

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Nuclear cost recovery clause.

DOCKET NO. 170009-EI

DATED: JUNE 30, 2017

MOTION FOR LEAVE TO FILE REVISED TESTIMONY AND SUPPLEMENTAL EXHIBIT

The Staff of the Florida Public Service Commission (Staff) hereby moves the Prehearing Officer, Commissioner Ronald A. Brisé, for permission to file revised testimony and a supplemental exhibit. Due to a scrivener's error, Exhibit LR-2, the 2016 Review of Florida Power & Light Company's Project Management Internal Controls for Turkey Point 6 & 7 Construction was not referenced within or attached to the joint testimony of Staff witnesses Sofi Lehmann and David Rich. Staff's revised testimony and supplemental exhibit are attached to this motion; the revised language within the testimony is located on page 3, lines 15-18.

Pursuant to Rule 28-106.204(3), Florida Administrative Code, Staff has conferred with all parties within this docket. Duke Energy Florida, LLC, White Springs Agricultural Chemicals Inc. d/b/a PCS Phosphate – White Springs, and the City of Miami take no position. Florida Industrial Power Users Group and Florida Power & Light Company do not oppose the motion. The Office of Public Counsel has no objection to the Motion to allow staff to supplement its June 20 testimonies due to the inadvertent error which omitted the inclusion of the 2016 Project Management Internal Controls for Turkey Point 6&7 Construction Audit Report for FPL.

MOTION FOR LEAVE TO FILE REVISED TESTIMONY AND SUPPLEMENTAL EXHIBIT
DOCKET NO. 170009-EI
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RESPECTFULLY SUBMITTED, this 30th day of June, 2017:

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CERTIFICATE OF SERVICE

I HEREBY CERTIFY that the foregoing MOTION FOR LEAVE TO FILE REVISED TESTIMONY AND SUPPLEMENTAL EXHIBIT has been filed with the Office of Commission Clerk and a copy has been furnished to the following by electronic mail, this 30th day of June, 2017:

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Docket No. 170009-EI: Nuclear Cost Recovery Clause.

Florida Power & Light Company

Turkey Point Units 6 & 7

Witness: **Direct Joint Testimony of SOFIA LEHMANN and DAVID RICH,**

Appearing on behalf of the staff of the Florida Public Service Commission

Date Filed: June 20, 2017

REVISED June 30, 2017

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **COMMISSION STAFF**

3 **DIRECT JOINT TESTIMONY OF**

4 **SOFIA LEHMANN AND DAVID RICH**

5 **DOCKET NO. 170009-EI**

6 **June 20, 2017**

7 **REVISED June 30, 2017**

8

9 **Q. Mrs. Lehmann, please state your name and business address.**

10 A. My name is Sofia Lehmann. My business address is 2540 Shumard Oak Boulevard,
11 Tallahassee, Florida 32399-0850.

12 **Q. By whom are you employed?**

13 A. I am employed by the Florida Public Service Commission (Commission) as a Public
14 Utility Analyst II, within the Office of Auditing and Performance Analysis.

15 **Q. What are your current duties and responsibilities?**

16 A. I perform audits and investigations of Commission-regulated utilities, focusing on the
17 effectiveness of management and company practices, adherence to company procedures and
18 the adequacy of internal controls. David Rich and I jointly conducted the 2017 audit of Florida
19 Power & Light Company's (FPL) project management internal controls for the Turkey Point 6
20 & 7 project.

21 **Q. Please describe your education and relevant experience.**

22 A. I earned a Bachelor of Arts degree in Economics and Asian Studies from Furman
23 University. I have worked for the Commission for four years conducting operational audits
24 and investigations of regulated utilities.

25 **Q. Have you filed testimony in any other dockets before the Commission?**

1 A. Yes. I filed similar testimony in Docket No. 160009-EI.

2 **Q. Mr. Rich, please state your name and business address.**

3 A. My name is David Rich. My business address is 2540 Shumard Oak Boulevard,
4 Tallahassee, Florida 32399-0850.

5 **Q. By whom are you employed?**

6 A. I am employed as a Public Utility Analyst IV by the Florida Public Service
7 Commission in the Office of Auditing and Performance Analysis.

