

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

**DOCKET NO. 150009-EI
FLORIDA POWER & LIGHT COMPANY**

MARCH 2, 2015

**IN RE: NUCLEAR POWER PLANT COST RECOVERY
FOR THE YEAR ENDING
DECEMBER 2014**

**TESTIMONY & EXHIBITS OF:
STEVEN D. SCROGGS**

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

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
FLORIDA POWER & LIGHT COMPANY
DIRECT TESTIMONY OF STEVEN D. SCROGGS
DOCKET NO. 150009-EI
March 2, 2015

Q. Please state your name and business address.

A. My name is Steven D. Scroggs and my business address is 700 Universe Boulevard, Juno Beach, FL 33408.

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

A. I am employed by Florida Power & Light Company (FPL) as Senior Director, Project Development. In this position I have responsibility for the development of power generation projects.

Q. Please describe your duties and responsibilities with regard to the development of new nuclear generation to meet FPL customer needs.

A. Commencing in the summer of 2006, I was assigned the responsibility for leading the investigation into the potential of adding new nuclear generation to FPL's system, and the subsequent development of new nuclear generation additions to FPL's power generation fleet. I currently lead the development of FPL's Turkey Point Nuclear Units 6 and 7 (Turkey Point 6 & 7).

Q. Please describe your educational background and professional 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. I was appointed to my current position in 2006.

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 2014. Accordingly,
13 this testimony contains information with respect to the project as of December
14 31, 2014. My testimony describes the deliberate, stepwise process FPL
15 continued to manage so that FPL will have the opportunity to add new nuclear
16 generation capacity for its customers. Specifically, I discuss the progress
17 made on the project, key issues faced in 2014, and how those issues were
18 evaluated and resolved. I also explain the Turkey Point 6 & 7 project internal
19 controls and how those controls, supported by internal and external oversight,
20 provided for diligent and professional project execution. Further, my
21 testimony provides the actual expenditures incurred in 2014 and compares
22 those expenditures to the actual/estimated values provided to the Florida
23 Public Service Commission (FPSC) on May 1, 2014. Collectively, my

1 testimony provides the information necessary to demonstrate that FPL's 2014
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. 2014 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. 2014 Project Costs

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

12 A. During 2014, FPL continued to make progress on the licensing and permitting
13 activities required for the Turkey Point 6 & 7 project, and maintained costs
14 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 2014 annual
18 feasibility analysis approved by FPSC Order No. PSC-14-0617-FOF-EI.

19

20 On May 13, 2014, FPL was granted State Site Certification by the Power
21 Plant Siting Board for Turkey Point Units 6 & 7. The Final Order provides
22 Certification for the Turkey Point 6 & 7 project, including all associated
23 transmission lines and facilities. In the Nuclear Regulatory Commission

1 (NRC) licensing process, significant progress was made including receipt of a
2 revised NRC Review Schedule for completing the Combined License (COL)
3 process. Receipt of the revised schedule allowed FPL to conduct a more
4 complete and informed review of the overall project schedule. As a result, the
5 project schedule has been revised, as discussed later in this testimony. FPL
6 has maintained its disciplined and steady approach in the execution of the
7 project, while displaying a willingness to adapt project timelines to ensure an
8 inclusive and complete review.

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

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

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

- 1 • SDS-1, consisting of True-up (T) Schedules covering the 2014 actual
2 period for the Turkey Point 6 & 7 project Site Selection and Pre-
3 construction costs. SDS-1 contains a table of contents listing the T-
4 Schedules sponsored and co-sponsored by FPL Witness Grant-Keene and
5 by me, respectively.
- 6 • SDS-2, consisting of a table listing all licenses, permits and approvals FPL
7 is preparing to support the Turkey Point 6 & 7 project.
- 8 • SDS-3, consisting of a graphic that compares prior and current Turkey
9 Point 6 & 7 project schedules.
- 10 • SDS-4, consisting of a comprehensive list of procedures and work
11 instructions that governed the internal controls processes.
- 12 • SDS-5, consisting of a list describing various project reports, their
13 periodicity and target audience.
- 14 • SDS-6, consisting of a comprehensive list of project instructions and
15 forms utilized in 2014.
- 16 • SDS-7, consisting of summary tables of the 2014 expenditures.

17
18
19

HIGH LEVEL PROJECT SUMMARY AND ISSUES

- 20 **Q. What is the Turkey Point 6 & 7 project?**
- 21 A. The project consists of a two-unit nuclear generating station with associated
22 linear and non-linear facilities. The AP1000 units designed by Westinghouse
23 will each produce 1,100 megawatts (MW). Linear facilities include five

1 transmission lines, a reclaimed water supply pipeline, potable water lines and
2 a series of roadway improvements in the region. Non-linear facilities include
3 a reclaimed water treatment facility, various buildings and facilities on the
4 Turkey Point site and mitigation projects in the region surrounding the plant.
5 In 2014 the project continued to focus on obtaining the licenses, permits and
6 approvals necessary for construction and operation. A list of these licenses,
7 permits and approvals is included in Exhibit SDS-2.

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

10 A. The benefits to FPL customers offered by additional nuclear generation are
11 numerous. The key benefits relate to FPL's core mission of providing reliable
12 electric service at reasonable rates. The fuel required for nuclear generation is
13 not dependent on natural gas pipelines, railroad or maritime distribution
14 systems or subject to volatile energy markets. Therefore, nuclear generation
15 greatly adds to the reliability of a system by increasing fuel diversity, fuel
16 supply reliability and energy security. Nuclear fuel markets provide a stable
17 cost input reducing the impact to monthly customer bills that result from fuel
18 price volatility. In addition, the location of 2,200 MW of baseload generation
19 in Miami-Dade County helps to maintain a balance of generation and load in
20 Southeastern Florida. The feasibility analyses approved by the FPSC in 2008
21 through 2014 demonstrate the robust cost-effective nature of nuclear
22 generation when compared to other baseload generation alternatives. Finally,
23 nuclear generation is recognized as an important component of meeting state

1 and national energy goals including addressing greenhouse gas reduction. By
2 employing an approach that maintains progress, even during dynamic and
3 demanding times, FPL is creating the opportunity to deliver those benefits on
4 the earliest practicable schedule.

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

7 A. By taking the steps to obtain the licenses and approvals, further defining the
8 specific project, the opportunity and timeline for customers to benefit from
9 this valuable generation source is more certain. With this approach FPL is
10 accomplishing several key objectives. First, the uncertainties around the
11 approval process are reduced and the final definition of the project is refined.
12 Second, the market for providing the equipment and services needed to
13 construct the project is allowed to further mature, leveraging observations
14 from first wave projects. Lastly, the decision to initiate construction activities
15 will be made with very current information providing the best decision basis.

16
17 By applying this deliberate and flexible approach, FPL is able to maximize
18 progress and the collection of information necessary to make subsequent
19 decisions, while minimizing the current cost exposure of customers.

20 **Q. What project-specific issues were monitored in 2014 for the potential**
21 **impact to cost and schedule of the Turkey Point 6 & 7 project?**

22 A. Project specific issues include 1) FPL system and regional economic
23 developments influencing the annual feasibility analysis, and 2) the pace and

1 outcome of permit and license application reviews, and 3) the impact of
2 revised NRC Review Schedules and the 2013 amendment to the Nuclear Cost
3 Recovery Statute and Rule.

4 **Q. Was the feasibility of the Turkey Point 6 & 7 project re-evaluated in**
5 **2014?**

6 A. Yes. A complete feasibility analysis was conducted to review the economics
7 of the project using updated assumptions for system demand, fuel forecasts,
8 environmental compliance costs, and alternative generation costs. The
9 analysis is a two-step process, consistent with the original analysis supporting
10 the 2008 Need Order.

