintain a stable regulatory climate in the U.S. In
18 consideration of the events, the NRC developed near term and long term
19 objectives. Near term objectives focused on existing nuclear reactors, while
20 long term objectives included plants under licensing. Most importantly for the
21 Turkey Point 6 & 7 project, the NRC has approved the AP1000 Design
22 Certification Document and the first two Combined Operating Licenses
23 (COLs) for the AP1000 design – Southern Company's Vogtle Units 3 and 4

1 project (Vogtle) and the South Carolina Electric & Gas Summer project
2 (Summer). The NRC indicated any future recommendations resulting from
3 the Fukushima initiated reviews that are relevant to new reactor designs and
4 owners/applicants could be capably integrated through existing NRC
5 processes. By continuing to address these critical approvals, the NRC is
6 maintaining the new nuclear deployment timeline anticipated prior to the
7 Fukushima events. Specific to the Turkey Point 6 & 7 project, the NRC has
8 required additional review of seismic, geotechnical and geological
9 information for the site. These additional reviews have been conducted and
10 the information has been provided to the NRC for its continued review.

11 **Q. What do recent developments related to the progress of international and**
12 **domestic new nuclear energy projects indicate with respect to the**
13 **continued pursuit of the Turkey Point 6 & 7 project?**

14 A. FPL is monitoring several AP1000 projects to capture issues and challenges
15 and to learn from the experiences of those projects. Internationally, FPL is
16 monitoring progress on the Sanmen 1 & 2 (China, AP1000) and Haiyang
17 1 & 2 (China, AP1000) projects. The Sanmen and Haiyang projects represent
18 the lead units for the AP1000 technology. These projects have completed site
19 preparation, poured their concrete foundations, accepted deliveries of major
20 components and have started module assembly/placement, and major
21 component installation. Recently the Sanmen project delayed its completion
22 target by 11 months.

23

1 In the United States, multiple projects are underway. NRC resources are now
2 actively engaged in monitoring the nuclear construction at Vogtle and South
3 Summer. Both Vogtle and Summer continue to make good progress on
4 construction, adjusting schedules and cost estimates to accommodate first
5 wave challenges.

6
7 The collective status of international and domestic projects continues to
8 demonstrate substantial and consistent progress is being made on the next
9 generation of nuclear projects. Time will be necessary to gather lessons
10 learned and strategies that best apply to the Turkey Point 6 & 7 project. In
11 general, the pace of these projects is positive, but the milestones to be
12 achieved in the next two years confirms FPL's choice to defer Preparation
13 phase activities until greater certainty can be attained as a way to control
14 implementation risks and incorporate lessons learned.

15 **Q. What are the specific milestones FPL will monitor on leading U.S.**
16 **projects in 2013 and 2014?**

17 A. The pace of COLA reviews that precede Turkey Point (*i.e.*, Duke/Progress
18 Levy, Duke Lee) give an indication of what FPL may experience. Federal
19 budget issues have had some impact to date, and may have more significant
20 impacts throughout 2013. Additionally, Southern Company has indicated that
21 it may be able to complete negotiations with DOE on the Loan Guarantee for
22 construction of the Vogtle project by mid-year. Some issues remain that
23 could impact the cost/benefit of the Loan Guarantee, and therefore whether

1 Southern Company will judge that it is advantageous for its customers. If
2 consummated, the results of this initial loan guarantee are expected to set the
3 standard for any future federal loan guarantees.

4

5 The initiation of safety related construction at Vogtle and Summer is
6 generating important information regarding construction planning logistics,
7 labor, and supply chain elements in the U.S. This information will be
8 important to guide the development of the construction execution plan for
9 Turkey Point Units 6 & 7.

10 **Q. What is the status of FPL's interest in a Department of Energy (DOE)**
11 **Loan Guarantee for the Turkey Point 6 & 7 project?**

12 A. FPL continues to monitor developments associated with the DOE Loan
13 Guarantee program and will consider all opportunities that may provide
14 demonstrable benefits to its customers. Upon execution of a loan guarantee
15 associated with the Vogtle project, more information with respect to costs,
16 benefits, and structure will emerge to allow for a better estimation of the costs
17 and benefits for FPL. The initial program was set at \$18 billion and the
18 Vogtle project is expected to utilize less than 50% of that amount, meaning
19 the balance of the funds may be available through a future solicitation. FPL is
20 in communication with the DOE Loan Guarantee office and will consider all
21 opportunities related to loan guarantees.

1 **Q. What do recent developments related to the national and regional**
2 **economy indicate with respect to the continued pursuit of the Turkey**
3 **Point 6 & 7 project?**

4 A. The economic downturn affected forward demand and fuel price forecasts, but
5 it also reduced the rate of price escalation and the projected costs of materials
6 and labor. The pace of recovery is expected to be steady but remain below
7 historic growth rates for the near term. Additionally, the significant shift in
8 supply relative to demand in the natural gas industry has created a near term
9 reduction in natural gas prices and has reduced long range forecasts for price
10 levels. FPL Witness Sim addresses the effect of changes in FPL demand
11 forecasts and natural gas price forecasts on the economic feasibility of Turkey
12 Point 6 & 7 and why completion of the project continues to be beneficial for
13 customers.

14 **Q. What do recent developments related to national and regional energy**
15 **policy indicate with respect to the continued pursuit of the Turkey Point**
16 **6 & 7 project?**

17 A. National energy policy, as articulated by the current administration, is
18 supportive of nuclear energy in general, and new nuclear energy development
19 in specific. The administration has reaffirmed its support for new nuclear
20 power following the events of Fukushima. In general, while cautious,
21 policymakers continue to recognize the long term value of and need for new
22 nuclear generation capacity.

23

1 A legal challenge to the NRC's Waste Confidence Rule resulted in a
2 requirement for the NRC to conduct an Environmental Impact Statement
3 (EIS) and subsequent rulemaking process. Until a new rule is provided, the
4 NRC has placed a hold on the issuance of any COLs. The process is projected
5 to be completed by September 2014, but is also potentially subject to any
6 delays created by federal budget issues and other resource demands on the
7 NRC.

8
9 Regionally, the legislature continues to address questions related to Florida's
10 energy mix, including a challenge to Nuclear Cost Recovery. However, issues
11 cited as important in the FPSC's Need Order of April 2008 have not changed.
12 Reliability, cost-effectiveness, fuel diversity, fuel supply reliability, and price
13 stability are still benefits to be delivered by increasing nuclear generation
14 capacity and are still needed by FPL's customers. A future plan not including
15 new nuclear capacity increases and prolongs reliance on fossil fuels, increases
16 exposure to fuel supply reliability and price volatility, and is not as effective at
17 reducing system emissions, including greenhouse gas emissions, as a plan
18 including new nuclear generation capacity.

19 **Q. What project-specific areas does FPL monitor that may affect objectives**
20 **for 2013 and 2014?**

21 A. There are two important areas that may impact the cost, schedule, and ultimate
22 success of the Turkey Point 6 & 7 project; the pace of the NRC license review
23 and the pace of the SCA review.

1

2 The pace of license and application reviews is subject to many influences.
3 These include budget constraints and resource allocation of the agencies
4 involved, timely participation and response of agencies and stakeholders, and
5 the political environment surrounding the agencies and governing bodies
6 involved in key aspects of the project. Maintaining the active participation of
7 these various parties over the course of the project is one of the unique
8 challenges of new nuclear deployment.

9

10 In the federal process, the project expects to resolve the remaining outstanding
11 requests from staff in the first part of 2013, revise the review schedule and
12 proceed to public comment on a draft NRC Safety Evaluation Report (SER)
13 and draft NRC EIS by year end.

14

15 In the state SCA process, the project received several key approvals and
16 recommendations in the early part of 2013, clearing the way for the SCA
17 hearing and Siting Board hearing in the latter part of the year. Assuming the
18 current schedule remains on pace, this would effectively complete the state
19 and local permitting activities. Activities in 2014 would include the
20 completion of post-certification design and submittals.

21 **Q. What are the factors that could impact the Turkey Point 6 & 7 COLA**
22 **review schedule in 2013 and 2014?**

1 A. There are several factors that may impact NRC resources, and therefore
2 impact the Turkey Point review schedule. Ongoing federal budget issues may
3 ultimately impact the resources available to conduct the Turkey Point COLA
4 review on a timely schedule. At the same time, the NRC continues to process
5 information generated for existing facilities as a follow up to the Fukushima
6 events in March 2011. The NRC also continues to devote resources to address
7 the Waste Confidence Rule, and have temporarily suspended any new
8 licensing decisions until resolved. While this activity is scheduled to be
9 complete by September 2014, changes to that schedule may impact resources
10 available to process the Turkey Point COLA.

11

12 Specific to the Turkey Point 6 & 7 project, in 2012 and 2013, FPL received
13 and responded to Requests for Additional Information (RAIs) from NRC staff
14 in safety-related areas focusing on seismic issues and flooding events and in
15 environmental areas focused on the characterization of alternative sites.
16 Review of two sub-sections of the COLA related to this information was
17 suspended pending FPL providing that information. The balance of the
18 COLA review continued. Therefore the Turkey Point COLA schedule was
19 placed "under review". Following discussion and several public meetings, the
20 issues have been significantly narrowed and are expected to be fully answered
21 by mid-2013. One additional public meeting remains to be conducted in later
22 this year. Following that meeting, the NRC will have all information
23 necessary to complete its review and provide a revised Turkey Point 6 & 7

1 COLA review schedule. The overall project schedule will be reviewed once a
2 revised COLA review schedule is published.

3

4 Once satisfied, the Advance Final SER will be completed and the draft EIS
5 would be published for comment. The time required to address remaining
6 items and subsequently complete the SER and draft EIS will influence what
7 substantive revisions are made to the COLA review schedule.

8 **Q. What is the status of the U.S. Army Corps of Engineers (USACE) wetland**
9 **permits and how is the pace of review linked to the NRC COLA**
10 **schedule?**

11 A. The USACE wetland permits are processed in coordination with the
12 development of the EIS in the NRC COLA process. FPL continues to work
13 with the USACE staff to answer their specific questions; however, any final
14 action is necessarily linked to the timeline of the NRC EIS.

15

16 KEY DECISIONS AND MILESTONES

17

18 **Q. What will be the focus of the project in 2013 and 2014?**

19 A. The focus remains on obtaining the licenses, permits, and approvals necessary
20 to construct and operate the Turkey Point 6 & 7 project. In 2013 the federal
21 focus will be on completing all outstanding items to allow the NRC to revise
22 the Turkey Point 6 & 7 COLA review schedule and publish the SER and draft

1 EIS. If successful, the project would be on track to complete the NRC and
2 USACE processes in 2014.

3

4 Much of the project activity and efforts this year will be devoted to
5 completing the Power Plant Siting process to obtain state Site Certification for
6 the plant, ancillary facilities and associated transmission lines.