8 **Q. What are your current duties and responsibilities?**

9 A. I perform audits and investigations of Commission-regulated utilities, focusing on the
10 effectiveness of management and company practices, adherence to company procedures and
11 the adequacy of internal controls. With Mrs. Lehmann, I conducted the 2017 audit of FPL's
12 project management internal controls for the Turkey Point 6 & 7 new nuclear construction
13 project.

14 **Q. Please describe your education and relevant experience.**

15 A. In 1978, I graduated from the United States Military Academy at West Point with a
16 Bachelor of Science degree and a concentration in Engineering. A Masters of Art degree in
17 National Security Affairs from the Naval Postgraduate School followed in 1987. I also
18 graduated from the Republic of Korea Army Command and General Staff College in 1989 and
19 the United States Army Command and General Staff College in 1990. My relevant work
20 experience includes fourteen years with the Florida Public Service Commission in
21 management and controls auditing, utility performance analysis, process reviews, and trend
22 analysis. I have participated in numerous audits of utility operations, processes, systems, and
23 internal controls.

24 **Q. Have you filed testimony in any other dockets before the Commission?**

25 A. Yes. I have filed similar testimony in Docket Nos. 090009-EI, 100009-EI, 110009-EI,

1 120009-EI, 130009-EI, 140009-EI, 150009-EI and 160009-EI.

2 **Q. Please describe the purpose of your testimony in this docket.**

3 A. Our testimony presents the attached audit report entitled *Review of Florida Power &*
4 *Light Company's Project Management Internal Controls for Turkey Point 6 & 7 Construction*
5 (Exhibit LR-1). This audit is completed each year to assist the Commission's annual
6 evaluation of nuclear cost recovery filings. The audit assesses the internal controls and
7 management oversight of the Turkey Point 6 & 7 project.

8 **Q. Please summarize the areas examined by your review of controls.**

9 A. The primary objective of this audit was to assess and evaluate key project
10 developments, along with the organization, management, internal controls, and oversight that
11 FPL used or plans to employ for this project. The internal controls examined were related to
12 the following key areas of project activity: planning, management and organization, cost and
13 schedule controls, contractor selection and management, and auditing and quality assurance.

14 **Q. Are you sponsoring any exhibits?**

15 A. Yes, our audit report is attached as Exhibit LR-1. We are also filing Exhibit LR-2,
16 *Review of Florida Power & Light Company's Project Management Internal Controls for*
17 *Turkey Point 6 & 7 Construction* published in June 2016. This report was previously filed by
18 Commission audit staff in Docket No. 160009-EI.

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

20 A. Yes.

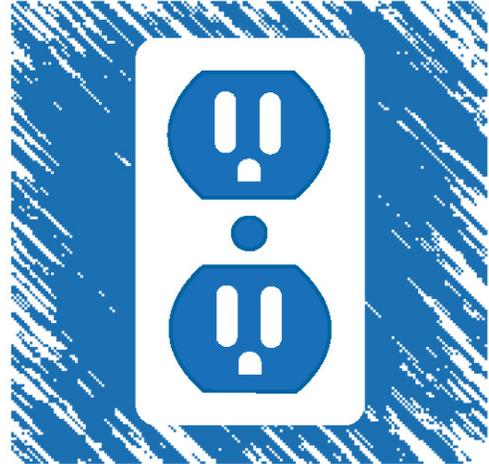
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Review of Florida Power & Light Company's Project Management Internal Controls For Turkey Point 6 & 7 Construction

JUNE 2016

BY AUTHORITY OF
The Florida Public Service Commission
Office of Auditing and Performance Analysis

**Review of
Florida Power & Light Company's
Project Management
Internal Controls
for
Turkey Point 6 & 7 Construction**

David Rich
Public Utility Analyst IV
Project Manager

Sofia Lehmann
Public Utility Analyst II

June 2016

**By Authority of
The State of Florida
Public Service Commission
Office of Auditing and Performance Analysis**

PA-16-01-002

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1.0 Executive Summary

1.1 Turkey Point 6&7 Project at a Glance

- ◆ Licensing remains the focus of FPL activity and COLA approval is expected in the fourth quarter of 2017.
- ◆ Upon COLA approval, FPL will shift project focus to maintaining approved licenses, permits, and certifications.
- ◆ Upon receiving the Commercial Operating License FPL no longer plans to immediately request Commission permission to begin preconstruction activities and construction contract negotiation.
- ◆ Third District Court of Appeals reversed and remanded portions of the 2014 Site Certification Order.
- ◆ Estimated project cost remains in the range of \$13.7 billion to \$20.0 billion.