11
12 The first step takes the form of developing a “break-even” cost to determine
13 what the nuclear project could cost while remaining economically competitive
14 with alternative baseload generation sources. That “break-even” cost is
15 compared to the high end of the project cost estimate range. These results
16 confirmed the economic feasibility of the Turkey Point 6 & 7 project.
17 Additionally, it should be noted that a nuclear facility is the only meaningful
18 opportunity to deliver the qualitative benefits of fuel diversity, energy security
19 and zero greenhouse gas emissions. An updated feasibility analysis will be
20 submitted on May 1, 2015 in the FPSC Nuclear Cost Recovery Clause
21 (NCRC) filing.

22 **Q. Did FPL have sufficient, meaningful, and available resources dedicated to**
23 **the Turkey Point 6 & 7 project in 2014?**

1 A. Yes. As demonstrated throughout this testimony, FPL had in place an
2 appropriate project management structure that relied on both dedicated and
3 matrixed employees, the necessary contractors for specialized expertise, and a
4 robust system of project controls. These resources enabled the project to
5 make significant progress in the current licensing phase.

6

7

2014 PROJECT ACTIVITIES AND RESULTS

8

9 **Q. What were the major activities for the Turkey Point 6 & 7 project during**
10 **2014?**

11 A. The major activities focused on completing the agency reviews of the federal
12 and state applications, and activities supporting conversion of the
13 Underground Injection Control (UIC) exploratory well at the project site.
14 Following receipt of a revised NRC COL Application Review Schedule, FPL
15 conducted a project schedule review and revised the expected in-service dates.

16 **Q. Please summarize the progress FPL made on the Turkey Point 6 & 7**
17 **project in 2014.**

18 A. FPL made measurable progress in all regulatory processes towards obtaining
19 all necessary licenses, permits, and approvals. The three key processes
20 include the COL process administered by the NRC, wetland permits under the
21 jurisdiction of the US Army Corps of Engineers (USACE), and the Site
22 Certification process, coordinated by the Florida Department of
23 Environmental Protection (FDEP). In general, 2014 largely completed the

1 information exchange with the federal agencies and finalized the state
2 certification.

3

4 Specific areas of focus in the NRC process included completing the safety and
5 environmental information requirements in 2014. The submission and
6 subsequent acceptance of the information by the NRC led to the NRC
7 publishing a revised review schedule. The USACE permitting process, as
8 designed, has maintained pace with the NRC process.

9

10 In the state Site Certification process, the Power Plant Siting Board conducted
11 a final hearing and approved the Final Order for the Site Certification of the
12 Turkey Point Units 6 & 7 project, including transmission corridors and
13 ancillary facilities. The Final Order was appealed by four entities (Miami
14 Dade County, City of Miami, City of South Miami and the Village of
15 Pinecrest).

16

17 Additional progress in 2014 included testing the UIC operating well. The
18 FDEP accepted and approved the injection test results on June 2, 2014.

19

20 Project staff also continued to monitor industry milestones and events to
21 identify potential impacts to the overall Turkey Point 6 & 7 project cost and
22 schedule and provide indicators as to when preparation phase activities are
23 warranted. Activities also included continued involvement in industry groups

1 and site visits to observe key construction milestones at Southern Company's
2 (Southern) Vogtle Electric Generating Plant (Vogtle) and SCANA
3 Corporation's (SCANA) Summer AP1000 projects in Georgia and South
4 Carolina, respectively.

5 **Q. Please describe the negotiation or execution of any commercial or**
6 **development agreements supporting the Turkey Point 6 & 7 project in**
7 **2014.**

8 A. FPL and Westinghouse continued discussions regarding the Forging
9 Reservation Agreement. In April, it was agreed to extend the expiration date
10 of the current agreement to October 31, 2016. There were no changes to the
11 substantive terms of the agreement.

12
13 Additionally, in support of a western transmission line corridor, FPL has been
14 engaged in negotiations with multiple state and federal agencies to exchange
15 its current owned transmission line corridor in the eastern Everglades for a
16 combination of easements and property that would provide a continuous
17 transmission right-of-way between north and south Miami-Dade County that
18 would not be in Everglades National Park (ENP). Collectively, these efforts
19 are referred to as the ENP land exchange. These negotiations are captured in
20 participation agreements, authorized by federal legislation and are undergoing
21 final environmental review by the National Park Service (NPS). A draft
22 Environmental Impact Statement (EIS) was published on January 17, 2014

1 and progress continued toward completion of the EIS and execution of the
2 Land Exchange.

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

5 A. In 2014 several factors influenced FPL's decision making related to initiation
6 of Pre-construction activities. The most influential factor is the expected
7 receipt of the COL in late 2016 or early 2017, combined with the changes to
8 the NCRC statute in 2013. The SCA process concluded, however an appeal
9 was filed. The appeal is anticipated to be resolved prior to the expected
10 receipt of the COL, so does not influence FPL's decision making regarding
11 Pre-construction activities.

12
13 **Q. What areas were considered in the project schedule review?**

14 A. The project schedule review included three major areas. First, the revised
15 NRC COL Application Review schedule provided a better estimate of when
16 key milestones in the COL process could be expected. Second, the Amended
17 NCRC statute and rule now include limitations on FPL's actions and insert
18 additional approval steps that affect the timing and sequence of events for the
19 project. Lastly, actual construction experience at the U.S. AP1000 project
20 sites provides information for FPL to better estimate durations for critical path
21 activities in the early construction period.

22 **Q. Please describe the revised NRC COL Application Review schedule, and**
23 **the impacts associated with that revision.**

1 A. The NRC COL Application review is conducted in two parts, an
2 Environmental Review and a Safety Review, before the process can proceed
3 to a contested hearing and the NRC for final vote by the Commissioners. On
4 April 17, 2014 the NRC issued a letter to FPL revising the target dates for the
5 Environmental Review. The Draft EIS is targeted to be issued in February
6 2015 and the Final EIS is targeted to be complete in February 2016. This is
7 approximately two and a half years later than our prior estimated schedule
8 dates.

9
10 On August 26, 2014 the NRC issued a letter to FPL revising the target dates
11 for the Safety Review. The Advanced Final Safety Evaluation Report (SER)
12 (with no open items) is targeted to be issued in January 2016, and the
13 Advisory Committee on Reactor Safeguards review of the SER is targeted to
14 be complete in May 2016. The Final SER is targeted for October 2016.
15 Based on the experience of prior licensing processes FPL estimates that with
16 these targeted interim dates, the NRC could issue a COL as early as December
17 2016 or as late as March 2017. This is approximately two and a half years
18 later than the project schedule included in last year's NCRC filing, which
19 projected a COL in October 2014.

20 **Q. What are the impacts associated with the incorporation of the amended**
21 **Nuclear Cost Recovery Clause statute and rule?**

22 A. The amended NCRC statute limits FPL from conducting certain key activities
23 in parallel with the licensing process, in advance of receiving the COL. Pre-

1 construction activities such as site engineering, procurement and design work
2 require significant resources and time to accomplish. Postponing the initiation
3 of Pre-construction activities adds approximately two and a half years of
4 additional time to the project.

5 **Q. How do the separate impacts created by the revised NRC COLA Review**
6 **Schedule and the amended Nuclear Cost Recovery Clause Statute and**
7 **Rule combine to affect the overall project schedule?**

8 A. The nature of the amendments to the NCRC Statute make these impacts
9 additive, in that the Pre-construction activities cannot begin any earlier than
10 when the COL is received. This additive effect is depicted on Exhibit SDS-3.