7 **Q. What specific milestones are expected in relation to the NRC licensing
8 process in 2013 and 2014?**

9 A. In 2013, FPL will work with NRC and USACE staff to complete all RAIs and
10 any other outstanding information needed to support production of the SER
11 and draft EIS. Once completed, the NRC staff will develop a revised COLA
12 review schedule. Consistent with earlier schedules, the SER could be
13 completed within 10 months, including review by the Advisory Committee on
14 Reactor Safeguards. The final EIS could be completed within 12 months
15 following a period of public comment on the draft EIS. The mandatory NRC
16 hearing that would culminate in the granting of the Combined License could
17 be held within four months of the completion of the final EIS. Completion of
18 the NRC review process could be accomplished in late 2014.

19 **Q. What types of decisions does the project make in support of the NRC
20 staff reviews?**

21 A. The NRC staff may request additional analyses and studies to augment the
22 initial submittal. These analyses can range from short topical studies to
23 significant field studies and/or modeling. Project management will be making

1 decisions on the necessity, scope, and execution of any additional work scope.
2 Similarly, NRC staff review may highlight opportunities for revisions to the
3 project and commitments the Company may be asked to make regarding
4 conditions of licensing. Revisions and commitments may result in additional
5 project cost or schedule impacts.

6 **Q. What specific milestones will be experienced related to the state Site**
7 **Certification process in 2013 and 2014?**

8 A. Considerable progress was made on key SCA milestones leading to the
9 scheduled SCA hearing in July and August of 2013. In January 2013 the
10 Miami-Dade Board of County Commissioners approved additional zoning for
11 the project. Also in January, Miami-Dade submitted an affirmative Land Use
12 consistency determination. Neither the County zoning approval nor the Land
13 Use determination was challenged within the defined appeal periods. These
14 events led to publication of the County's Agency Report and the Florida
15 Department of Environmental Protection's Project Analysis Report, both of
16 which recommend approval with conditions.

17

18 In preparation for the SCA hearing, FPL will continue to work with all
19 agencies to ensure all legitimate issues have been addressed, and will seek to
20 enter into stipulation agreements with willing parties to limit the number of
21 issues that are unresolved in the hearing. The SCA hearing is the penultimate
22 activity during which an Administrative Law Judge hears all evidence
23 supporting the project's compliance with applicable substantive requirements

1 and provides a recommended order regarding approval, denial and any
2 appropriate conditions of certification. The Governor and Cabinet, sitting as
3 the Power Plant Siting Board, review the recommendation and make the
4 ultimate determination, anticipated in December 2013.

5 **Q. Please provide examples of decisions that may be made associated with**
6 **the state Site Certification process, and how those decisions may affect**
7 **the project cost and schedule estimate.**

8 A. During the preparation for and prosecution of the SCA hearing, FPL will be
9 developing and presenting necessary evidence to support its application.
10 Additionally, conditions of certification have been proposed by various
11 agencies. These conditions can impact the cost and schedule for project
12 execution. FPL will engage the sponsoring agencies to modify condition
13 language to reduce potential risks. FPL will make decisions regarding what
14 level of revisions to make, what conditions can be accepted, and assess the
15 impact of these changes to project cost and schedule.

16 **Q. Will the project decisions regarding the Everglades National Park EIS**
17 **and land exchange be similar to those made in the NRC and SCA**
18 **processes?**

19 A. Yes. The EIS process results in observations and recommendations. The
20 Secretary of the Interior may choose to place conditions on the land exchange
21 as a result of these observations and recommendations. FPL will assess the
22 nature of these conditions and determine the impact to project cost and
23 schedule. It is expected that the draft EIS will be provided for public

1 comment in 2013. Comments are collected on the draft EIS and a final EIS
2 will be developed in 2014.

3 **Q. Based on FPL's Turkey Point 6 & 7 project Revision 6 schedule, what**
4 **engineering work is anticipated in 2013 and 2014?**

5 A. The revised schedule assumes that bid and evaluation activities related to
6 early site preparation design and planning begin in late 2013 and continue
7 through 2014. Decisions on whether to undertake those activities per the
8 current project schedule will be made once a new COLA review schedule is
9 published and a full project schedule review can be conducted.

10 **Q. Does FPL intend to pursue completion of the Turkey Point 6 & 7 project?**

11 A. Yes. The most important near term activity is creating the opportunity by
12 obtaining the licenses and approvals necessary to construct and operate
13 Turkey Point 6 & 7. Once the project is closer to obtaining the approvals,
14 FPL will be able to refine the economic assumptions and incorporate the
15 experience of other new nuclear projects as well as how state and federal
16 energy policies have evolved. The FPSC will continue to have the
17 opportunity to review FPL's plans through the NCRC process.

18
19 FPL's step-wise management process will allow the project to proceed to a
20 later stage where risks can be better quantified and mitigated. Considering all
21 project specific and industry factors, this is a responsible and prudent course
22 of action to continue progress in creating the opportunity for new nuclear
23 generation for our customers.

1 **Q. Are there other project decisions that have occurred or are expected in**
2 **2013 or 2014?**

3 A. Yes. FPL executed a Forging Reservation Agreement with Westinghouse in
4 2008 to secure manufacturing capacity for ultra-heavy forgings to support the
5 project's original schedule. The agreement has been extended several times to
6 allow FPL and Westinghouse to monitor industry developments and
7 determine the best disposition of the existing reservation agreement. The
8 current extension expires October 31, 2013.

9

10 **PROJECT COST AND FEASIBILITY**

11

12 **Q. What is the current non-binding cost estimate range for the project?**

13 A. The overnight capital cost estimate range is \$3,659/kW to \$5,320/kW. When
14 time-related costs such as inflation and carrying costs are included, and FPL's
15 earliest practicable commercial operation dates of 2022 and 2023 are
16 assumed, the total project cost ranges from \$12.7 to \$18.5 billion.

17 **Q. Please explain how the overnight cost estimate is constructed and how it**
18 **is used to help evaluate the feasibility of the project each year.**

19 A. An overnight cost is developed using the most current information available.
20 An overnight cost provides an estimate of the total project costs assuming all
21 costs occur at one point in time ("overnight") and time-related costs
22 (escalation, interest during construction) are not included. Further,
23 recognizing many things could influence the overnight cost, additional

1 analysis is conducted on each component of the overnight cost to explore how
2 much it could vary, resulting in a cost estimate range. The overnight cost
3 provides an indication of the cost per kilowatt (\$/kW) for the project in a
4 given year reference. The 2012 cost estimate range was \$3,570/kW to
5 \$5,190/kW in 2012 dollars. Updating the cost estimate range to 2013 dollars
6 provides a cost estimate range of \$3,659/kW to \$5,320/kW in 2013 dollars.
7 The cost estimate range has been adjusted to current year dollars by assuming
8 a 2.5% escalation over the years between 2007 and present. While the actual
9 escalation experienced has been lower, retaining this simple assumption is
10 conservative and consistent with past year evaluations.

11

12 A breakeven cost analysis is developed by FPL's Resource Assessment and
13 Planning department, and is further discussed by FPL Witness Sim. This
14 breakeven cost is provided as an overnight cost and is directly compared to
15 the cost estimate range to assess the economic feasibility of the project.

16 **Q. Have there been any revisions to project features or design or any**
17 **industry-wide developments in the past year that suggest a revision to the**
18 **overnight capital cost estimate range?**

19 A. No. A review was conducted to capture any potential changes and estimate
20 the potential cost impact. No significant changes or developments have
21 occurred in the past year that indicates any revisions are necessary to the
22 project cost estimate range.

23 **Q. Does FPL's cost estimate range continue to be reasonable?**

1 A. Yes. The FPL cost estimate range continues to be reasonable based on the
2 annual review of the Turkey Point 6 & 7 capital cost estimate, a comparison to
3 other U.S. AP1000 project overnight capital cost estimates, and Concentric
4 Energy Advisors' review of U.S. AP1000 project overnight and total
5 estimated costs.

6
7 This is reassuring when one recognizes that the costs being experienced by the
8 lead projects at Vogtle and Summer are informed by committed contracts and
9 include significant equipment and material purchases. Therefore, the total
10 project costs for these projects are more certain.

11 **Q. What future activities are anticipated that will provide information to**
12 **revise the overnight capital cost estimate range?**

13 A. Negotiations on the Engineering, Procurement and Construction contract will
14 provide more information including price, terms and schedules to support an
15 execution plan for project construction. That information will be integrated
16 with continued observations of the progress of preceding U.S. projects to
17 inform and revise the Turkey Point 6 & 7 non-binding cost estimate, as
18 warranted.

19 **Q. What factors may impact the overall project cost estimate, including**
20 **time-related costs such as price escalation and carrying costs?**

21 A. The primary factors affecting the total project cost will be the actual labor and
22 materials costs experienced during the Preparation and Construction periods.
23 The certainty around these costs will increase as preceding projects move

1 through the early stages of construction and as FPL negotiates the principal
2 contracts for engineering, procurement, and construction of the project. The
3 pace of expenditures is also a critical factor that will impact total project costs.
4 Escalation of future costs and carrying costs on expended funds are time
5 related factors.

6 **Q. What is the estimate of the total project costs based on the current**
7 **project schedule?**

8 A. As described above, there are a number of assumptions made to arrive at this
9 estimate. Under the current 2022/2023 in-service date schedule, and using the
10 2013 overnight cost estimate range, the total project cost range becomes \$12.7
11 billion to \$18.5 billion for the 2,200 MW project.

12 **Q. What are the most current Turkey Point 6 & 7 economic feasibility**
13 **analysis results?**

14 A. Through the economic downturn and following a substantial shift in the
15 market supply and prices of natural gas fuel, the overall economic feasibility
16 of new nuclear generation demonstrates noteworthy robustness.

17

18 As discussed by FPL Witness Sim, the most current feasibility analysis
19 affirms the projected cost effectiveness and benefits associated with the
20 Turkey Point 6 & 7 project using the same basic analytical approach applied
21 in the Need Determination proceeding for the project and the four prior NCRC
22 filings. The analysis calculated a projected “break-even” cost for new
23 nuclear; a cost that results in the same life cycle costs (or cumulative present

1 value of revenue requirements) as an alternative plan relying on natural gas
2 combined cycle units. The analysis was conducted for seven scenarios
3 comprised of combinations of three fuel and three emission cost forecasts.
4 The projected break-even costs were higher than FPL's non-binding cost
5 estimate range for its Turkey Point 6 & 7 project in five of seven scenarios,
6 and within range for the other two. These results indicate that the Turkey
7 Point 6 & 7 project is quantitatively and qualitatively superior to the combined
8 cycle gas alternative plan in five scenarios. In the other two scenarios, which
9 assume either continued low environmental costs for 50 years, or continued
10 low costs for both natural gas and environmental compliance for 50 years, the
11 combined cycle alternative showed comparable economics. However, a
12 natural gas fueled alternative would not deliver the qualitative benefits of fuel
13 diversity, energy security and zero greenhouse gas emissions that are offered
14 by new nuclear generation.