1.2 Audit Execution

1.2.1 Purpose and Objective

This audit addresses project internal controls and management oversight used by Florida Power & Light Company (FPL or the company) in managing the Turkey Point 6 & 7 (PTN6&7) project. The primary objective of this audit was to provide an independent account of project activities and to evaluate internal project controls. Information in this report may be used by the Commission to assess the reasonableness of FPL cost-recovery requests.

Commission audit staff published previous reports in 2008 through 2015, each entitled *Review of Florida Power & Light's Project Management Internal Controls for Nuclear Plant Uprate and Construction Projects*. These previous reports are available on the Commission website at www.floridapsc.com.

1.2.2 Scope

The period of this review is January 2015 to May 2016. Staff examined the adequacy of FPL project management and internal controls for the PTN6&7 project. The internal controls assessed are related to the following key areas of project activity:

- ◆ Planning
- ◆ Management and organization
- ◆ Cost and schedule controls
- ◆ Contractor selection and management
- ◆ Auditing and quality assurance

Comprehensive controls are essential for successful project management. However, adequate and comprehensive controls are ineffective if not actively emphasized by management, embraced by the organization, and subject to oversight and revision. Proper internal controls minimize risk, enhance its mitigation and management, and aid efficient, reasoned decision making.

Risk must be timely and accurately identified, with adequate safeguards created, vetted, and actively in use to provide prevention or mitigation. Prudent decision making also plays a key role in project management, resulting from well-defined processes addressing identified project risks, expectations, and cost. Effective communication, adherence to clear procedures, and vigilant oversight are also essential to ensure prudent project decisions.

The primary standard used by Commission audit staff for review of FPL internal controls associated with the PTN6&7 project is the Institute of Internal Auditors' *Standards for the Professional Practice of Internal Auditing* and *Internal Control - Integrated Framework*. Staff's audit work is performed in compliance with Institute of Internal Auditors Performance Standards 2000 through 2500. This set of standards was developed by the Committee of Sponsoring Organizations (COSO) of the Treadway Commission. Staff's internal control assessments focused on the COSO framework's five key, interrelated elements of internal control:

- ◆ Control environment
- ◆ Risk assessment
- ◆ Control activities
- ◆ Information and communication
- ◆ Monitoring

To maximize operational effectiveness and efficiency, reliability of financial reporting, and compliance with applicable laws and regulations, all five components must be present and functioning in concert to conclude that internal controls are effective.

1.2.3 Methodology

Initial planning, research, and data collection occurred from December 2015 through January 2016. Staff interviewed FPL project management in April 2016.

Audit staff conducted additional data collection and analysis from January through May 2016. Staff also reviewed project internal audits and company testimony, discovery, and filings in Docket No. 160009-EI. Staff collected and analyzed a large volume of information, including:

- ◆ Policies and procedures
- ◆ Organizational charts
- ◆ Project timelines
- ◆ Vendor and contract change orders and updates
- ◆ Vendor invoices
- ◆ Internal and external audit reports

1.3 Commission Audit Staff Observations

Based upon its information gathering and analysis, Commission audit staff developed the following observations regarding the Turkey Point 6&7 project:

- ◆ Project internal controls, risk evaluation, and management oversight are adequate and responsive to current project requirements.
- ◆ Invoicing policies and procedures are adequate, universally understood and followed.
- ◆ Contracts and contract change orders (CO) adhered to FPL procedures and included all required justifications.
- ◆ The process by which FPL reached its decision to delay pre-construction activities was reasonable.

2.0 New Construction - Turkey Point 6&7

FPL maintains the characterization of its project management as careful and deliberate, creating an option to build two new AP1000 nuclear reactors designated as Turkey Point Units 6 and 7. The project critical path remains licensing, unchanged from 2015.

Throughout 2015 and to date in 2016, FPL continued to focus on obtaining COLA approval from the Nuclear Regulatory Commission (NRC). Approval is expected in the fourth quarter of 2017.