11 **Q. What were the results of the review of construction lessons learned from**
12 **U.S. AP1000 projects?**

13 A. In the execution of these large capital construction projects, there are
14 significant complexities and parallel activities that must necessarily be
15 coordinated at the construction site to mitigate the potential for unintended
16 conflicts and delays. Careful planning, proper logistical support and resources
17 can mitigate these issues, but the early construction period (to begin after
18 receipt of the COL and necessary FPSC approvals) will be challenging. The
19 critical path involves the initial site clearing, grading and fill activities to
20 establish the at-grade construction site. FPL estimates it will be able to
21 sequence activities such that no incremental impact to project schedule results
22 from these activities. This approach is consistent with producing the earliest
23 practicable schedule from its project schedule review.

1 **Q. What is the net effect on the Turkey Point Unit 6 & Unit 7 in service**
2 **dates?**

3 A. The combination of federal licensing delays and limitations arising from the
4 revised NCRC process results in an approximate five year change to the in-
5 service dates for Units 6 & 7. The revised in-service dates for Units 6 & 7 are
6 June 2027 and June 2028, respectively.

7

8 **PROJECT MANAGEMENT INTERNAL CONTROLS**

9

10 **Q. Please describe the project management structure that was responsible**
11 **for the Turkey Point 6 & 7 project in 2014.**

12 A. The management structure for the Turkey Point 6 & 7 project was modified in
13 2014 to include Steve Reuwer as Director of Construction. Mr. Reuwer led
14 the activities necessary to revise the project schedule in support of the
15 upcoming 2015 feasibility analysis and determined critical path items for the
16 project. William Maher and I retained management of the NRC licensing and
17 Development aspects of the project, respectively.

18 **Q. Please describe the project management and staffing approach employed**
19 **on the Turkey Point 6 & 7 project in 2014.**

20 A. The project was staffed by a combination of employees fully dedicated to the
21 project, employees from FPL business units who devoted a portion of their
22 time to the project, and a select group of contractors and subcontractors whose
23 subject matter expertise and skills were required to complete the considerable

1 tasks related to this undertaking. Leading the staff was a project management
2 team charged with monitoring the day-to-day execution and strategic direction
3 of the project. The project management team provided routine, dedicated
4 oversight of the project including a determination of the timing and content of
5 external reviews. The project management team was supported by project
6 controls professionals that executed the day-to-day project activities and
7 provided direct oversight of procedural compliance. The project also
8 benefited from routine review, supervision, and direction provided by FPL
9 executive management.

10 **Q. What were the key elements of the project management process used to**
11 **manage the Turkey Point 6 & 7 project in 2014?**

12 A. FPL routinely and methodically evaluated the risks, costs, and issues
13 associated with the Turkey Point 6 & 7 project using a system of internal
14 controls, routine project meetings and communication tools, management
15 reports and reviews, internal and external audits, and the annual feasibility
16 analysis.

17 **Q. Please describe the system of internal controls that were applicable to the**
18 **project in 2014.**

19 A. The project internal controls were comprised of various financial systems,
20 department procedures, work/desktop instructions and best practices providing
21 governance and oversight of project cost and schedule processes.

22

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

10 **Q. Please describe the administration of these internal controls.**

11 A. A Project Controls Manager provided cost and schedule direction and
12 analysis, coordinated internal and external audit requests, held meetings with
13 project management to review cost and schedule performance, and reviewed
14 all cost, scope changes, schedules and performance indicators. The Project
15 Controls Manager also participated in meetings with project management to
16 review cost and schedule performance, provided information regarding cost,
17 scope changes, schedules and performance indicators, maintained cost
18 templates, supported the production of documents and responses to
19 information requests, and met monthly or as required with department heads
20 on forecasting and commitments.

21 **Q. Please describe the specific reports that were generated to monitor the**
22 **project and the periodicity and audience for those reports.**

1 A. The project relied on a series of weekly or monthly reports and had standing
2 meetings to discuss forward-looking analysis with project managers. Exhibit
3 SDS-5 provides a list describing the reports, and their periodicity and target
4 audience.

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

6 A. In the course of project development, FPL identified a need to develop some
7 business processes unique to new nuclear deployment. These processes
8 involve conducting business in compliance with NextEra Energy, Inc. and
9 FPL policies and procedures, but also recognize project-specific requirements.
10 For example, specific instructions are needed to ensure compliance with
11 additional NRC requirements for quality control and document retention.
12 Direction for such specific areas of focus is provided to project staff through a
13 set of FPL's New Nuclear Project - Project Instructions (NNP-PI). These
14 Project Instructions establish a standard for the project team which provides
15 guidance, sets expectations and drives consistency. Exhibit SDS-6 provides
16 FPL's comprehensive list of project instructions and forms that were utilized
17 in 2014.

18 **Q. What processes were used to manage project risk?**

19 A. Cost and schedule risk was managed by ensuring the project team recognized
20 and understood the issues facing different sub-teams that comprised the
21 overall project. A mix of weekly meetings with small teams, monthly
22 meetings with select members of the project team, and routine executive
23 briefings ensured the project would benefit from sufficient and timely

1 communication. Further, the information flow began at the working level and
2 was integrated as it moved to the project management team to ensure the
3 issues were adequately captured and the interaction with other portions of the
4 project was properly assessed. These meetings resulted in several reports
5 identified in Exhibit SDS-5. All of these routine meetings allowed project
6 management to obtain updates from key project team members, provide
7 direction on the conduct of the project activities and maintain tight control
8 over project progress, expenditures, and key decisions.

9
10 Each week the project team held multiple status meetings. These meetings,
11 held by teams within the project, tracked project activities at a level that
12 allowed most issues to be identified, discussed, and resolved at the working
13 team level. Schedule and cost metrics were monitored and reported in
14 standard format reports to allow close monitoring of contractor performance.

15
16 The project team met monthly to review project schedule, budget
17 performance, and key project issues. Project risk was specifically tracked and
18 reviewed. The monthly Cost Report meeting provided an opportunity to drill
19 down on project cost issues and expectations. Project management also
20 provided a routine update to FPL executive management. This update
21 provided the opportunity for dialogue between the project management team,
22 Business Unit leaders and executive management. While the executive team
23 was always available for consultation on developing issues and opportunities,

1 the routine meetings ensured a broad range of topics were regularly reviewed
2 and discussed.

3

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

12 **Q. What other periodic reviews were conducted to ensure the project was**
13 **appropriately reviewed and analyzed?**

14 A. Internal and external audits occur during the course of the project to ensure
15 the project adheres to all corporate guidelines for financial accounting as well
16 as employing best management and internal controls practices. When a
17 deficiency is identified in an audit, an analysis is conducted to determine the
18 cause of the deficiency and corrective actions are implemented to ensure the
19 deficiencies are mitigated going forward. The 2014 audits are described
20 further below.

21

22 Additionally, the project is reviewed annually to determine its continued
23 economic feasibility. In 2014, this analysis was conducted using the same

1 framework as the analysis accepted during the Need Determination
2 proceeding, but was updated to reflect what was currently known regarding
3 project cost, project schedule, and the cost and viability of alternative
4 generation technologies. The analysis presented in the May 2014 NCRC
5 filings demonstrate the project remains feasible. An updated feasibility study
6 will be filed on May 1, 2015.