15 **Q. In February 2010, FPSC Staff provided a list of factors for consideration**
16 **in the feasibility analysis. Have those factors been considered?**

17 A. Yes. FPL Witness Sim discusses the economic factors and I discuss the non-
18 economic factors.

19 **Q. What non-economic factors affect the projects long term feasibility?**

20 A. Non-economic factors include the feasibility of obtaining all necessary
21 approvals (permits, licenses, etc.), the ability to obtain financing for the
22 project at a reasonable cost, and supportive state and federal energy policy.

23

1 Significant federal, state, and local approvals are required to allow for the
2 construction and operation of the project. During recent months, several key
3 state agency reports were completed recommending approval of the project
4 with conditions, continuing to support the long-term feasibility of the project.
5 While the review process has taken longer than originally anticipated, the
6 process is proceeding substantively as expected.

7

8 Financing will be determined as the project proceeds through approvals to
9 construction. The lead projects, Vogtle and Summer, have successfully
10 obtained financing. FPL will continue its dialogue with the financial
11 community to help maintain FPL's capability to obtain financing upon
12 reasonable terms.

13

14 As discussed earlier in this testimony, state and federal energy policy
15 continues to be generally supportive of new nuclear generation for a host of
16 reasons. Recent legislative activity in Florida sought to revise some aspects of
17 the Nuclear Cost Recovery statute, but preserve the opportunity it provides.
18 The high reliability, low and stable cost and zero greenhouse gas emission
19 profile of nuclear generation technology remains highly compatible with key
20 energy policy objectives.

21

22

23

2013 & 2014 PRE-CONSTRUCTION COSTS

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22

Q. How are the 2013 actual/estimated costs and the 2014 projected costs developed?

A. As described earlier, FPL has a disciplined ground-up process to develop project budgets. This process was used in the initial project budgeting activity and is routinely reviewed and evaluated for adequacy and accuracy as additional information becomes available. The estimates of the 2013 actual/estimated and 2014 projected costs were completed in accordance with FPL's budget and accounting guidelines and policies. Where services are contracted, rates are provided by the contractor and reviewed to verify the charged rates are consistent with FPL's experience in the broader industry. The cost estimates were compared to other costs being incurred by the company for similar activities and found to be reasonable.

Q. Please provide a high level summary of the 2013 actual/estimated and the 2014 projected costs presented in this filing.

A. The costs associated with the Turkey Point 6 & 7 project in 2013 and 2014 are focused on supporting the licensing and permit application reviews underway. Additional costs are incurred in the Engineering & Design category associated with completing the Underground Injection Control (UIC) Exploratory Well, a necessary step towards approval of that process.

Q. What changes may occur that could affect these cost projections?

1 A. The pace and content of the application reviews may impact the actual costs in
2 2013 and 2014. The NRC COLA process may include an expanded review of
3 seismic and flooding issues, in response to the Fukushima event in Japan in
4 March of 2011. Additionally, the project anticipates several hearings in the
5 state certification process in 2013. The extent to which these hearings are
6 contested and the breadth of issues allowed within the scope of the hearings
7 by the Administrative Law Judge may impact the costs experienced.

8 **Q. Please summarize the costs included in this filing for Turkey Point 6 & 7**
9 **Pre-construction activities.**

10 A. Schedule AE-6 of SDS-7 presents the 2013 actual/estimated costs in the
11 following categories: 1) Licensing \$25,526,715; 2) Permitting \$1,030,565;
12 3) Engineering and Design \$2,720,435; 4) Long Lead Procurement advance
13 payments \$0; 5) Power Block Engineering and Procurement \$0; and
14 6) Transmission Engineering \$0. Schedule P-6 of SDS-7 presents the 2014
15 projected costs in the following categories: 1) Licensing \$13,410,866; 2)
16 Permitting \$663,796; 3) Engineering and Design \$3,061,439; 4) Long Lead
17 Procurement \$0; 5) Power Block Engineering and Procurement \$0; and
18 6) Transmission Engineering \$0. Table 1 of Exhibit SDS-8 provides a
19 summary of the actual/estimated 2013 and projected 2014 Pre-construction
20 costs. The descriptions in the Exhibit SDS-8 tables are illustrative and do not
21 provide full line item detail.

22 **Q. Please describe the activities included in the Licensing category for the**
23 **2013 actual/estimated costs and the 2014 projected costs.**

1 A. For the period ending December 31, 2013, Licensing costs are projected to be
2 \$25,526,715 as shown on Line 3 of Schedule AE-6 of SDS-7. For the period
3 ending December 31, 2014, Licensing costs are projected to be \$13,410,866
4 as shown on Line 3 of Schedule P-6 of SDS-7. Table 2 of Exhibit SDS-8
5 provides a detailed breakdown of the Licensing subcategory costs.

6
7 Licensing costs consist primarily of FPL employee and contractor labor and
8 specialty consulting services necessary to support the various license and
9 permit applications required by the Turkey Point 6 & 7 project. The majority
10 of the licensing expenditures are a result of the federal COLA process. This
11 value is a combination of NNP team costs and Bechtel COLA team costs.
12 The license and permit applications contain project specific information,
13 assessments and studies requested by various regulatory authorities to support
14 the reviews leading to decisions on the technical, environmental and social
15 acceptability of the project. Other licensing activities include costs associated
16 with the SCA, USACE permits and delegated programs such as Prevention of
17 Significant Deterioration and UIC. In 2013 and 2014 these costs will
18 increasingly be related to preparation and support for hearings that include
19 legal briefs and expert witness testimony. License and permitting costs are
20 developed in accordance with budget and accounting guidelines and policies.
21 Some activities are common between applications, and therefore offer
22 opportunities to coordinate efforts and manage costs. Further, these cost
23 estimates were compared to FPL's extensive experience with the development

1 and permitting of new generation projects in Florida and found to be
2 reasonable.

3 **Q. What are the major differences between the 2013 actual/estimated values**
4 **and those projected in the April 27, 2012 filing for the Licensing**
5 **category?**

6 A. The actual/estimated values for the Licensing category in 2013 are lower than
7 the amount projected for 2013 in 2012. Primarily, the decrease is based on a
8 reduction of contingency in this category to offset additional costs
9 experienced in the Engineering and Design category.

10 **Q. Please describe the activities in the Permitting category for the 2013**
11 **actual/estimated costs and the 2014 projected costs.**

12 A. For the period ending December 31, 2013, Permitting costs are projected to be
13 \$1,030,565 as shown on Line 4 of Schedule AE-6 of SDS-7. For the period
14 ending December 31, 2014, Permitting costs are projected to be \$663,796 as
15 shown on Line 4 of Schedule P-6 of SDS-7. Table 3 of Exhibit SDS-8
16 provides a detailed breakdown of the Permitting subcategory costs, including
17 a description of items included within each category. Permitting costs include
18 costs for the Development team, in-house legal support, and resources to
19 conduct necessary outreach educating stakeholders about the project.

20 **Q. What are the major differences between the 2013 actual/estimated values**
21 **and those projected in the April 27, 2012 filing for the Permitting**
22 **category?**

1 A. The difference is driven by a reduction in labor costs in this category and a
2 reduction in contingency in this category, which combine to offset additional
3 costs experienced in the Engineering and Design category.

4 **Q. Please describe the activities in the Engineering and Design category for**
5 **the 2013 actual/estimated costs and the 2014 projected costs.**

6 A. The Engineering and Design activities performed in 2013 and 2014 are
7 primarily related to supporting the permitting effort for the UIC well system.
8 For the period ending December 31, 2013, Engineering and Design costs are
9 projected to be \$2,720,435 as shown on Line 5 of Schedule AE-6 of SDS-7.
10 For the period ending December 31, 2014, Engineering and Design costs
11 associated with preliminary engineering activities are projected to be
12 \$3,061,439 as shown on Line 5 of Schedule P-6 of SDS-7. Table 4 of Exhibit
13 SDS-8 provides a detailed breakdown of the Engineering and Design
14 subcategory costs, including a description of items included within each
15 category.

16
17 Costs for participation in industry groups include the Electric Power Research
18 Institute Advanced Nuclear Technology working group (with annual fees of
19 \$275,000) and the DCWG (no external charge to participate in this group).
20 The fee for participation in APOG is expected to be \$1.5 million in 2013 and
21 \$2.0 million in 2014. These costs are necessary to obtain the benefits of
22 membership described earlier in this testimony.

1 **Q. What are the major differences between the 2013 actual/estimated values**
2 **and those projected in the April 27, 2012 filing for the Engineering and**
3 **Design category?**

4 A. The major difference is a carryover of costs that were not incurred in 2012 on
5 the UIC exploratory well. Some completion costs associated with the
6 exploratory well carried into 2013 as the final contract discussions were
7 settled with the vendor. Additionally, an increase in APOG fees of
8 approximately \$900,000 is expected as this group assumes some of the work
9 previously accomplished by NuStart.

10 **Q. Please describe the activities in the Long Lead Procurement category for**
11 **the 2013 actual/estimated costs and the 2014 projected costs.**

12 A. For the period ending December 31, 2013, Long Lead Procurement costs are
13 projected to be \$0 as shown on Line 6 of Schedule AE-6 of SDS-7. Future
14 Long Lead Procurement costs are anticipated to be included in the Power
15 Block Engineering and Procurement cost category.

16 **Q. Please describe the activities in the Power Block Engineering and**
17 **Procurement category for the 2013 actual/estimated costs and the 2014**
18 **projected costs.**

19 A. For the period ending December 31, 2013, Power Block Engineering and
20 Procurement costs are projected to be \$0 as shown on Line 7 of Schedule AE-
21 6 of SDS-7. For the period ending December 31, 2014, Power Block
22 Engineering and Procurement costs are projected to be \$0 as shown on Line 7
23 of Schedule P-6 of SDS-7.

1 **Q. Please describe the activities in the Transmission Engineering category**
2 **for the 2013 actual/estimated costs and the 2014 projected costs.**

3 A. For the period ending December 31, 2013, Transmission Engineering
4 expenditures are projected to be \$0 as shown on Line 25 of Schedule AE-6 of
5 SDS-7. For the period ending December 31, 2014, Transmission Engineering
6 expenditures are projected to be \$0 as shown on Line 25 of Schedule P-6 of
7 SDS-7.

8
9 All 2013 and 2014 costs associated with Transmission planning are related to
10 the licensing and permitting activities, and therefore are appropriately
11 included in those categories, described above.

12 **Q. Are FPL's actual/estimated 2013 and projected 2014 Turkey Point 6 & 7**
13 **costs reasonable?**

14 A. Yes. FPL's 2013 and 2014 expenditures are reasonable and necessary to
15 obtain the licenses and permits which will allow FPL to carefully and
16 methodically create the opportunity for additional reliable, cost-effective and
17 fuel diverse nuclear generation to benefit FPL customers. FPL uses a robust
18 system of project controls, systems, and practices to obtain a high level of
19 control over the expenditures incurred and projected. Together, these support
20 a finding that FPL's actual/estimated 2013 and projected 2014 expenditures
21 are reasonable.