2.1 Key Project Developments

In 2015, the State Siting Board's May 2014 Final Order of Site Certification was challenged in the courts by four appellants including the City of Miami and Miami-Dade County, opposing the Board decision allowing FPL to build and operate two new nuclear units at Turkey Point, the required support facilities, and approximately 88 miles of new transmission. In April 2016, the Third District Court of Appeals reversed and remanded portions of the Site Certification, citing the Siting Board's failure to consider applicable local land development regulations, its inaccurate perception that the Board lacked the authority to require underground installation of transmission lines at FPL expense, and that the Siting Board incorrectly interpreted county environmental regulations as zoning issues. A final legal resolution and its timing are currently unclear. Commission audit staff believes that additional project delay from the reversal, remand, and ongoing legal challenges is possible.

Though there is now further project delay, FPL states that the PTN6&7 project cost estimate remains in a range from \$13.7 billion to \$20.0 billion. This cost range assumes commercial operation dates determined a year ago, of 2027 and 2028, dates the company is now unlikely to meet. A revised, accurate cost estimate is necessary, reflecting changed operational dates, factoring in inflation and other costs associated with the new delay.

2.1.1 Significant Events

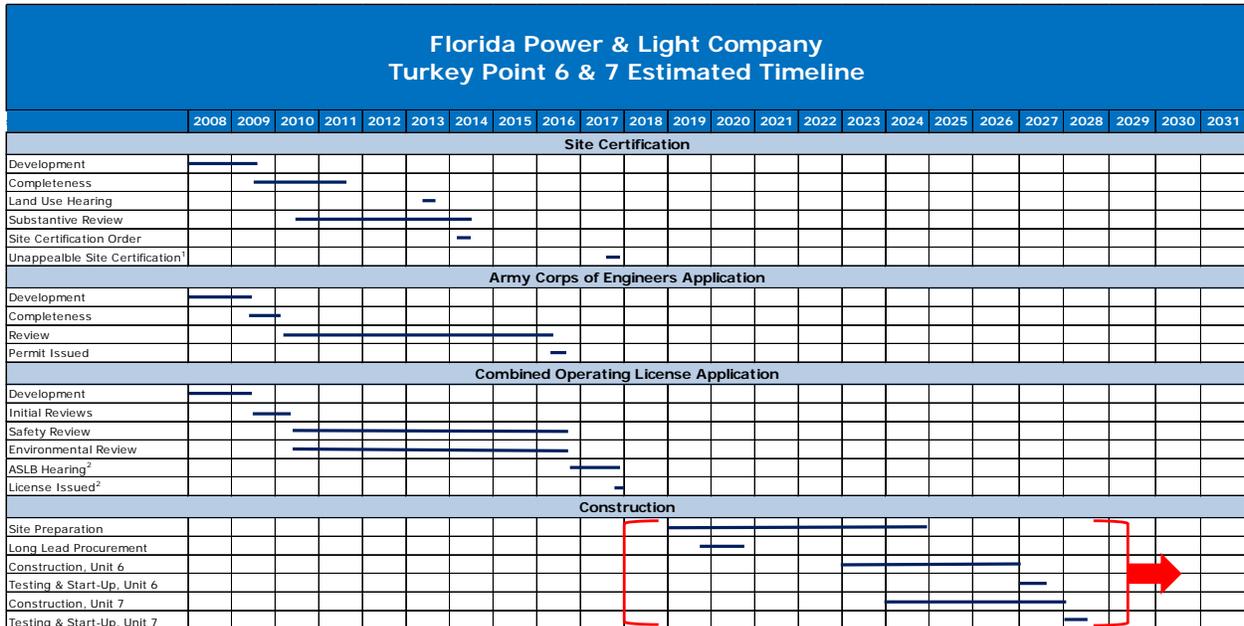
Schedule Change

During 2015, FPL initiated a review of 18 critical project tasks to assess project schedule, scope, and assumptions. The first phase of the review provided insight into the Level 1 baseline schedule and project activities. Two more phases of this review will be completed during mid-2016.

During March and April 2016, FPL reconsidered its planned actions after the COL is received. One of the primary factors considered was recent industry experience from the Vogtle and Summer AP1000 construction projects. Though both projects are approximately 60% complete, substantial uncertainty exists about remaining costs and potential challenges. FPL continues to place value on incorporating lessons learned, to improve the reliability of cost and schedule estimates. Other factors considered were general economic conditions, potential emission control legislation, and fuel price projections.