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

10 A. FPL is an industry leader in nuclear generation, and as such, has the
11 experience, contacts, and industry presence to engage in many forums for
12 exploration of nuclear industry issues. Nonetheless, the specific challenges of
13 new nuclear deployment have created focus areas requiring additional
14 coordination between entities involved in new plant licensing, construction,
15 and operation. FPL participated in three key industry groups providing value
16 to the Turkey Point 6 & 7 project in 2014. The Design Centered Working
17 Group was formed to provide coordination among owners, vendors, and the
18 NRC related to design modifications of the AP1000. This critical activity is
19 necessary to ensure design changes for the AP1000 are made through a
20 consensus process with the involvement of the NRC to preserve
21 standardization of design, a cornerstone of new nuclear development. FPL
22 also is a member of the AP1000 owners group (APOG) (a consortium of
23 owners of the AP1000 design) and of the Advanced Nuclear Technology

1 group organized by the Electric Power Research Institute (EPRI). In 2014,
2 William Maher assumed the Chairmanship of APOG.

3

4 These groups are primarily forums to identify and resolve issues that are of
5 primary interest to owners, such as staffing, training and maintenance
6 activities. For example, programs such as Procurement Specification
7 Development, Equipment and Nuclear Fuel Reliability improvements,
8 Advancing Welding Practices, and Modular Equipment Testing and
9 Benchmarking provide FPL increased efficiency in program development and
10 implementation resulting in future cost savings. The principle of
11 standardization through operations and maintenance requires this level of
12 industry coordination and dialogue. These different groups have unique and
13 important roles in the successful execution of new nuclear deployment in the
14 U.S. Achieving the goal of industry standardization and realizing the
15 associated economic and operational efficiencies requires active participation
16 by industry participants in these venues.

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

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

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

7 **Q. How would you summarize FPL's overall approach to Turkey Point**
8 **6 & 7 project management in 2014?**

9 A. FPL followed robust project planning, management, and execution processes
10 to manage the Turkey Point 6 & 7 project. These efforts were led by
11 personnel with significant experience in project management and development
12 supported by project management professionals trained in the deliberate
13 execution of critical infrastructure projects through a comprehensive set of
14 internal controls. Additionally, FPL capitalized on the experience of its other
15 power generation development projects by implementing lessons learned by
16 those project teams. Finally, FPL implemented an ongoing internal auditing
17 and quality assurance process to continuously monitor compliance with the
18 controls discussed above. In summary, FPL had the right people with the
19 right tools and oversight making decisions with the best available information.
20 For all of these reasons, FPL is confident that its Turkey Point 6 & 7 project
21 management decisions were well-founded and reasonable.

22

1 FPL recognizes the unique nature of new nuclear deployment demands
2 continuous monitoring of developments in policy, regulatory and economic
3 arenas. FPL maintains an ongoing analysis and incorporation of these events
4 to ensure the appropriate actions are taken at the right time to establish the
5 option for new nuclear generation. The application of sound project
6 management fundamentals and critical questioning provides the best results.

7

8 **PROCUREMENT PROCESSES AND CONTROLS**

9

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

12 A. The preferred approach for the procurement of materials or services was to
13 use competitive bidding. FPL benefitted from its strong market presence
14 allowing it to leverage corporate-wide procurement activities to the specific
15 benefit of individual project procurement activities. Maintaining a
16 relationship with a range of service providers offered the opportunity to assess
17 capabilities, respond to changing resource loads and remain knowledgeable of
18 current market trends and cost of service.

19

20 However, in certain situations the use of single or sole source procurement
21 was in the best interest of the company and its customers. In some cases there
22 was a limited pool of qualified entities to perform specific services or provide
23 certain goods and materials. In other cases a service provider was engaged to

1 conduct a specific scope of work based on a competitive bid or other analysis
2 and additional scope was identified that the vendor could efficiently provide.
3 Circumstances such as the above examples are common in the nuclear
4 industry, and especially on complex long-term projects such as the Turkey
5 Point 6 & 7 project.

6 **Q. Please describe the single and sole source procurement procedures that**
7 **applied to the Turkey Point 6 & 7 project in 2014.**

8 A. NextEra Energy, Inc. corporate policy NEE-PRO-1470 requires proper
9 documentation and authorization for single or sole source procurement. Such
10 authorization must be from an individual with a commitment/spend authority
11 at least equal to the value of the goods or services being procured. The
12 procedure also calls for a review of the justification for reasonableness.
13 Throughout 2014, FPL maintained its vigilance in creating adequate single or
14 sole source documentation consistent with NEE-PRO-1470.

15

16 **INTERNAL/EXTERNAL AUDITS AND REVIEWS**

17

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

20 A. FPL engaged Concentric Energy Advisors (Concentric) to conduct a review of
21 the project internal controls, with a focus on management processes, as was
22 conducted in 2008 through 2014. The 2015 Concentric review of 2014
23 controls is discussed by Witness Reed.

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

The FPSC Staff conducts a financial audit of the project ledger and accounts and an internal controls audit annually. The 2015 audits of 2014 project activities are currently underway.

Q. Does Internal Audit conduct an annual review to ensure the project controls were adequate and costs were reasonable?

A. Yes. An annual FPL internal audit focuses on ensuring that costs charged to the project are for Turkey Point 6 & 7 project related activities and are recorded in accordance with NCR Rule 25-6.0423. This audit is underway to review the project costs for the period January 1, 2014 to December 31, 2014, the results of which will be available to the FPSC, its Staff, and other parties upon completion in the second quarter of 2015.

2014 PROJECT COSTS

Q. Describe the costs incurred for the Turkey Point 6 & 7 project in 2014.

A. As represented in Exhibit SDS-7 and Exhibit SDS-1, Schedule T-6, FPL incurred a total of \$19,403,497 in project costs that were necessary for the activities described in this testimony. This is \$837,132 less than the May 1, 2014 Actual/Estimated costs of \$20,240,630.

These "Pre-construction costs" (as that term is defined by Rule 25-6.0423(2)(g)) are broken down into the following subcategories: 1) Licensing

1 \$16,072,490; 2) Permitting \$414,704; 3) Engineering and Design \$2,916,303;
2 4) Long Lead Procurement Advanced Payments \$0; and 5) Power Block
3 Engineering and Procurement \$0.

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

5 A. In 2014, Licensing costs were \$16,072,490 as shown in Exhibit SDS-7 Table
6 2 and Exhibit SDS-1, Schedule T-6, Line 3. Licensing costs consisted
7 primarily of FPL employee, contractor labor, and specialty consulting services
8 necessary to support the COL required for construction and operation of the
9 Turkey Point 6 & 7 project and the state certification of the project.

10 **Q. Please explain the reasons behind the variances between the actual 2014**
11 **Licensing costs and the costs estimated in the 2014 NCR filing in Docket**
12 **No. 140009-EI.**

13 A. Several activities resulted in higher than anticipated costs in 2014 while other
14 activities did not occur or were not required. The net result was a positive
15 variance of \$510,188 compared to the May 1, 2014 filing. In support of the
16 NRC COLA Safety analysis, additional work scope supporting seismic and
17 geotechnical RAI's was required. Additionally, the NRC fees were
18 significantly higher than forecast. These higher costs were offset by reduced
19 costs in legal and environmental service support and contingency.

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

21 A. In 2014, Permitting costs were \$414,704 as shown in Exhibit SDS-7 Table 3
22 and Exhibit SDS-1, Schedule T-6, Line 4. Permitting costs consisted
23 primarily of project employees and legal services necessary to support the

1 various license and permit applications required by the Turkey Point 6 & 7
2 project. Exhibit SDS-7, Table 3 provides a detailed breakdown of the
3 Permitting subcategory costs in 2014, including a description of items
4 included within each category.

5 **Q. Please explain any variance between the actual 2014 Permitting costs and**
6 **the costs provided in the 2014 NCR filing in Docket No. 140009-EI.**

7 A. Permitting costs were \$173,709 lower than estimated in the May 1, 2014 filing
8 due to not requiring outside legal support and unused contingency.