22 **Q. Does this conclude your direct testimony?**

23 A. Yes.

1 **BY MS. CANO:**

2 Q. Did you also prefile exhibits to your
3 testimony?

4 A. Yes, I did.

5 Q. And those consist of Exhibits SDS-1 to
6 SDS-10 as corrected by errata filed on July 3rd and
7 July 26th in this proceeding?

8 A. That's correct.

9 **MS. CANO:** Mr. Chairman, I would note that
10 these have been premarked for identification on Staff's
11 Comprehensive List as Exhibit Numbers 2 through 11.

12 **CHAIRMAN BRISÉ:** Thank you.

13 **BY MS. CANO:**

14 Q. Mr. Scroggs, would you please provide an oral
15 summary of your testimony for the Commissioners at this
16 time?

17 A. Yes, I will.

18 Good afternoon, Chairman and Commissioners.

19 The purpose of my testimony is to describe the
20 activities and managerial decisions associated with the
21 Turkey Point Units 6 and 7 project. I will cover the
22 time period from January 2012 to the present and the
23 activities and plans for the project in 2013 and 2014.

24 The Turkey Point project was developed in
25 response to state policies to promote utility investment

1 in nuclear energy to benefit our customers. FPL
2 responded by initiating the steps for this project in
3 2006. The issues that prompted our decision to go
4 forward with this project in 2006 are as important today
5 as they were seven years ago.

6 As shown in Exhibit SDS-9, which we have
7 behind me here, key items are supply reliability through
8 fuel diversity. This project provides an 18 percent
9 less reliant plan once it's in operation from natural
10 gas. The project also provides reasonableness of costs
11 through low cost and stably priced generation. As you
12 can see, the estimates for this year for the project are
13 avoiding \$78 billion worth of fuel costs by having this
14 project on the system.

15 We also have the opportunity to provide some
16 meaningful greenhouse gas reductions by a baseload
17 technology with zero emissions avoiding 265 million tons
18 of CO2. That would be the equivalent of removing
19 50 million cars off the roads every year.

20 Throughout the history of the project, FPL has
21 maintained a very disciplined and step-wise approach
22 that focuses on obtaining all the necessary licenses,
23 certifications, and approvals to allow for construction
24 and operation of the project while keeping a close eye
25 on the first wave of nuclear plants that are under

1 construction now in the United States.

2 We are working diligently now to obtain all
3 the necessary permits and licenses. In fact, this year
4 earlier we obtained the final zoning approval in
5 Miami-Dade County, and we have just completed four weeks
6 of site certification hearing in Miami-Dade County. A
7 good portion of my team is down there today entering
8 into our fifth week of hearings on that project. The
9 project is then scheduled to be heard by the Power Plant
10 Siting Board by the end of this year.

11 The content of my testimony and the
12 accompanying exhibits and detailed filing requirements I
13 sponsor demonstrate that FPL's actual costs in 2012 have
14 been prudently incurred and that FPL's actual/estimated
15 costs for 2013 and projected costs for 2014 are
16 reasonable.

17 My testimony also supports the conclusions of
18 the annual feasibility analysis. The analysis indicates
19 that the project continues to be cost-effective for
20 customers as discussed in more detail by FPL Witness
21 Sim, and offers the benefits of fuel diversity and
22 emission-free generation that led to the Commission's
23 original need order in 2008.

24 I would also point out, as stated in my
25 prefiled testimony, that FPL's nuclear cost-recovery

1 request for Turkey Point Units 6 and 7 seeks only the
2 recovery of costs related to or necessary for obtaining
3 plant licensing and certification.

4 I look forward to answering your questions
5 about this project, and this completes my summary.

6 **MS. CANO:** FPL tenders the witness for
7 cross-examination by SACE.

8 **CHAIRMAN BRISÉ:** Thank you.

9 It is my understanding that the Office of
10 Public Counsel does not have questions for this witness.

11 **MR. MCGLOTHLIN:** Correct.

12 **CHAIRMAN BRISÉ:** And FIPUG does not have
13 questions for this witness either.

14 So, Mr. Cavros, the floor is yours. Cavros,
15 sorry. The floor is yours.

16 **MR. CAVROS:** Thank you, Mr. Chairman.

17 **CROSS EXAMINATION**

18 **BY MR. CAVROS:**

19 Q. Good afternoon, Mr. Scroggs. It's good to see
20 you again. I hope at some point in the future we'll be
21 able to meet in a nonconfrontational fashion.

22 Mr. Scroggs, is it fair to describe your
23 duties with FPL as managing the project activities for
24 Turkey Point 6 and 7 with a focus on obtaining the
25 necessary licenses and authorizations for the project?

1 A. That would be a fair characterization, yes.

2 Q. Okay. And the project in-service dates for
3 Unit 6 is 2022 and 2023 for Unit 7, is that correct?

4 A. That's correct.

5 Q. And that's the in-service dates that you
6 utilized for the feasibility analysis for the project
7 this year, is that correct?

8 A. Could you restate your question?

9 Q. Sure. The 2022 and 2023 in-service dates were
10 utilized for the feasibility analysis this year?

11 A. That's correct.

12 Q. Now, the original in-service dates were 2018
13 and 2020, is that correct?

14 A. That's correct.

15 Q. And those dates were pushed back -- they were
16 pushed out in 2010 to 2022 and 2023, is that correct?

17 A. Yes.

18 Q. Okay. And according to your 2010 testimony,
19 to the best that you can recollect it, the original
20 in-service dates of 2018 and 2020 were based on the
21 premise of having some predictability achieved by 2010,
22 as far as a clear path to construction, is that
23 generally correct?

24 A. Yes.

25 Q. And it is fair to say then at that time that

1 that certain level of predictability was not achieved in
2 2010?

3 **A.** That's correct.

4 **Q.** And is it fair to say that three years later
5 in 2013, as we sit here today, a clear path to
6 construction is still less than predictable?

7 **A.** Yes, there are uncertainties, but there have
8 also been a significant number of events that give us a
9 higher comfort that we are headed in the right
10 direction. We have made progress in all the licensing
11 arenas.

12 **Q.** Okay. Let's talk a little bit about the
13 uncertainties, and let's take those sort of in temporal
14 order. I'm going to refer to these events as
15 contingencies for you to meet the 2022/2023 projected
16 in-service dates as we move forward. Can you explain
17 what a COL, what a combined operating license review
18 schedule is?

19 **A.** A combined operating license review schedule
20 is essentially the schedule that the NRC publishes to
21 estimate what they believe is the upcoming schedule for
22 a project to proceed through application review, report
23 generation, report review, and then the hearings before
24 the ASLB and the ultimate NRC decision.

25 **Q.** Okay. Thank you. And you don't have a COL

1 review schedule from the NRC yet, correct?

2 **A.** We have had a review schedule. Currently the
3 review schedule is under review by the NRC.

4 **Q.** Okay. And this is related to you receiving
5 some requests for additional information from the NRC in
6 2012 and 2013 related to seismic issues, flooding
7 events, and the characterization of alternative sites,
8 is that correct?

9 **A.** Right. We received two -- RAIs in two areas.
10 One relates to a subsection of the environmental report
11 on alternative sites. The other relates to a subsection
12 in the safety report on seismic and geologic issues.

13 **Q.** Uh-huh. And that COL review, or rather the
14 COL has been placed, quote, unquote, under review, is
15 that the appropriate way to describe it?

16 **A.** Correct.

17 **Q.** And you are still working with NRC staff to
18 fully answer their outstanding questions, correct?

19 **A.** Actually, to this date we have responded to
20 all the RAIs that are outstanding with the exception of
21 a few data analyses that they have asked us to produce.
22 We expect to have that provided to them later this year.

23 **Q.** Okay. So that process, then, of fully
24 answering the outstanding questions is not complete as
25 of today?

1 **A.** Not fully complete, no.

2 **Q.** And it's correct that you are going to review
3 your overall project schedule once the revised combined
4 operating license review schedule is published, is that
5 correct?

6 **A.** That's correct.

7 **Q.** And as I believe you indicated before, that
8 review schedule has not been published?

9 **A.** That's correct.

10 **Q.** Okay.

11 **A.** An update to the review schedule has not been
12 published.

13 **Q.** Correct, yes. Isn't it true that that
14 schedule update might not be published until next year?

15 **A.** I can't predict when the NRC is going to
16 produce the updated review schedule. The response that
17 we expect is once we provide them all the information
18 that they have asked for, they would then turn to
19 updating that schedule.

20 **Q.** Okay. Is it possible that that schedule might
21 not be updated until next year?

22 **A.** It's possible.

23 **Q.** And I'd like to ask you to refer to your
24 testimony for May 1st, if you could, on Page 23. I'll
25 give you a second to get there.

1 **A.** 23? I'm there.

2 **Q.** That's correct. If you could go to Line 20,
3 and if you could, please, starting from -- in 2013, if
4 you could read that out loud for the record all the way
5 through to the following page on Line 2?

6 **A.** "The focus remains on obtaining the licenses,
7 permits, and approvals necessary to construct and
8 operate the Turkey Point 6 and 7 project. In 2013, the
9 federal focus will be on completing all outstanding
10 items to allow the NRC to revise the Turkey Point 6 and
11 7 COLA review schedule and publish the SCR and draft
12 EIS. If successful, the project would be on track to
13 complete the NRC and U.S. Army Corp of Engineers
14 processes in 2014."

15 **Q.** Thank you. And on Line 1 of Page 24 you
16 state, if successful, is that correct?

17 **A.** That's correct.

18 **Q.** Okay. In other words, if you meet all the
19 thresholds you had just described previously, then you
20 could get your license by late 2014, is that correct?

21 **A.** Correct.

22 **Q.** Can you explain what a safety evaluation
23 report is, or an SER?

24 **A.** Yes. The safety evaluation report is simply
25 one-half of the combined operating license review

1 process with an attention to those items under the NRC
2 purview related to public health and safety, essentially
3 the safety design of the reactor steam system.

4 Q. Uh-huh, okay. And is it your testimony that
5 you expect to get the draft environmental statement this
6 year?

7 A. That's my testimony.

8 Q. Let me ask you this, what are the chances, and
9 I'll let you describe that however you like, to be
10 successful in, number one, getting the issuance of a
11 revised COLA, yes, an updated COLA review schedule, the
12 issuance of an SCR and the issuance of a draft
13 environmental impact statement in the next four and a
14 half months?