FPL decided that upon receiving the Commercial Operating License it will not immediately request Commission permission to begin preconstruction activities. Upon obtaining the COL from the NRC, FPL intends to shift project focus to maintaining the COL and other approved licenses, permits, and certifications. Both construction contract negotiation and construction activities will be delayed approximately three years.

Exhibit 1 shows the current estimated project timeline, indicating the potential delay for the construction phase.



¹ To be determined pending resolution of April 20, 2016 Third DCA Opinion

² Assumes a contested hearing

█ Project Delay TBD
 █ FPL 2015 Estimate

EXHIBIT 1

Source: FPL Response to Document Request 3.1

State Site Certification Appeal

The City of Miami, Miami-Dade County, and other parties challenged in the Third District Court of Appeals the State Siting Board’s 2014 Final Order authorizing FPL to construct two new nuclear units and approximately 88 miles of transmission lines. The appeals were combined into one docket, with oral arguments heard in September 2015.

In April 2016, the Court reversed and remanded portions of the Final Order of Site Certification, citing the Board’s failure to consider applicable local land development regulations, an erroneous perception of the Board that it lacked authority to require undergrounding of transmission lines at FPL’s expense, and opining that the Siting Board incorrectly interpreted county environmental regulations as zoning issues.

FPL states that a specific review aimed at determining a favorable resolution of the Site Certification will take place in the near term. Date for completion of the review, length of the review, and recommended actions are uncertain at this time.

Staff believes that additional project delay stemming from the reversal and remand, as well as future legal challenges, is possible.

COLA Status

Licensing remains the focus of FPL efforts. FPL states that the NRC COLA reviews are largely complete, and the processes to obtain approval are ongoing. The NRC has delayed the anticipated date for COLA approval from March 2017 to an undetermined date in late 2017.

Other Federal Applications, Approvals, or Certifications

NRC reviews for the FPL COLA are nearly complete and the necessary Army Corps of Engineers (ACOE) reviews parallel the NRC COLA review. The Land Exchange Agreement between FPL, the National Parks Service, and the Army Corps of Engineers was signed in March 2016 and a closing date is expected in November.

The Advisory Committee on Reactor Safeguards review of COLA safety aspects is expected in September, followed by publication of the Final Safety Evaluation Report in November.

The NRC's Final Environmental Impact Statement (FEIS) is also expected in October 2016 but FPL admits that the date could be extended because the NRC is considering comments associated with a saltwater plume extending under currently existing Turkey Point cooling canals. These comments will be addressed in the FEIS.

On April 21, 2016 the Atomic Safety and Licensing Board issued an order requiring an evidentiary hearing, over a contention related to the injection of wastewater underground and potential impact to deep aquifer groundwater. FPL expects a decision from the ASLB sometime in the second quarter of 2017.

The Final Safety Evaluation Report, which documents the NRC staff position on all COLA safety issues, is expected in the fourth quarter of 2016.

Land Exchange

The Everglades National Park land exchange process was completed in March 2016 with a closing date expected in November 2016. The swap will allow FPL to exchange land that it owns within the Everglades National Park for land on the eastern edge of the park. The company will use this land to create a north-south transmission right-of-way in Miami-Dade County.

A draft Environmental Impact Statement was published in January 2014. The Final Environmental Impact Statement is expected to be issued in October 2016.

Transmission

The Site Certification Final Order issued in May 2014 that was remanded by the Third District Court of Appeals approved FPL's proposed transmission corridors and directed maximum use of the Western Consensus Corridor. This corridor is dependent on the successful completion of the land exchange and the acquisition of land rights from federal and state agencies. The Western Consensus Corridor must be obtained within three years of the receipt of a non-appealable site certification, and the cost cannot exceed ten percent of the cost of the Western Preferred

Corridor. If the Western Consensus Corridor is not obtained under these conditions, FPL would pursue the development of the Western Preferred Corridor.

Project Construction Contract

FPL has not made a decision whether an EPC or an EP&C contract would be more advantageous. The company states that a decision at this point would be unwise based on industry experience. FPL believes the best course of action is to defer pursuit of the construction contract. The company does not intend to pursue an EPC or an EP&C contract until the review of the first wave of AP1000 projects are completed in 2020. The company acknowledges the risk associated with waiting, but it believes this course actually reduces overall project risk.