9 **Q. Please describe the costs incurred in the Engineering and Design**
10 **subcategory.**

11 A. In 2014, Engineering and Design costs were \$2,916,303 as shown in Exhibit
12 SDS-7 Table 4 and Exhibit SDS-1, Schedule T-6, Line 5. Engineering and
13 Design costs consisted primarily of FPL employee services and/or engineering
14 consulting services necessary to support the continued permitting of the UIC
15 exploratory well and membership fees for EPRI's Advanced Nuclear
16 Technology working group and the APOG industry groups. Exhibit SDS-7
17 Table 4 provides a detailed breakdown of the Engineering and Design
18 subcategory costs in 2014, including a description of items included within
19 each category.

20 **Q. Please explain any variance between the actual 2014 Engineering and**
21 **Design costs and the costs provided in the 2014 NCR filing in Docket No.**
22 **140009-EI.**

1 A. Engineering and Design costs were \$153,236 lower than planned. The
2 variance was caused by additional costs to complete the UIC operating well,
3 and engineering support to conduct the project schedule review. These higher
4 costs were offset by contingency.

5 **Q. Did FPL incur any costs in the Long Lead Procurement, Power Block
6 Engineering and Procurement, or Transmission subcategories in 2014?**

7 A. No. In 2014, there were no Long Lead Procurement, Power Block
8 Engineering and Procurement, or Transmission costs. Also, there were no
9 variances in these subcategories from FPL's estimates provided in the 2014
10 NCR filing in Docket No. 140009-EI.

11 **Q. Please describe the Site Selection costs incurred in 2014.**

12 A. FPL's Site Selection work was completed in October 2007 with the filing of
13 the Need Petition. The cost of \$158,482 in this category relates to carrying
14 charges. FPL Witness Grant-Keene supports the calculation of carrying
15 charges.

16 **Q. Were the 2014 project activities prudent and were the related costs
17 prudently incurred?**

18 A. Yes. All costs were incurred as a result of the deliberately managed process at
19 the direction of a well-informed, properly qualified management team. The
20 costs were incurred in the process of obtaining the necessary licenses,
21 certifications, permits, approvals or authorizations for the Turkey Point 6 & 7
22 project. All costs were reviewed and approved under the direction of the
23 Turkey Point 6 & 7 project management team and were made fully subject to

1 project internal controls. Costs were processed using FPL standard
2 procurement procedures and authorization processes, are reasonable and were
3 prudently incurred.

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

5 A. Yes.

**Docket No. 150009-EI
T- Schedules
Turkey Point 6 & 7 Site Selection and Pre-Construction Costs
Exhibit SDS-1, Page 1 of 1**

SDS – 1 is in the Nuclear Filing Requirements Book

FEDERAL AUTHORIZATIONS

Jurisdictional Agency	Authority, Law, or Regulation	Description of Requirement	Activity Covered
NRC	10 CFR Part 30	By-Product License	Possession of fuel
NRC	10 CFR Part 40	Source Material License	Possession of source material
NRC	10 CFR Part 50	Licensing of nuclear power plant	Approval for construction of nuclear power plant
NRC	10 CFR Part 51 10 CFR Part 52	NRC approval of an Environmental Report	Evaluation of environmental impacts from construction and operation of a nuclear power plant
NRC	10 CFR Part 52	COL	Safety review of the nuclear power plant site
NRC	10 CFR Part 61	Licensing requirements for land disposal of radioactive wastes	Land disposal of radioactive waste that contains by-product source and Special Nuclear Material (SNM)
NRC	10 CFR Part 70	SNM License	Possession of SNM
NRC	10 CFR Part 71	Packaging and transportation of radioactive material	Packaging and transportation of licensed radioactive material
Department of Energy	Nuclear Waste Policy Act (42 U.S.C 10101 et seq.) 10 CFR Part 961	Spent Fuel Contract	Disposal of spent nuclear fuel
USACE	Clean Water Act of 1976 /33 U.S.C section 1344	Section 404 Permit	Discharge of dredge and fill materials into waters of the US
USACE	Rivers and Harbors Act of 1899/ 33 U.S.C. section 401 et. seq.	Section 10 -Rivers and Harbors Act Permit	Excavation or filling within navigable waters of the US
USACE	Rivers and Harbors Act of 1899/ CWA section 14 (33 USC 408)	Section 408. Taking possession of, use of, or injury to harbor or river improvements.	Control of all potential changes to navigable waters or to flood control structures.

FEDERAL AUTHORIZATIONS (CONT.)

Jurisdictional Agency	Authority, Law, or Regulation	Description of Requirement	Activity Covered
USACE	Secretary of the Army	License for use of government owned lands; Modified water deliveries to Everglades National Park	Use of Government owned lands for the purpose of onsite investigations in support of a Phase 1 Environmental Site Assessment, Wetland delineation, preparation of legal description and soil borings
Federal Aviation Agency (FAA)	14 CFR Part 77 - Safe, Efficient Use, and Preservation of Navigable Airspace	FAA Obstruction Permit for Unit 6 Containment Building	FAA Obstruction Permit for Unit 6 Containment Building
FAA	14 CFR Part 77 - Safe, Efficient Use, and Preservation of Navigable Airspace	FAA Obstruction Permit for Unit 7 Containment Building	FAA Obstruction Permit for Unit 7 Containment Building
FAA	14 CFR Part 77 - Safe, Efficient Use, and Preservation of Navigable Airspace	FAA Obstruction Permit for Construction Cranes	FAA Obstruction Permit for Construction Cranes - to be obtained as necessary
Department of the Interior (DOI)	RE-DO-53	Special Use Permit; Temporary Construction Easement	Provide access to delineate wetland boundaries within the proposed utility line right of way relocation in Everglades National Park
DOI	RE-DO-53	Special Use Permit; Temporary Construction Easement	Provide access to conduct visual and pedestrian surveys for Phase I environmental assessment within the proposed utility line right of way relocation in Everglades National Park

FEDERAL AUTHORIZATIONS (CONT.)

Jurisdictional Agency	Authority, Law, or Regulation	Description of Requirement	Activity Covered
US Fish and Wildlife Service (USFWS)	16 U.S.C 1539(a)(1)(A) 50 CFR Parts 13, 17	Endangered species permit to take American crocodile during monitoring	Provides authorization to take (capture, examine, weigh, identify sex, collect tissue samples, mark, radio-tag, radio-track, relocate, release) endangered American crocodile individuals during population monitoring
USFWS	16 U.S.C 703-712	Special purpose salvage permit, migratory birds	Provides authorization to: salvage dead migratory birds, abandoned nests, and addled eggs after nesting season; salvage dead bald or golden eagles; and possess live migratory birds for transport to permitted rehabilitator
USFWS	16 U.S.C. 703-7121 50 CFR Part 13:50 CFR 21.41	Federal Fish and Wildlife Permit	Emergency relocation of active migratory bird nests when birds, nests, or eggs pose a direct threat to human health and safety or when the safety of the bird is at risk if the nest and/or birds are not removed

STATE OF FLORIDA AUTHORIZATIONS

Jurisdictional Agency	Authority, Law, or Regulation	Description of Requirement	Activity Covered
FDEP, Siting Board	F.S. § 403.501-.518, F.S	Power Plant Site Certification*	Construction and operation of a power plant with more than 75 MW of steam generated power and associated facilities

*Pursuant to the Florida Electrical Power Plant Siting Act (PPSA) all state, regional and local permits, except for certain local land use and zoning approvals and certain state issued licenses required under federally delegated or approved permit programs, are covered under a single "Certification". Because the Certification is the sole license of the state and any agency required for construction and operation of the proposed electrical power plant, it is not necessary to apply for permits individually.