15 A. I wouldn't want to speculate on the chances.
16 I can tell you that we have provided 100 percent of the
17 RAI responses related to the environmental side, so the
18 Section 9.3 that focuses on alternate sites, the NRC
19 staff will have that information and be able to, if they
20 choose to, move forward independently on a schedule for
21 the environmental review. We'll have the environmental
22 or the Section 2.5, seismic and geologic information,
23 available later this fall, and, again, the NRC could
24 proceed independently on the safety track.

25 Q. Okay. You just testified that you expect to

1 get your DIS this year. Isn't that speculation?

2 A. No.

3 Q. Okay. Because you just testified that it
4 would be speculation on your part to quantify the
5 chances of being successful of getting a COLA review
6 schedule, the issuance of an SCR, and the issuance of a
7 draft EIS in the next four and a half months?

8 A. Well, if I can explain?

9 Q. Sure.

10 A. If you put all the events together, there are
11 things that are under FPL's control and things that are
12 not under FPL's control. Things that are not under
13 FPL's control are federal budget issues, sequestration,
14 and other items that affect the NRC's resource and their
15 resource allocation.

16 I have no insight into how they make those
17 choices. I can say that FPL is doing everything under
18 its control to put us in a posture of being able to meet
19 these milestones that you have asked about.

20 Q. Okay. But those uncertainties as they apply
21 to the NRC could impact the schedule related to the
22 draft EIS, is that correct?

23 A. It's possible.

24 Q. And I'm going to ask you for a moment, if you
25 could, just turn to Page 24 of your testimony, line --

1 **A.** Is that May?

2 **Q.** I'm sorry, yes, that's correct. We're on the
3 same testimony. Line 14, Page 24, and it starts with
4 the final EIS. And I would like, if you could, to read
5 from there to Line 18. If you could read that out loud
6 so we could place that in the record.

7 **A.** "The final EIS could be completed within 12
8 months following a period of public comment on the draft
9 EIS. The mandatory NRC hearing that would culminate in
10 granting the combined license could be held within four
11 months of the completion of the final EIS. Completion
12 of the NRC review process could be accomplished in late
13 2014."

14 **Q.** Okay. So let me see if I understand this. So
15 your projected -- let me back up for a second. When
16 would you have to engage in substantive contract
17 negotiations to meet your 2023/2024 time line?

18 **A.** I believe that's 2022 and 2023.

19 **Q.** I apologize, yes.

20 **A.** And I think as we have discussed in previous
21 testimony, our target would be to have a contract in
22 place in early 2015.

23 **Q.** Okay. So as I understand this, then, your
24 projected in-service dates are dependent on, one, the
25 issuance of a revised COLA review schedule, right?

1 **A.** Correct.

2 **Q.** Is one component. The issuance of an SCR,
3 correct?

4 **A.** Correct.

5 **Q.** Okay. The issuance of a draft EIS in the next
6 four and a half months or so, correct?

7 **A.** Yes.

8 **Q.** Okay. Additionally, it's also contingent on a
9 final EIS being completed within 12 months after the
10 hearing and the granting of the COL within four months
11 after the completion of a final EIS, is that right?

12 **A.** The final EIS would have to be complete in a
13 time line to support hearings by the end of 2014, so it
14 depends on a number of serial issues.

15 **Q.** Okay. Wouldn't you agree that's a pretty
16 ambitious schedule of completing outstanding items
17 related to the COL?

18 **A.** In fact, it's the earliest practicable
19 schedule. That's how we refer to the posture we
20 maintain on the project.

21 **Q.** Uh-huh. In fact, there's one more contingency
22 to the granting of a COL to FPL in the time frame you
23 put forth, and that is also the resolution of the Waste
24 Confidence court decision, is that correct?

25 **A.** That's correct.

1 Q. Okay. And I assume you're familiar with that
2 decision and that it has led to the NRC having to
3 complete an environmental impact statement on the
4 long-term storage of highly radioactive nuclear waste,
5 is that correct?

6 A. That's correct.

7 Q. Okay. And no COLs are being issued until
8 that process is complete, right?

9 A. That's my understanding.

10 Q. Okay. And a final EIS and a new Waste
11 Confidence Rule is expected to be promulgated around
12 September of 2014, is that your understanding?

13 A. That's their schedule right now, yes, sir.

14 Q. Okay. And I understand you're not an
15 attorney, but are you familiar with the fact that
16 parties that have legal standing in cases could seek
17 what is called judicial review outside of the agency to
18 seek or resolve questions regarding the legality of any
19 final EIS that might be issued by the --

20 A. I'm not intimately familiar with those
21 details, but I would accept that there is an appeal
22 process possible.

23 Q. Okay. Fair enough. Do you know, and I
24 understand you're not an attorney, but do you know if
25 it's possible that the final EIS that is issued could

1 be stayed during the appeals process?

2 A. I'm not familiar with that.

3 Q. Okay. Are you familiar with how long it may
4 take to resolve a legal issue in federal court? Could
5 it take a year, longer than a year, do you think?

6 A. No position. It's a guess.

7 Q. Okay. But suffice it to say if you don't meet
8 that early 2015 deadline, then those in-service dates --
9 the 2015 deadline for entering into substantive
10 contracts, those 2022/2023 in-service dates won't be
11 met?

12 A. That's correct.

13 Q. Okay. Isn't it true that also sequestration
14 budget cuts are delaying the processing of the COL
15 applications?

16 A. That has not been the feedback I have had from
17 NRC on our application, so --

18 MR. CAVROS: Okay. What I would like to do at
19 this time is mark an exhibit. It's a --

20 CHAIRMAN BRISÉ: (Inaudible; microphone off.)

21 (Exhibits and 113 marked for identification.)

22 MR. CAVROS: Thank you.

23 BY MR. CAVROS:

24 Q. And, this exhibit is described as Platts
25 article on COL delays due to sequester. And if you have

1 that in front of you, Mr. Scroggs, I just want to point
2 you to the first paragraph, and I will read that aloud.
3 The U.S. Nuclear Regulatory Commission said it will not
4 make a decision on Duke Energy's application to build
5 and operate two 1,100 megawatt nuclear units in South
6 Carolina until 2016, three years later than it had
7 planned, because of federal budget cuts. And then it
8 goes on to cite some other decisions by the company.

9 Seeing that, does that change your opinion
10 regarding the impact of the federal budget cuts due to
11 sequestration on the pace of the processing of COL
12 applications?

13 **A.** Well, I believe I answered your question that
14 I have heard nothing from the NRC about sequestration
15 affecting our project and our schedule. I also note the
16 finish of that sentence identifies that Duke made a
17 decision late last year to change the physical location
18 of the reactors. That created a desire on the part of
19 the NRC staff to see additional geologic analysis of the
20 area specifically under where the reactors were being
21 moved. So I understand that there are federal budget
22 issues cited here, but it would be difficult for me to
23 make a judgment on how much those issues played into
24 their decision on schedule and how much the factual
25 issues of the decision to move the reactors played.

1 Q. Okay. So then you haven't accounted for a
2 possible delay in your in-service date testimony due to
3 any federal budget cuts, is that correct?

4 A. That's correct. We are basing it on the most
5 recent NRC schedule that we have had.

6 Q. Okay. And if I could just ask you to turn to
7 Page 27.

8 A. I'm there.

9 Q. And if you could just -- in fact, I will read
10 it out loud. I'm going to read Lines 5 to 7 out loud.
11 "The bid and evaluation activities related to early cite
12 preparation design --

13 A. Excuse me. I don't know that we are in the
14 same place.

15 Q. Oh, I apologize. Page 27, Line 4.

16 A. Of what testimony, March?

17 Q. This is your May, May 1st testimony.

18 A. Okay. I'm not reading what you're reading,
19 so, I'm sorry.

20 Q. Okay. Are you on Page 27 of your May 1st?

21 A. I am.

22 Q. Do you see on Line 5 an answer, "The revised
23 schedule assumes"?

24 A. Yes, I have that.

25 Q. Okay.

1 **A.** I'm sorry, maybe I misheard you.

2 **Q.** Okay. My apologies. It says the revised
3 schedule assumes that bid and evaluation activities
4 related to early cite preparation, design, and planning
5 begin in late 2013 and continue into 2014. Is that
6 preconstruction work unrelated to the pursuance of a
7 combined operating license?

8 **A.** That would have been the plan, yes.

9 **Q.** Okay. Are you familiar with SB 1472, the
10 statute that was passed this year?

11 **A.** Yes, I am.

12 **Q.** Okay. Do you know if that would be
13 permissible under the current statute?

14 **A.** That would be a legal decision. I think the
15 relevant parties, that to the extent that we would
16 decide to go forward with those activities, we would
17 certainly come before the Commission with whatever is
18 determined the appropriate request before we did that.

19 **Q.** Okay. So, in fact, it is true then the
20 company hasn't accounted for the new statute and how
21 that might affect the projected in-service dates, is
22 that correct?

23 **A.** No. To the extent that we are working on the
24 Revision 6 schedule that was produced in 2010, based on
25 the best information that we had available at that point

1 in time, without an updated COLA review schedule and
2 without an understanding of the implementation of
3 SB 1472, it would be very difficult for me to put forth
4 a new schedule.

5 Q. Okay. So the application of SB 1472 will be
6 part of an evaluation you do when you get your new COL?

7 A. We would certainly want to make sure we
8 understand the Commission's desires on that regard and
9 that we would order our work and our requests
10 accordingly.

11 Q. Okay. And sitting here today, you can't
12 guarantee that the in-service dates will be 2022 or 2023
13 for the units, is that correct?

14 A. Correct.

15 Q. And sitting here today, you can't guarantee
16 that the units, in fact, will be constructed at all, is
17 that correct?

18 A. That's correct.

19 Q. Okay. Could I direct you to Page 17, again,
20 on the May 1st testimony?

21 A. I'm there.

22 Q. Great. I'm looking at Line 7, and could you
23 please read that first sentence out loud?

24 A. The collective status of international and
25 domestic projects continues to demonstrate substantial

1 and consistent progress is being made on the next
2 generation of nuclear projects.

3 Q. Thank you. And you are proposing two
4 Westinghouse 1000 AP reactors for Turkey Point, is that
5 correct?

6 A. That's correct.

7 Q. Okay. And you know that Duke Energy has
8 canceled the Levy project last week, right?

9 A. That's not my understanding. My understanding
10 is that they have withdrawn from the nuclear
11 cost-recovery program, but they are maintaining pursuit
12 of the combined license.

13 Q. Okay. Thank you for that clarification. And
14 those were going to be AP1000 reactors, is that correct?

15 A. That's correct.

16 Q. Okay. And in terms of domestic progress, do
17 you still believe that consistent progress is being made
18 on the next generation of nuclear regulators after the
19 motion that was offered here today to defer the NCRC
20 hearing for the Levy project and an associated
21 settlement agreement that cancels the project?

22 A. Yes.

23 Q. Are you familiar with the news that the NRC is
24 delaying a decision on Duke Energy's combined operating
25 license application to build and operate two Lee nuclear

1 units in South Carolina, generally?