Project Long Lead Forging Reservation

The 2008 Forging Reservation agreement between FPL and Westinghouse reserved manufacturing capacity. Multiple extensions have been signed. The most recent extension in 2014 extended the original terms and conditions until October 2016. The company plans to pursue an extension in October 2016.

FPL believes continued extension is in its best interest, reducing near term costs and risk while preserving schedule flexibility. If the agreement is dissolved, FPL may forfeit some or all of its \$10.8 million deposit.

Project-Joint Ownership

FPL continues to hold annual meetings with prospective joint owner utilities and to provide updates to the Commission. The last meeting was held in June 2015. Participants included Jacksonville Electric Authority, Orlando Utilities Commission, Ocala Electric Utility, Florida Municipal Power Agency, Florida Municipal Energy Association, and Seminole Electric Cooperative. The next meeting is scheduled for the summer of 2016.

NRC Requests for Information (RAI)

In 2015, the NRC asked for additional seismological and geological information pertaining to FPL's Final Safety Analysis Review. FPL hired third party experts to review data and to assist in preparing responses. All RAIs pertaining to the Final Safety Analysis Review were submitted by the second quarter of 2015.

Additionally, the NRC asked for environmental information. All RAIs pertaining to the Environmental Report were submitted by the end of 2015.

No RAIs were opened in 2016.

2.1.2 Turkey Point 6&7 Project Cost Estimate

The project final cost estimate remains in a range from \$13.7 billion to \$20.0 billion. **Exhibit 2** shows project cost estimates, 2007-2016.

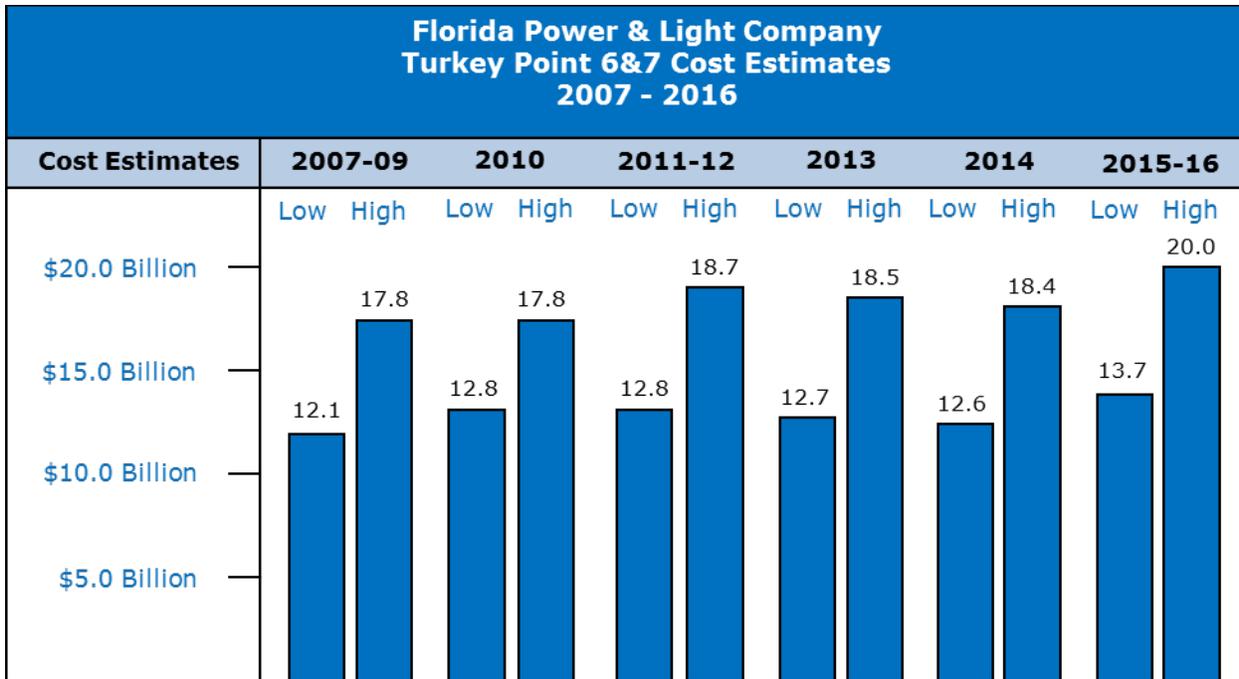


EXHIBIT 2

Source: Staff Interviews, April 2016

FPL expects that project expenditures will be split 60/40 between Unit 6 and Unit 7. The lesser percentage for Unit 7 will result from equipment reuse and a maturation of the project leading to efficiencies in construction and management.