Docket No. 150009-EI
 Turkey Point 6 & 7 Licenses, Permits and Approvals
 Exhibit SDS-2, Page 4 of 8

STATE OF FLORIDA AUTHORIZATIONS (CONT.)

Jurisdictional Agency	Authority, Law, or Regulation	Description of Requirement	Activity Covered
FDEP, US Environmental Protection Agency (EPA) Region IV review	F.A.C. 62-621	National Pollutant Discharge Elimination System (NPDES) Storm water Operations Permit for Industrial Activities	Operation of an industrial facility
FDEP	Chapter 403 F.S.	Exploratory Well Construction Permit	Allows for the construction of the exploratory well and dual-zone monitor well
FDEP	Chapter 403 F.S.	UIC Well Construction Permit	Allows for the conversion of the exploratory well to an injection well and perform operational testing for up to 2 years
FDEP	Chapter 403 F.S.	UIC Well Construction Permit	Allows for the construction of up to 12 additional injection wells and associated dual - zone monitoring wells and perform operational testing for up to 2 years
FDEP	Chapter 403 F.S.	Class I Well Operation Permit	Allows for the operation of the injection wells. This permit must be renewed every 5 years
FDEP, EPA Region IV review	F.A.C. 62-621	Prevention of Significant Deterioration Construction Permit	Construction and operation of facilities that generate air emissions
FDEP, EPA Region IV review	403.0885 F.S.	Modification of Industrial Wastewater Treatment Facility (IWW) permit	Construction of Units 6 & 7 within the industrial wastewater facility
FDEP/EPA	F.A.C. 62-25, 62-40	NPDES Construction Storm water Permit	Construction of any facility that disturbs 1 acre or more

Docket No. 150009-EI
 Turkey Point 6 & 7 Licenses, Permits and Approvals
 Exhibit SDS-2, Page 5 of 8

STATE OF FLORIDA AUTHORIZATIONS (CONT.)

Jurisdictional Agency	Authority, Law, or Regulation	Description of Requirement	Activity Covered
Florida Fish and Wildlife Conservation Commission (FWCC)	F.A.C. 68A-9.002; 68A-25.002; 68A-27.003	Special purpose live-capture permit	Provides authorization for live-capture, insertion of data loggers in nests, and collection of samples, on FPL properties of American crocodiles for mark/recapture and scientific data collection; also provides for live-capture, relocation, and release of American alligators and eastern indigo snakes and other endangered or threatened species or species of special concern
FDEP	403.087, F.S. and F.A.C. 62-4, 62-520, 62-522, 62-528 62-550, 62-600, 62-601	Operation of Class V, Group 3 domestic wastewater injection (gravity flow) well	Operation of treated domestic sewage injection well
FDEP	403, F.S. and F.A.C. 62-600, 62-601, 62-602, 62-620, 62-640, 62-699	Operation of domestic wastewater treatment facility (WWTF)	Operation of Turkey Point Power Plant WWTF
FDEP	F.A.C. 62-213	Title V Operations Permit	Operations of facilities that generate air emissions
FDEP	253.12 F.S. F.A.C. 18-18, 18-20, 18-21, 18-22	Sovereign Submerged Lands Easements	Obtain easements for facilities to be located below surface water bodies in state owned lands
FDEP	253.12 F.S. F.A.C. 18-2	Upland Easements	Obtain easements for facilities to be located in state owned lands (uplands)
FDEP, South Florida Water Management District (SFWMD)	F.A.C. 40B-3	Well Construction Permit	Construct, repair, modify, or abandon a well

STATE OF FLORIDA AUTHORIZATIONS (CONT.)

Jurisdictional Agency	Authority, Law, or Regulation	Description of Requirement	Activity Covered
SFWMD	F.A.C. 40E-3	Well Abandonment Permit	Well abandonment permits
SFWMD, USACE	33 USC S 408	Federal Jurisdiction Per Section 14 of the Rivers and Harbors Act of 1899	Permission to place facilities in the vicinity of or otherwise use levees owned or controlled by the SFWMD originally constructed by the
SFWMD	Chapter 373 F.S.	Water well construction permits	Pump test for test wells
State of Florida	F.A.C. 40E-3	Well Abandonment Permit	Application to construct, repair, modify, or abandon well
FWCC	F.A.C. 68A-9.002, 68A-9.025, 68A-27	Carcass Salvage Permit	Salvage, mount, and display wildlife carcasses upon encounter for educational or scientific purposes
FWCC	F.A.C. 68A-9.002, 68A-27.005	Removal of nests and ospreys	Removal and replacement of inactive nests of ospreys and other migratory birds

FOREIGN STATE AUTHORIZATIONS

Jurisdictional Agency	Authority, Law, or Regulation	Description of Requirement	Activity Covered
Utah Department of Environmental Quality Division of Radiation Control	R313-26 of the Utah Radiation Control Rules	Revision of existing General Site Access Permit	Transport of radioactive materials into the State of Utah

FOREIGN STATE AUTHORIZATIONS (CONT.)

Jurisdictional Agency	Authority, Law, or Regulation	Description of Requirement	Activity Covered
Tennessee Department of Environment and Conservation Division of Radiological Health	TDEC Rule 1200-2-10.32	Revision of existing Tennessee Radioactive Waste License-for-Delivery	Transport of radioactive waste into the State of Tennessee

LOCAL AUTHORIZATIONS

Jurisdictional Agency	Authority, Law, or Regulation	Description of Requirement	Activity Covered
Miami-Dade County	Chapter 163 F.S.; Miami-Dade County Comprehensive Plan and adopted regulations	Land use and zoning conditional approval (unusual use approval)	Unusual Use (zoning approval) to permit a nuclear power plant (atomic reactors) and ancillary structures and equipment
Miami-Dade County	Chapter 163 F.S.; Miami-Dade County Comprehensive Plan (CDMP) and adopted regulations	CDMP text amendment	Excavation for fill source. Application was withdrawn 03/05/2010
Miami-Dade County	Chapter 163 F.S.; Miami-Dade County Comprehensive Plan (CDMP) and adopted regulations	CDMP text amendment	Temporary access roads

Docket No. 150009-EI
Turkey Point 6 & 7 Licenses, Permits and Approvals
Exhibit SDS-2, Page 8 of 8

LOCAL AUTHORIZATIONS (CONT.)

Jurisdictional Agency	Authority, Law, or Regulation	Description of Requirement	Activity Covered
Miami-Dade County	Miami-Dade County Ordinances	IW6 Permit (Industrial Well field) for site investigation	Land use -non-residential, within major well field protection areas not served by sanitary sewers
Miami-Dade County Health Department	Chapter 373 F.S.	Water well construction permits	Well installation for hydrologic investigation
Miami-Dade County	Miami-Dade County Code Chapter 24	Domestic wastewater annual operating permit	Stabilization treatment facility
Miami-Dade County	Miami-Dade County Code Chapter 24	Operation of pollution control facility permit	Operation of fleet vehicle maintenance facility that generates waste oil, coolant, and used batteries with a solvent wash tank and served by septic tank
Miami-Dade County	Miami-Dade County Ordinances, Chapter 14	Burn Permit	Onsite combustion of construction debris. Annual permit issued
Miami-Dade County	Miami-Dade County Ordinances, Section 24-35	IW5 Permit (or waiver)	Hazardous materials or hazardous waste – large user or generator. Hazardous waste permit issued 10/01/2008
Miami-Dade County	Miami-Dade County Ordinances, Section 24	Stratospheric Ozone Protection Annual Operations Permit	Use of refrigerants R-12, R-22, R-502 for Robinair Recovery Units, Models 25200, 25200A, 25200B
Miami-Dade County	Miami-Dade County Ordinances, Section 24	Industrial Waste Annual Operations Permit	Onsite disposal of Class III industrial solid waste consisting of earth and earth-like products, concrete, rock, bricks, and land clearing debris
Miami-Dade County	Miami-Dade County Ordinances, 89-104	Marine Facilities Annual Operations Permit	Operation of 1 wet slip, 1 dry slip, 2 commercial vessels