2 A. Yes.

3 Q. Okay. And do you know that those are AP1000
4 units?

5 A. Yes.

6 Q. Okay. And do you believe that consistent
7 progress is being made after the announced delay in the
8 Duke Lee nuclear unit combined operating license?

9 A. Yes.

10 Q. Okay. And are you familiar with the news that
11 the Vogtle Plant in Georgia has been delayed 15 months
12 and it has experienced cost overruns?

13 A. Yes.

14 Q. Okay. And those are AP1000 units, also?

15 A. That's correct.

16 Q. And do you believe that consistent progress is
17 still being made considering the Vogtle delays and the
18 cost overruns?

19 A. Yes. The purpose for this is looking at those
20 two plants, Vogtle and Summer, as the first wave of new
21 construction plants. They are the first to receive
22 their combined operating license, they have both moved
23 into full scale construction. And as I have said
24 multiple times throughout my testimony, and particularly
25 in the paragraph that we are looking at is that that is

1 a very important indicator for us, and it is very
2 important for us to understand the lessons that are
3 learned from those projects. And as a prime driver for
4 us taking a very cautious and stepwise approach so that
5 we can observe those developments and how they proceed
6 and understand where we can make better decisions or
7 better contract language or better logistical plans to
8 mitigate any of these delays that are affecting the
9 first wave projects.

10 Q. Okay. And do you likewise agree that the
11 Commission staff, as well, should assess those projects,
12 or your project with the same kind of understanding and
13 cautiousness that you are approaching it with?

14 A. I expect that they will. And in my testimony
15 we provide our perspective on that.

16 Q. Great. Thanks.

17 You garnered a determination of need in 2008
18 for this project, is that correct?

19 A. That's correct.

20 Q. Okay. It's now 2013. It's five years later,
21 and the best nonbinding cost estimate that you can offer
22 the Commission is a range from 12.7 billion to
23 \$18.5 billion for the proposed project, is that correct?

24 A. Yes.

25 Q. Okay. That indicates a great deal of

1 uncertainty on the predictability of the costs moving
2 forward on the construction of the project, isn't that
3 correct?

4 **A.** You could look at it that way. I look at it
5 as a range of -- you know, as we move through the
6 process the goal is to reduce uncertainties. That cost
7 estimate range was developed very carefully in the 2007
8 time frame, and it has really stood the test of time as
9 we have moved forward.

10 I think if you look at the projects that are
11 well into construction, essentially complete with
12 design, complete with engineering, and in the case of
13 Vogtle is 33 percent through construction, our high-end
14 cost estimate exceeds the costs that they are reporting
15 right now by almost \$1,000 per kW in overnight costs.
16 So I think the confidence that the Commission can take
17 from that is, one, we did a very careful job when we
18 started the project. We checked that cost against a
19 price estimate from Westinghouse in 2010, and we
20 provided testimony on that in 2010 extensively, and it
21 has held up to today. And when we do our feasibility
22 analysis, we are comparing the break-even cost against
23 that high end of the range. So to the extent that we
24 are providing a lot of uncertainty in a wide range, we
25 are also providing a lot of confidence in comparison to

1 projects that are being executed right now.

2 Q. Okay. So it's your testimony, then, that you
3 believe this range is reasonable based on the cost of
4 other AP1000 overnight costs and also project total
5 costs, is that correct?

6 A. I believe the range is reasonable based on its
7 merits, the components that we use, the information we
8 use to develop it. In checking that cost estimate range
9 against ongoing projects that are much further along in
10 the pipeline, it gives me great confidence that we have
11 done a good job of bracketing the range.

12 MR. CAVROS: Okay. I'd like to consider that
13 range a little closer, and at this time I'd like to mark
14 an exhibit.

15 CHAIRMAN BRISÉ: Sure. We are at 114.

16 MR. CAVROS: I'm sorry, Chairman, is that 113?

17 CHAIRMAN BRISÉ: 14.

18 MR. CAVROS: Right. Thank you.

19 CHAIRMAN BRISÉ: A short title would be --

20 MR. CAVROS: Concentric Energy Advisors'
21 Estimate of AP1000 Costs.

22 CHAIRMAN BRISÉ: All right. Thank you.

23 (Exhibit Number 114 marked for
24 identification.)

25

1 BY MR. CAVROS:

2 Q. So, Mr. Scroggs, this is a response by FPL to
3 an interrogatory request by staff, and I'd like to -- if
4 you go to the second page, there is a table in the
5 middle of the page, if I could direct your attention
6 there. Concentric uses an overnight cost of \$5,320 per
7 installed kW for the Turkey Point project, is that
8 correct?

9 A. Yes.

10 Q. And in the column adjacent to that, Concentric
11 uses an \$18-1/2 billion cost as the projected cost for
12 the Turkey Point project, is that correct?

13 A. That's correct.

14 Q. Okay. And in that same column, that is the
15 one with the total cost, there are some units with a
16 higher total cost than Turkey Point, than the Turkey
17 Point reactors, is that correct?

18 A. That's correct.

19 Q. And there are some units in that same column
20 with lower costs, total costs, is that correct?

21 A. That's correct.

22 Q. Okay. And if you shift directly to the column
23 to the left, which is price per installed kilowatt, you
24 can see that Turkey Point is not the highest-priced
25 project, is that correct?

1 **A.** That's correct.

2 **Q.** But it is also not the lowest-point project,
3 is that correct?

4 **A.** Correct.

5 **Q.** Okay. There are no units presented here with
6 a 3,659 per installed kilowatt projected overnight cost,
7 is that correct?

8 **A.** That's correct.

9 **Q.** Okay. And that's the low end of the range
10 that you are currently using with this Commission for
11 the overnight cost of the project, is that correct?

12 **A.** That's correct.

13 **Q.** Okay. In fact, isn't it fair to say that
14 there aren't any projects that really come close to a
15 3,659 per installed kilowatt projected overnight cost,
16 overnight cost per project according to this table?

17 **A.** I'm not sure what you would mean by the term
18 close.

19 **Q.** Uh-huh. Within certainly a couple hundred
20 dollars?

21 **A.** If that's your definition, then that's a fact.

22 **Q.** Okay. And isn't it true that going across the
23 first row, that the first two units there, the Summer
24 unit and also the Vogtle unit tend to be the
25 lowest-priced units with the stated overnight costs

1 generally in a little over 4,000 per installed kilowatt?

2 **A.** Yes, and I can offer an explanation as to why.

3 **Q.** Please.

4 **A.** Both the Georgia Power and Summer projects are
5 in construction with projected COD dates in this coming
6 decade. The time effect of escalation on overall cost
7 has a different affect on a project that is five years
8 away from completion than one that's ten years away from
9 completion. So there is a bit of apples and oranges.
10 There's a subtle difference between COD dates that
11 affect that overall cost.

12 Also one of the things that is not captured on
13 this table is the certainty of the price estimate. As I
14 said, with projects that are in construction, those
15 projects have gone through an EPC contract negotiation
16 to fixed prices, they have gone through design, they
17 have gone through procurement, and they are well into
18 construction. That gives you a high confidence that
19 that number is going to be executable, lower
20 uncertainty, higher level of certainty. So the two
21 lowest-cost projects on this table are the ones that are
22 farthest along in the engineering procurement and
23 construction process.

24 **Q.** Those two projects also, those overnight costs
25 and also the projected total price of the units excludes

1 transmission, is that correct?

2 **A.** If I understood your question, the answer
3 would be no. The Summer project excludes transmission.
4 The Vogtle project indicates that it includes
5 transmission.

6 **Q.** I apologize. You're right. Are you familiar
7 with dollar per kilowatt of installed capacity estimates
8 for new reactors that have been offered by rating
9 agencies like Moody's or Fitch?

10 **A.** No, I have not had an opportunity to look at
11 that recently.

12 **Q.** Okay. Sitting here today, you can't guarantee
13 by the time that FPL gets to the construction phase, if
14 ever, that the overnight costs won't be \$7,000 per
15 kilowatt, installed kilowatt, is that correct?

16 **A.** Well, no, I can't guarantee. But we have high
17 confidence that our cost estimate range captures the
18 reasonable ranges of costs. And Witness Sim will
19 discuss the methodology for the annual feasibility
20 analysis which this Commission is well aware of the
21 method that uses the best estimate that can be provided
22 for a comparably sized combined cycle unit and puts them
23 head-to-head against the nuclear unit. The results of
24 those analyses essentially are on the chart behind me,
25 and that is where I gain the confidence that we have

1 applied the same feasibility analysis since 2008, and we
2 have consistently showed, even with swings in natural
3 gas prices and demand, that the project has big benefits
4 for our customers and has continued to be worthy of
5 pursuit.

6 Q. Okay. And I'll get that -- I will get more
7 into that with Witness Sim. But on Page 35 of your
8 testimony -- again, that's the May 1st testimony --
9 starting at Line 10, you itemize costs for which you are
10 seeking recovery, right?

11 A. Correct.

12 Q. Okay. And those costs are related to pursuing
13 a combined operating license, right?

14 A. Yes.

15 Q. Okay. And those costs are ultimately
16 recovered from customers?

17 A. Yes, under the cost-recovery statute.

18 Q. Okay. Well, in light of the proposed
19 cancellation of the Levy project, and the fact that you
20 have testified that you can't guarantee when the
21 proposed reactors will be built, if at all, and the fact
22 that you can't guarantee a price, has the company
23 considered having FPL shareholders cover the cost of
24 obtaining a combined operating license?

25 A. The costs -- the company follows the rules and

1 the procedures of the Commission. Those rules are very
2 clear in identifying how to get to the very complex and
3 difficult task of bringing new nuclear capacity on which
4 is an objective. They want to do it in a very step-wise
5 transparent fashion. That is the policy that we have
6 employed, that's the approach that we have employed, and
7 that's how we see the best way to get to new nuclear
8 capacity in the state.

9 **Q.** Okay. So it's fair to say then that there is
10 no policy at FPL whereby shareholders would engage in
11 sharing some of the risk in the licensing process?

12 **A.** Well, I don't necessarily accept your premise
13 that the shareholders don't share in some of the risk.
14 The nuclear cost-recovery process provides us a vehicle
15 to move forward on some of the long-term long-lead
16 items, like licensing and permitting, to get to a point
17 where we have a very good idea of what it's going to
18 cost to execute.

19 When we move to that execution phase, the
20 money is not going to come from customers. The money is
21 going to come from the financial institutions that
22 provide money for us to invest that capital. And the
23 confidence that those financial institutions have in an
24 FPL project is largely based on the positive
25 relationship that we have with the regulator. So I

1 think the nuclear cost-recovery rule is important to
2 give the financial institutions confidence, but at the
3 end of the day it is our stockholders, shareholders that
4 are going to be responsible for the investments that we
5 make and the risks that we take in recovering that
6 through the regulatory process.