The total estimated project cost is down very slightly, less than a one fourth of one percent, from a year ago but remains in a rounded range from \$13.7 billion to \$20.0 billion. **Exhibit 3** shows project cost estimate changes from 2015 to 2016.

Florida Power & Light Company Turkey Point 6&7 In-Service Cost Estimate 2015 and 2016 (\$)				
Category	2016 Low	Change from 2015	2016 High	Change from 2015
Site Selection	6,118,105	0	6,118,105	0
Pre-construction	302,305,438	(2,204,496)	335,146,376	(2,031,521)
Construction	10,119,373,657	(29,889,533)	14,876,554,988	(29,889,533)
AFUDC	3,239,116,870	(1,490,819)	4,742,829,983	(1,490,819)
Total	13,666,914,070	(33,584,848)	19,960,649,452	(33,411,873)

EXHIBIT 3 Source: Dkt 150009-EI, Schedule TOR-2, May 2015 & Dkt 160009-EI, Schedule TOR-2, May 2016

2.1.3 FPL Project Feasibility Analyses

FPL did not produce a project feasibility analysis this year, filing a motion requesting a waiver in April 2016. The company stated that absent a company request for Commission approval to advance to preconstruction there was no need for a feasibility study.

The company believes that completion of nuclear plants currently under construction will provide critical data for analysis of future capital cost and project construction schedule. With that information in hand, FPL states that it will then be able to produce a feasibility analysis allowing it, and the Commission, to determine if movement to the preconstruction phase is warranted.

As of the writing of this report, the request for waiver is still pending.

2.2 Project Controls and Oversight

2.2.1 Project Controls

Project controls are built into the financial accounting systems, department procedures, and desktop instructions. Controls and process instructions exist in the following areas of project management:

- ◆ Budgeting and reporting
- ◆ Schedule and activity reporting
- ◆ Contract management
- ◆ Internal and external oversight
- ◆ Executive management
- ◆ Subordinate managers
- ◆ FPL subject matter experts (SME) and team members
- ◆ Third party experts
- ◆ Regular updates and reports on risk, cost, and schedule

FPL's Project Controls Group provides management schedule, budget, costs, vendor performance, and risk reports on a regular, ongoing basis. Primavera-6 remains the scheduling software. This software is capable of real-time updates, active monitoring, tailored date sorting, and customized status reports.

No project instructions or management controls were created or deleted during 2015. The following project instructions were revised during 2015:

- ◆ NNP-PI-06 NNP NRC Correspondence
- ◆ NNP-PI-12 Hosting Visiting Dignitaries at the FPL Juno Campus and Preconstruction Tours of the PTN 6 & 7 Site

Additionally, the following project instructions are currently under review or are scheduled for periodic review and revision during 2016:

- ◆ NNP-PI-08 COLA Review and Acceptance Process
- ◆ NNP-PI-01 Request for Information (RFI) and RFI Response
- ◆ NNP-PI-02 Preparation, Revision Review and Approval of New Nuclear Projects Project Instructions
- ◆ NNP-PI-03 Project Document Retention and Records Processing

- ◆ NNP-PI-04 COLA Configuration Control and Responses to Request for Additional Information for Project Applications
- ◆ NNP-PI-05 NNP Project Correspondence
- ◆ NNP-PI-07 Department Training
- ◆ NNP-PI-10 NNP PTN COLA Related Project Management Briefs, Project Memoranda and COLA Related Document Reviews
- ◆ NNP-PI-13 Technical Review of Commercial Project Document
- ◆ NNP-PI-14 Discovery Production Instructions Related to Turkey Point 6 & 7 Combined License Hearing
- ◆ NNP-PI-15 Site Work Activities - Incident Response Instructions

According to FPL, these revisions were responsive to changing project requirements. No internal audits, quality assurance reviews, or external audits reviewed by staff cited any deficiencies in project instructions or management controls.