COMPARISON OF PRIOR & CURRENT TURKEY POINT 6 & 7 PROJECT SCHEDULE

Prior Schedule - 2022 & 2023 In-Service Dates

Prior schedule included pre-construction work in parallel with NRC review



Current Schedule - 2027 & 2028 In-Service Dates

Current schedule includes 2 ½ years of extended NRC review, and pursuant to amended NCR statute, pre-construction must now follow NRC approval



Extended Nuclear Regulatory Commission Review & Amended Nuclear Cost Recovery Statute Drive 5 Year Project Schedule Change

Docket No. 150009-EI
Turkey Point 6 & 7 Procedures and Work Instructions
Exhibit SDS-4, Page 1 of 1

PROCEDURES AND WORK INSTRUCTIONS

QI4-NSC-1 Rev13 Procurement Control
BO-AA-102-1008 r6 Procurement Control
FPL - Affiliate Charge Review Process
FPL - Affiliate Charging FPL
FPL - Clause Recovery Charging Guideline
FPL - Clause Recovery Training Costs
FPL - Shopping Cart Training
FPL - Utility Retention Process
NEE - Project Controls Framework
E&C Monthly Accrual Process
Acquiring/Developing FPL Fixed Assets
PTN 67 - Expense Report Review
PTN 67 - Invoice Review
PTN 67 - Monthly Cost Report Process
PTN 67 - Payroll Distr Review Process
PTN 67 - Project Structure

PROJECT REPORTS

Report	Report Description	Periodicity	Audience
FPL/Bechtel COL Weekly Status Updates	FPL/Bechtel COL Project action items, applicable schedules and RAI review table.	Weekly	Project staff personnel, project management and project controls
FPL COL Weekly Status Updates	FPL COL Project action items, applicable schedules, Action Request look ahead report, Bechtel RAI report and FPL status report	Weekly	Project staff personnel, project management and project controls
Corporate Variance (Cost)	Financial status compared to corporate budget including Current Month (CM), Quarter (QTR), Year-To-Date (YTD) and End-Of-Year (EOY) with variance explanations	Monthly	Executive Management
NFR Variance	Compares filing projections for CM, YTD, EOY, and Prior Month Forecast	Monthly	Project Management and department heads
NFR Summary	Compares filing projections to actual/forecast with major milestone schedule dates	Monthly	Project Management and department heads

PROJECT REPORTS (CONT.)

Report	Report Description	Periodicity	Audience
Project Cost Summary	Financial status by WBS Element including CM, YTD and EOY	Monthly	Project Management
Cost Recovery by Detail	Compares Pre-construction NFR filing projection details to actual/forecast for CM, YTD and EOY	Monthly	Project Management
Pre-construction Cumulative Spend Graph	Visually compares Corporate Budget and NFR Projection to actual and forecast costs	Monthly	Project Management and department heads
Due Diligence Report	Project status for financial reporting process	Quarterly	Executive Management
Quarterly Risk Assessment	Risk assessment focuses on the licensing, permitting and general development activities	Quarterly	Project Management

PROJECT INSTRUCTIONS & FORMS

Procedure Number	Title	Revision Number	Effective Date
NNP-PI-01	REQUEST FOR INFORMATION (RFI) AND RFI RESPONSE	3	10/04/12
NNP-PI-02	PREPARATION, REVISION, REVIEW AND APPROVAL OF NEW NUCLEAR PROJECTS PROJECT INSTRUCTIONS	3	12/09/13
NNP-PI-03	PROJECT DOCUMENT RETENTION AND RECORDS PROCESSING	4	10/03/13
NNP-PI-04	COLA CONFIGURATION CONTROL AND RESPONSES TO REQUEST FOR ADDITIONAL INFORMATION FOR PROJECT APPLICATIONS	4	04/09/13
NNP-PI-05	NNP PROJECT CORRESPONDENCE	2	10/16/13
NNP-PI-06	NNP NRC CORRESPONDENCE	5	05/07/13
NNP-PI-07	DEPARTMENT TRAINING	5	02/15/13
NNP-PI-08	COLA REVIEW AND ACCEPTANCE PROCESS	6	01/07/13
NNP-PI-09	NNP COMBINED LICENSE APPLICATION SUBMITTAL	2	Cancelled 09/15/10
NNP-PI-10	NNP PTN COLA RELATED PROJECT MANAGEMENT BRIEFS, PROJECT MEMORANDA, AND COLA RELATED DOCUMENT REVIEWS	3	12/11/13
NNP-PI-11	CHANGE CONTROL FOR COL APPLICATION INFORMATION	4	Cancelled 11/13/14
NNP-PI-12	HOSTING VISITING DIGNITARIES AT THE FPL JUNO CAMPUS AND PRECONSTRUCTION TOURS OF THE PTN 6 & 7 SITE	2	12/06/11
NNP-PI-13	TECHNICAL REVIEW OF COMMERCIAL PROJECT DOCUMENTS	2	10/09/13
NNP-PI-14	DISCOVERY PRODUCTION INSTRUCTIONS RELATED TO TURKEY POINT 6 & 7 COMBINED LICENSE HEARING	3	08/20/13

Docket No. 150009-EI
 Turkey Point 6 & 7 Project Instructions and Forms
 Exhibit SDS-6, Page 2 of 3

Procedure Number	Title	Revision Number	Effective Date
NNP-PI-15	EXPLORATORY AND DUAL ZONE MONITORING WELL PROJECT INCIDENT RESPONSE INSTRUCTIONS	1	07/22/13
NNP-PI-100	PROJECT SCHEDULE CONFIGURATION AND CONTROL	0	Cancelled 02/11/14
NNP-PI-301	REVIEW OF WEC DESIGN CHANGE PROPOSALS (DCPS)	0	11/7/14
NNP-PI-302	PRE-COL DEPARTURE PROCESS	0	11/7/14
NNP-PI-303	PREPARATION OF INTERIM STAFF GUIDANCE – 011 SCREENS/EVALUATIONS	1	12/16/14

NNP Form Number	Title	Revision Number	Effective Date
NNP-AA-01	REGULATORY ITEMS & COMMITMENTS	0	4/12/13
NNP-PI-01-01	FPL NNP PTN 6 & 7 COL APPLICATION REQUEST FOR INFORMATON	1	11/12/13
NNP-PI-02-01	PROJECT INSTRUCTION REVIEW AND APPROVAL FORM	1	12/09/13
NNP-PI-03-01	QA RECORDS TRANSMITTAL FORM	2	9/8/11
NNP-PI-06-01	NNP OUTGOING NRC CORRESPONDENCE REVIEW & APPROVAL SHEET	3	6/10/14
NNP-PI-07-01	TRAINING ATTENDANCE FORM	0	3/19/08
NNP-PI-07-02	TRAINING EXEMPTION FORM	0	3/19/08
NNP-PI-07-03	REQUIRED READING FORM	7	11/17/14
NNP-PI-08-01	NNP COMMENT RESOLUTION ACCEPTANCE FORM	1	8/18/08
NNP-PI-08-02	NNP LRB MEETING SUMMARY FORM	1	9/8/08
NNP-PI-09-01	CERTIFICATION REFERENCE FORM	0	1/20/10
NNP-PI-10-01	NNP DOCUMENT REVIEW COMMENT FORM	0	4/12/13
NNP-PI-10-02	NNP PROJECT MANAGEMENT BRIEF/PROJECT MEMORANDUM	1	4/12/13