7 Q. Uh-huh. Notwithstanding that, if FPL would
8 walk away from the project at some future point, like
9 Duke Energy did, they would be entitled to recover all
10 preconstruction and construction costs, is that correct?

11 A. That's the process, yes, sir.

12 Q. Isn't it true that FPL is going to cancel its
13 forging reservation agreement?

14 A. I'm not aware of that.

15 Q. Okay. You have a forging reservation
16 agreement, is that correct?

17 A. That's correct.

18 Q. And that agreement is going to expire in
19 October, is that correct?

20 A. That's correct.

21 Q. Okay. And what does the company intend to do
22 at that time?

23 A. As we have always done, we are on the 11th
24 amendment of that reservation forging agreement because
25 we want to get the best result for the customers. If we

1 were to just simply use the language in the current
2 amendment and execute it, we would potentially forfeit
3 our forging agreement fee. And we are not keen to do
4 that, so we continue to engage with Westinghouse to find
5 the best way. All avenues are being explored to get the
6 best result for our customers.

7 **Q.** Okay. And how would you answer this question,
8 if FPL was committed to actually building the project,
9 why wouldn't it just enter into a forging agreement this
10 year?

11 **A.** Well, FPL intends to complete this project. I
12 have had enough conversations with you, and I understand
13 that it seems that there is a desire to see FPL put down
14 large sums of money in order to show some level of
15 commitment. We don't think that's in the best interest
16 of the customers to do that until we have a very
17 well-defined price estimate, an execution schedule, and
18 a handful of licenses and permits that define the
19 project. So it's not in the customer's best interest,
20 it's not in the state's best interest for us to enter
21 into any contract or any expenditures prematurely.
22 That's how we have managed the program from day one.

23 **Q.** Isn't it true, though, that as you sit here
24 today, FPL has not made the decision to proceed to the
25 construction phase of the project?

1 **A.** That's correct.

2 **Q.** Okay. At Page 33 of your testimony, you state
3 that FPL will continue its dialogue with the financial
4 community to maintain FPL's ability to obtain financing
5 at reasonable terms, is that right?

6 **A.** That's correct.

7 **Q.** Okay. Is it fair to say that if you can't
8 obtain financing that is consistent with your cost of
9 raising debt on other regulated investments that the
10 company will consider abandoning the project?

11 **A.** I'm sorry, could you state the question again
12 to make sure I heard it right?

13 **Q.** Sure. Is it fair to say that if you can't
14 obtain financing that's consistent with your cost of
15 capital that the company would consider abandoning the
16 project?

17 **A.** I think it's one of several very important
18 factors. We definitely would want to obtain the best
19 rates and best terms and that's a part of the overall
20 project decision.

21 **Q.** Okay. So how high above your cost of raising
22 debt at the time of financing would the company go
23 before considering abandoning the project?

24 **A.** I'm not in a position to answer for the
25 company on that.

1 Q. Okay. So you couldn't say if it was one
2 percent, two percent, one and a half percent?

3 A. Not in my testimony.

4 Q. Okay. You point to the Vogtle and Summer
5 plants as encouraging signs that reasonable financing
6 can be obtained, is that right, generally?

7 A. In general, yes.

8 Q. Okay. And you know that the Vogtle plant is
9 in the process of obtaining a federal loan guarantee?

10 A. I understand that Vogtle is in the process of
11 negotiating, that they have been negotiating for some
12 years, and I'm anxious to see what comes out of that.

13 Q. Sure. And that would necessarily have the
14 effect of spreading out the risk. Generally, when there
15 is lower risk there is a lower interest rate, is that
16 correct?

17 A. You know, our goal would be to get the best
18 deal for our customers. If the federal government
19 offers a loan guarantee program that we qualify for and
20 we can be certain that it provides value for FPL's
21 customers, we would definitely participate.

22 Q. Uh-huh. And you know that the Summer project
23 has multiple owners, right, essentially splitting the --

24 A. I understand that.

25 Q. Okay. And that would necessarily also have

1 the effect of spreading out the risk, and generally when
2 there is lower risk there is a lower interest rate, is
3 that correct?

4 **A.** That's a general principle.

5 **Q.** Generally. Okay. And you don't have a loan
6 guarantee at this time or --

7 **A.** That's correct.

8 **Q.** Okay. And you don't have a co-owner yet, is
9 that correct?

10 **A.** That's correct.

11 **MR. CAVROS:** Okay. Those are all the
12 questions I have for you. Thank you, Mr. Scroggs.

13 **CHAIRMAN BRISÉ:** I think staff has some
14 questions.

15 **MR. YOUNG:** Yes, sir. If I can get a second
16 to check my notes.

17 **CHAIRMAN BRISÉ:** Sure.

18 **CROSS EXAMINATION**

19 **BY MR. YOUNG:**

20 **Q.** Good afternoon, Mr. Scroggs.

21 **A.** Good afternoon, sir.

22 **Q.** Does FPL have an agreement with a third party
23 ownership with respect to the Turkey Point 6 and 7?

24 **A.** We do not have an ownership agreement. We do
25 have an option agreement with Orlando Utilities

1 Commission.

2 Q. Okay. In your testimony looking at economic
3 feasibility, in your May 1st, 2013, prefiled testimony,
4 Page 4, you list diversification of FPL fuel source as a
5 benefit of Turkey Point 6 and 7, correct?

6 A. That is correct.

7 Q. Why is that important?

8 A. Well, at present the state, or FPL's system is
9 very dependent on natural gas. That is a result of
10 decisions made over the last 10, 15, 20 years for our
11 baseload generation. It has been beneficial in terms of
12 greenhouse gases and costs in many respects, but it does
13 put us subject to a large amount of dependence on
14 natural gas and the deliverability of that through two
15 pipelines into the state.

16 Q. Okay. On Lines 14 through 16 on the same
17 page, you claim that Turkey Point 6 and 7 units will
18 provide FPL customers with a fuel cost savings of
19 \$78 billion, correct?

20 A. That is correct.

21 Q. What's the basis for this \$78 billion claim?

22 A. This is the incremental value of a plan that
23 includes Turkey Point 6 and 7 as compared to a plan that
24 includes a similarly sized combined cycle unit and the
25 savings in natural gas costs that we would expect over a

1 40-year term for our medium fuel forecast. So with the
2 higher forecast it would be higher and in the lower
3 forecast it would be lower.

4 Q. Looking at Page 9 of your May 1st testimony,
5 you claim that the nuclear recovery clause provides
6 savings for FPL customers, and in a response to your --
7 in a response to an interrogatory, staff interrogatory
8 you cosponsored Staff's Fifth Set of Interrogatories,
9 Interrogatory Number 5028, which is Hearing Exhibit
10 Number 74, and you claim that customers will realize
11 between 7.4 and \$10.6 billion. Are you familiar with
12 that?

13 A. Yes, I am.

14 Q. Can you explain how do you -- how the savings
15 occur?

16 A. Well, primarily the savings occur from the
17 nuclear cost-recovery's approach of paying interest
18 during the construction period. So as the capital
19 balance grows as the plant is being constructed, we are
20 paying off interest each year instead of letting that
21 interest accumulate and compound providing a much larger
22 amount that would need to be moved into base rates upon
23 commercial operation.

24 Q. Now, looking at the regulatory feasibility,
25 again, in your May 1st, 2013, prefiled testimony

1 beginning on Page 15, you discuss the potential impacts
2 of the Turkey Point Unit 6 and 7 project such as the
3 March 2012 earthquake, the tsunami in Japan, and the
4 Waste Confidence Rule, to name a few. Considering the
5 potential impact on these issues you discussed, how can
6 you conclude that on Lines 16 and 17 on the same page,
7 Page 15, that the NRC actions and plans maintain, and I
8 quote, a stable regulatory environment for U.S. -- in
9 the U.S., unquote?

10 **A.** I would basically say in our experience with
11 the Generation 2 plants, following Three Mile Island and
12 other processes there was considerable instability in
13 the regulatory environment. What has occurred since
14 then is the NRC redrafting the entire licensing process
15 so that it is a combined license. You have a license to
16 operate and a license to construct in one, and a very
17 well-informed process by which changes that occur during
18 that are folded in and looked at.

19 What we understand is with the new licenses
20 that are under review, the NRC has indicated that they
21 feel that the structure of the Part 52 process is
22 sufficient to bring in any changes that might be
23 identified from the March 2011 tsunami and earthquake in
24 Japan into any future design changes. So the stability
25 isn't no changes at all; the stability is there is a

1 process by which those changes can be addressed without
2 derailing unnecessarily other projects that are in
3 progress.

4 **MR. YOUNG:** All right. Thank you. No further
5 questions.

6 **CHAIRMAN BRISÉ:** Okay. Thank you.

7 Commissioners?

8 Commissioner Balbis.

9 **COMMISSIONER BALBIS:** Thank you, Mr. Chairman.
10 I have a few questions.

11 Welcome, Mr. Scroggs. Good to see you, again.

12 **THE WITNESS:** Good afternoon, sir.

13 **COMMISSIONER BALBIS:** I want to talk a little
14 bit about the NRC and the seismic issues and other
15 issues brought forth in their quest for additional
16 information. And you had a lot of clarification to that
17 that resolved some of my questions, but my question for
18 you is the additional information that was requested,
19 was that because of new requirements from NRC or just
20 information that was missing in your application that
21 should have been included?

22 **THE WITNESS:** Thank you. That's a great
23 question. I think that it is something in the middle.
24 There are no new requirements that have been generated
25 out of the March -- following the March 2011 incident in

1 Japan. What has been done is that staff now understands
2 and has a higher level of scrutiny on those topics and
3 has the ability to interpret what additional information
4 they'd like to see. I think as I reminded folks last
5 year, the NRC is totally reliant on information provided
6 by the applicant to make their decision. So as these
7 events have occurred, there has been a whole lot of
8 study of the specific events, there has been a lot of
9 retroactive review of existing plants in the United
10 States, there has actually been changes to the seismic
11 model that's used to model these events in the United
12 States.

13 Because all of those changes and additional
14 scrutiny, additional questions popped up. So what we
15 provided in 2009 was adequate in 2009. There were
16 deficiencies in certain areas, but it was essentially
17 adequate. What we have been responding to since then
18 has been an added heightened scrutiny that we are happy
19 to provide answers to. A specific example is we are
20 gathering new samples from beneath the site to provide
21 better compression testing to estimate the strength of
22 the rock down there. We have already provided what
23 would have been acceptable in 2009, but they are wanting
24 a little bit more, so we are providing that information.

25 **COMMISSIONER BALBIS:** Okay. And I guess what

1 I'm confused about is -- and it may have been a deja vu
2 moment, but I believe last year we had an extensive
3 discussion about this, and I believe there was an
4 exhibit entered in. It was an actual letter from NRC.
5 So is this additional information that's required this
6 year, or is it still FPL responding to that letter and
7 providing that additional information which takes an
8 extended period of time?

9 **THE WITNESS:** There's a little bit of both.
10 The information that was identified as deficient was
11 essentially a judgment on the part of the expert at the
12 NRC that it didn't completely answer all the questions
13 they wanted answered. So we worked with them to flesh
14 those out in more detail, send it back to our experts,
15 have them review it. We had other experts review the
16 expert's work to make sure that they were completely and
17 comprehensively answering the question and provided
18 those answers.

19 In addition to that, through the course of
20 looking at that information the NRC developed additional
21 requests that we are responding to.

22 **COMMISSIONER BALBIS:** Okay. I will change
23 gears a little bit. In your testimony you discussed a
24 Miami-Dade zoning process, and FPL's decision to go
25 ahead and, I guess, reply for the zoning approval.

1 Could you just update as to where FPL is in that
2 process?

3 **THE WITNESS:** Yes. We applied for zoning on
4 several specific project features, the reclaimed water
5 treatment facility and the radio collector wells that
6 weren't specified in the 2007 zoning approval that we
7 received from Miami-Dade County. In July of this last
8 year we reapplied for specifically zoning approval for
9 those two new features. We received that zoning
10 approval in January of this year, and a month later we
11 received an affirmative land use determination from the
12 county that said the property and the project is
13 consistent with land use in Miami-Dade County. So we
14 are complete with the Miami-Dade County approval
15 process.

16 **COMMISSIONER BALBIS:** Okay. And just
17 additional clarification on the forging agreement. Is
18 there an evergreen provision of that agreement that will
19 allow continuous extensions, or do you --

20 **THE WITNESS:** There is not an evergreen on
21 purpose. I specifically asked for a six-month extension
22 to force the parties back to the table every six months
23 and say what is our best information now, what is our
24 best opportunities now, can we do something now, or
25 should we extend again. And so it is by choice and by

1 design that we do not have an evergreen, but each period
2 we renegotiate an extension.

3 **COMMISSIONER BALBIS:** Do you anticipate that
4 at any time that the extension will require costs or
5 payment?

6 **THE WITNESS:** That may be one result, but we
7 would certainly seek to minimize any cost or payment.
8 Actually, I'm sorry, what's on the table is we have made
9 a -- we have provided a fee. We have submitted to
10 Westinghouse a fee, and the question is how much of that
11 fee do we get refunded. So there wouldn't be additional
12 costs; it's a matter of what level of refund can we
13 negotiate.

14 **COMMISSIONER BALBIS:** But that fee, the
15 recovering of that fee is not included in this year's
16 proceeding?

17 **THE WITNESS:** No, because it was -- cost was
18 laid out in 2008. We have already recovered for that in
19 previous years. So the question now is what level of
20 refund do we get if we unwind the reservation agreement.

21 **COMMISSIONER BALBIS:** Okay. And then the last
22 question. It's my understanding just through press
23 releases, articles, et cetera, that Florida Power and
24 Light was opposed to Senate Bill 1472 in some fashion,
25 is that correct?

1 **THE WITNESS:** Yes, sir. I provided testimony
2 to the Senate and the House committees on that topic.

3 **COMMISSIONER BALBIS:** And were there lobbyists
4 that were retained and other actions taken by FPL in
5 order to oppose that bill?

6 **THE WITNESS:** I worked with our governmental
7 affairs folks up here, so -- they're FPL employees. I
8 don't know if they engaged other lobbyists.

9 **COMMISSIONER BALBIS:** Okay. And the reason
10 why I'm asking is that in both your March 1st and May
11 1st exhibits, SDS-6 and SDS-8, in SDS-6 there is a
12 \$470,000 cost that's just labeled regulatory affairs,
13 and in SDS-8 there's a \$636,000 cost. And I just want
14 to make sure, or find out what makes up those costs?

15 **THE WITNESS:** Yes. Thanks for asking. There
16 are no costs associated with lobbying or anything close
17 to lobbying in these cost-recovery requests. That is
18 not something that we would include in the cost-recovery
19 requests. It's nothing that I know about as the project
20 manager. The numbers that you see under regulatory
21 affairs are essentially for the support of the nuclear
22 cost-recovery proceeding. So the regulatory affairs
23 specialists that we have here and that I work with
24 throughout the year to make all the filings, respond to
25 the discovery, put the MFRs into the right situation,

1 that's the cost related to that.

2 **COMMISSIONER BALBIS:** Okay. And so you
3 anticipate with us approving the stipulation that the
4 \$636,000 cost should go down upon true-up?

5 **THE WITNESS:** Those are the costs that I
6 estimate for 2012. They are actual true-up costs. For
7 2013, if the cost of regulatory support goes down, you
8 will not be billed for that.

9 **COMMISSIONER BALBIS:** Okay. Thank you.
10 That's all I had.

11 **CHAIRMAN BRISÉ:** Thank you, Commissioner
12 Balbis.

13 Commissioner Brown.

14 **COMMISSIONER BROWN:** Hi. Good afternoon.

15 **THE WITNESS:** Good afternoon.

16 **COMMISSIONER BROWN:** I just have one question
17 for you. In your opening intro statement you said that
18 FPL takes a very disciplined approach to managing costs.
19 And I know in your Direct Prefiled Testimony you stated
20 that FPL is involved and participates in various
21 industry groups focused with identifying and resolving
22 issues related to licensing, but it appears that
23 licensing costs continue to increase.

24 I know that you estimated in 2014 them to
25 drop, so would you say that the current trend, I guess,

1 across-the-board with the other electric utilities that
2 are deploying new nuclear projects, would you say that
3 the trend is that these licensing costs are increasing?

4 **THE WITNESS:** I'm not sure. I really don't
5 have the information from that. The industry groups
6 that you pointed to are really focused on plant
7 construction and plant operation, personnel type
8 decisions, training, so they are not as focused. We
9 don't share a lot of information on our individual
10 licensing experiences. In our case, our original
11 estimate and when we started this process was very much
12 more along the statutory lines for the site
13 certification process and the experience that Vogtle and
14 Summer had in the federal process.

15 We have had a protracted go of it in both
16 venues, so we have experienced a little higher cost, and
17 I don't know if that's the result of being later in the
18 queue and being subject to certain resource issues or if
19 is there a trend there. But we have been, from the
20 start, overall pretty close to what we thought the costs
21 were going to be. We thought all those costs would be
22 expended in several years. We have stretched that out,
23 but we have been able to maintain those costs
24 essentially in the same range. So we have dialed down
25 on the resources. We have tightened up on the costs as

1 we have seen the regulatory process take longer.

2 **COMMISSIONER BROWN:** Thank you. That's all.

3 **CHAIRMAN BRISÉ:** Commissioners. Okay. I have
4 maybe one or two questions for you. Have you seen
5 yourself professionally any other projects come to
6 fruition?

7 **THE WITNESS:** I have seen the Vogtle and
8 Summer projects move into nuclear grade construction.
9 That's a very significant milestone for nuclear
10 construction in the United States. I have also seen,
11 obviously, our uprate projects move into a position
12 where we are providing 100 percent of what was -- or
13 actually more than 100 percent of what was targeted for
14 those projects.

15 **CHAIRMAN BRISÉ:** Okay. So based upon what you
16 have seen professionally, what would you rate the
17 possibility of this project coming into fruition or into
18 operation based upon the steps that are being taken?

19 **THE WITNESS:** I think taking a look at our
20 track record over the course of time, we have been very
21 up front about the challenges of a complex project like
22 this. We have talked about controlling the spend and
23 controlling the approach relative to things that we
24 can't control, such as the regulatory process, and
25 that's so that we keep this opportunity alive for our

1 customers. The numbers over my shoulder are what tell
2 us we're moving in the right direction. If we keep
3 doing it in a very disciplined manner and a very
4 controlled manner, we can get there.

5 **CHAIRMAN BRISÉ:** Okay. Final question. So as
6 you sit here today, you can't definitively say that FPL
7 is in the posture to say, yes, we're going to construct?

8 **THE WITNESS:** As I sit here today, I cannot
9 commit on a date certain and a cost certain. I can tell
10 you it is every bit the company's intention to complete
11 this project.

12 **CHAIRMAN BRISÉ:** Okay. So just for
13 clarification, the intent -- as it sits today based on
14 all the information that you have today, the intent is
15 to build?

16 **THE WITNESS:** Yes, sir.

17 **CHAIRMAN BRISÉ:** Okay. Thank you.

18 Any further questions, Commissioners?

19 All right. Redirect.

20 **MS. CANO:** No redirect.

21 **CHAIRMAN BRISÉ:** Okay. Thank you. I think we
22 have some exhibits that we need to enter.

23 **MS. CANO:** Thank you. FPL would move Exhibits
24 2 through 11 into the record.

25 **CHAIRMAN BRISÉ:** Okay. We will move Exhibits

1 2 through 11 into the record. Seeing no objections?

2 Okay.

3 (Exhibit Numbers 2 through 11 entered into the
4 record.)

5 **CHAIRMAN BRISÉ:** Mr. Cavros.

6 **MR. CAVROS:** Thank you. And SACE would move
7 Exhibits 113 and 114 into the record.

8 **CHAIRMAN BRISÉ:** We will move Exhibits 113 and
9 114 into the record. Seeing no objections?

10 (Exhibit Numbers 113 and 114 entered into the
11 record.)

12 **CHAIRMAN BRISÉ:** Staff, there were no exhibits
13 that you offered. Okay.

14 Is there anything further for this witness?

15 **MS. CANO:** No, but we'd ask that this witness
16 be excused.

17 **CHAIRMAN BRISÉ:** Okay. I just want to make
18 sure that everyone is good with that. If there were no
19 issues on rebuttal, if you had any rebuttal. Okay.

20 Thank you. So with that, Mr. Scroggs, thank
21 you for your testimony today, and you are certainly
22 excused.

23 **THE WITNESS:** Thank you, sir.

24 **CHAIRMAN BRISÉ:** All right.

25 (Transcript continues in sequence

1 with Volume 4.)

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

1 STATE OF FLORIDA)

2 : CERTIFICATE OF REPORTER


3 COUNTY OF LEON)

4
5 I, JANE FAUROT, RPR, Chief, Hearing Reporter
6 Services Section, FPSC Division of Commission Clerk, do
7 hereby certify that the foregoing proceeding was heard
8 at the time and place herein stated.

9 IT IS FURTHER CERTIFIED that I
10 stenographically reported the said proceedings; that the
11 same has been transcribed under my direct supervision;
12 and that this transcript constitutes a true
13 transcription of my notes of said proceedings.

14 I FURTHER CERTIFY that I am not a relative,
15 employee, attorney or counsel of any of the parties, nor
16 am I a relative or employee of any of the parties'
17 attorney or counsel connected with the action, nor am I
18 financially interested in the action.

19 DATED THIS 14th day of August, 2013.

20
21
22
23
24
25


JANE FAUROT, RPR
Official FPSC Hearings Reporter
(850) 413-6732