Docket No. 150009-EI
Turkey Point 6 & 7 Project Instructions and Forms
Exhibit SDS-6, Page 3 of 3

NNP Form Number	Title	Revision Number	Effective Date
	REVIEW AND APPROVAL FORM		
NNP-PI-11-01	SCREEN AND EVALUATION OF COL APPLICANT CHANGES TO A DCD	1	Cancelled 6/10/09
NNP-PI-11-03	10 CFR PART 52 SCREENER TRAINING AND QUALIFICATION FORM	1	Cancelled 6/12/09
NNP-PI-11-04	DEPARTURE SCREENING / EVALUATION REVIEW AND APPROVAL FORM	1	Cancelled 6/12/09
NNP-PI-13-01	REVIEW AND APPROVAL FORM	0	3/17/10
NNP-PI-13-02	DOCUMENT REVIEW CHECKLIST	1	3/22/11
NNP-PI-14	BUSINESS UNIT COMPLIANCE CERTIFICATION FORM	0	3/8/11
NNP-PI-14	BUSINESS UNIT DOCUMENT SEARCH CERTIFICATION FORM	0	3/8/11
NNP-PI-14	INDIVIDUAL DISCOVERY CERTIFICATION FORM	0	3/8/11
NNP-PI-302-01	SCREEN AND EVALUATION OF COL APPLICANT CHANGES TO THE PLANT-SPECIFIC DCD	0	11/7/14
NNP-PI-302-02	VENDOR GENERATED DEPARTURE COMPLETENESS REVIEW	0	11/7/14
NNP-PI-302-03	10 CFR PART 52 SCREENER TRAINING AND QUALIFICATION FORM	0	11/7/14
NNP-PI-302-04	DEPARTURE SCREENING/EVALUATION REVIEW AND APPROVAL FORM	0	11/7/14
NNP-PI-303-01	ISG-011 SCREEN OF CHANGES	1	12/16/14
NNP-PI-303-02	ISG-011 EVALUATION OR ACCEPTANCE REVIEW WORKSHEET	1	12/16/14
NNP-PI-303-03	INTERIM STAFF GUIDANCE 011 (ISG-011) TRAINING/QUALIFICATIONS	1	12/16/14

Docket No. 150009-EI
Turkey Point 6 & 7 Summary Tables of the 2013 Expenditures
Exhibit SDS-7, Page 1 of 3

Table 1. 2014 Preconstruction Costs

Category	2014 Actual Costs (\$)
Licensing	16,072,490
Permitting	414,704
Engineering & Design	2,916,303
Long Lead Procurement	0
Power Block Engineering & Procurement	0
Total Preconstruction Costs	19,403,497
Transmission	0
Total Preconstruction Costs & Transmission	19,403,497

Note: Totals may not appear to add due to rounding.

Docket No. 150009-EI
Turkey Point 6 & 7 Summary Tables of the 2013 Expenditures
Exhibit SDS-7, Page 2 of 3

Table 2. 2014 Licensing Costs

Category	2014 Actual Costs (\$)
New Nuclear Project (NNP) Team Costs - NNP FPL Payroll and Expenses, FPL Project Team Facilities, FPL Engineering, FPL Licensing	4,832,581
Application Production - COLA/SCA Contractor, Project Architecture & Engineering, NRC and Design Center Working Group fees	7,930,124
SCA Oversight	0
SCA Subcontractors:	
• ECT - Transmission	125,667
• Golder - Environmental	115,601
• McNabb - Underground Injection	0
<hr/>	
Total SCA	241,268
Environmental Services - FPL Payroll and Expenses, External Support Expenses	449,364
Power Systems - FPL Payroll and Expenses, System Studies, Licensing and Permitting Support and Design Activities	75,707
Licensing Legal - FPL Payroll and Expenses, External Legal Services, Expert Witnesses	1,953,620
Regulatory Affairs	417,239
New Nuclear Accounting	172,588
<hr/>	
Total Regulatory Support	589,827
Total Licensing	16,072,490

Note: Totals may not appear to add due to rounding.

Docket No. 150009-EI
Turkey Point 6 & 7 Summary Tables of the 2013 Expenditures
Exhibit SDS-7, Page 3 of 3

Table 3. 2014 Permitting Costs

Category	2014 Actual Costs (\$)
Project Communication Support	30,709
Development - FPL Payroll and Expenses, Various Studies	317,087
Permitting-Legal Specialists Support	66,909
Total Permitting	414,704

Table 4. 2014 Engineering and Design Costs

Category	2014 Actual Costs (\$)
Engineering and Construction Team - FPL Payroll and Expenses, Preconstruction Project Management	414,383
Pre-construction External Engineering - Construction Planning	526,920
APOG Membership Participation	1,700,000
EPRI Advanced Nuclear Technology	275,000
FEMA Fees	0
Total Engineering and Design	2,916,303

Table 5. 2014 Power Block Engineering and Procurement

Category	2014 Actual Costs (\$)
No costs in 2013	0
Total Power Block Engineering and Procurement	0

Note: Totals may not appear to add due to rounding.

**CERTIFICATE OF SERVICE
DOCKET NO. 150009-EI**

I HEREBY CERTIFY that a true and correct copy of the foregoing testimony and exhibits was served electronically this 2nd day of March, 2015, to the following:

Keino Young, Esq.
Kyesha Mapp, Esq.
Division of Legal Services
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, Florida 32399-0850
kyoung@psc.state.fl.us
kmapp@psc.state.fl.us

Patricia A. Christensen, Esq.
Associate Public Counsel
Office of Public Counsel
The Florida Legislature
111 West Madison Street, Room 812
Tallahassee, Florida 32399
christensen.patty@leg.state.fl.us
Attorney for the Citizens of the State of Fla.

J. Michael Walls, Esq.
Blaise N. Gamba, Esq.
Carlton Fields Jordan Burt, P.A.
P.O. Box 3239
Tampa, Florida 33601-3239
mwalls@cfjblaw.com
bgamba@cfjblaw.com
Attorneys for Duke Energy Florida, Inc.

Dianne M. Triplett, Esq.
299 First Avenue North
St. Petersburg, Florida 33701
dianne.triplett@duke-energy.com
Attorney for Duke Energy Florida, Inc.

Matthew Bernier, Sr. Counsel
106 East College Ave., Suite 800
Tallahassee, Florida 32301-7740
Matthew.bernier@duke-energy.com
Attorney for Duke Energy Florida, Inc.

James W. Brew, Esq.
Owen J. Kopon, Esq.
Laura A. Wynn
Brickfield, Burchette, Ritts & Stone, P.C.
1025 Thomas Jefferson Street, N.W.
8th Floor, West Tower
Washington, D.C. 20007
jbrew@bbrslaw.com
owen.kopon@bbrslaw.com
laura.wynn@bbrslaw.com
*Attorneys for White Springs Agricultural
Chemicals, Inc., d/b/a PCS Phosphate-White
Springs*

Jon C. Moyle, Jr., Esq.
Moyle Law Firm, P.A.
118 North Gadsden Street
Tallahassee, Florida 32301
jmoyle@moylelaw.com
*Attorney for Fla. Industrial Power Users
Group*

Victoria Méndez, City Attorney
Matthew Haber, Assistant City Attorney
City of Miami
444 Southwest 2nd Avenue
Miami, FL 33130
vmendez@miamigov.com
mshaber@miamigov.com
yillescas@miamigov.com (secondary e-mail)
Attorneys for City of Miami

By: s/ Jessica A. Cano
Jessica A. Cano
Fla. Bar No. 0037372