Additionally, FPL utilizes white papers to record and document key decisions or actions. There were no white papers produced in 2015. The company produced a white paper in April 2016 discussing FPL's planned actions following approval of the COLA. The white paper recommended that the company maintain the COL (e.g. incorporating design changes to the COL) after the receipt of the certification if the project is to be deferred for more than one year.

2.2.2 Risk Management Reporting

Project risk management remains unchanged. The process uses ongoing, regular meetings and reports designed to identify, characterize, evaluate, and/or mitigate project risk.

Weekly small team meetings track project activities, facilitate risk identification, discussion, and the development of a mitigation or remediation strategy for each. Items are either resolved by the small teams or elevated to incrementally higher management levels until resolution is achieved.

Project schedule, progress, and cost metrics are monitored continuously. Results are tracked using standardized reports, increasing subject matter familiarity and allowing for close scrutiny of contractor performance. FPL considers vendors as risk management stakeholders, requiring them to provide weekly progress reports identifying, describing, recording, and addressing risks.

The project team meets monthly, reviewing schedule, budget, issues and potential issues impacting the project, and risks. Identified project risks are tracked and reviewed until resolved and closed out. A Cost Report meeting also provides an opportunity to scrutinize project cost risk. Project management provides regular project updates to FPL executive management.

Commission audit staff reviewed all monthly project dashboards and quarterly risk analyses for 2015 and through May 2016. These reports detail the issue, risk, probability of occurrence, and potential for impact on project cost and schedule. Areas assessed included:

- ◆ NRC Licensing
- ◆ US Army Corps of Engineers Permitting
- ◆ Site Certification Application

- ◆ Underground Injection Control wells
- ◆ Development
- ◆ Project Design
- ◆ Budget
- ◆ Schedule
- ◆ Procurement
- ◆ Safety

Another important management assessment tool is the quarterly risk analysis that provides a wider, more comprehensive scope. It identifies key issues, characterizes them, provides historical trending, and tracks risk. This analysis estimates the likelihood of occurrence for each risk (low, medium, or high) and the potential negative project consequences (low, medium, high). A response is then designed for each risk. A mitigation owner is assigned, management strategies are developed, and progress is tracked until the risk is sufficiently mitigated or eliminated.

Project leadership also has the option of presenting information to and obtaining the advice of the FPL Risk Committee. No presentations were made to the FPL Risk Committee from January 2015 thru May 2016.

Commission audit staff believes that the FPL risk controls reviewed during this audit are adequate and responsive to the current state of the project. Monthly dashboard and quarterly assessments inform FPL management and executive leadership. But Commission audit staff believes that as the project matures, with a vastly increased scope associated with construction, reassessments by FPL of its risk management approach will be necessary. Restructuring of risk management may be required to meet the far greater demands of the expanded project.

2.2.3 Management Oversight

Some changes occurred in management oversight organization and reporting during 2015. These changes altered the way in which information flowed but did not impact management oversight of the project. The Construction Director and License Director began reporting to the vice-president of Nuclear Projects within the Nuclear Division in May of 2015. And, as of November, the Senior Director for Development reports to the vice-president for Project Development who, in turn, reports to the FPL President.

2.2.4 Audits and FPL Quality Assurance Reviews

As in previous years, FPL selected Experis to conduct an audit of project expenditures for 2015. This was done under the supervision and direction of FPL Internal Audit department. The report was published and reviewed by Commission audit staff in March 2016.

Audit areas included employee reimbursed expenses, third-party invoices, payroll, and reconciliation of annual NCRC filings. The audit examined approximately 64 percent of the total expenditures, and no exceptions were noted.

Since 2008, Concentric Energy Advisors has also performed an annual review of PTN6&7 project processes, procedures, and structures. In 2016, Concentric concluded that FPL capably managed the project in 2015 and that project expenditures were prudently incurred. Concentric offered FPL five recommendations to establish development plans for stages beyond the

licensing phase. These addressed Quality Assurance/Quality Control (QA/QC) planning, selection of vendors to receive requests for proposals, procurement close-out, time allocation and warranty tracking.

QA activity was limited during 2015 and year-to-date 2016 due to the limited project scope associated with licensing. However, Concentric recommended that FPL should pursue proactive surveillance and oversight of vendors. Concentric is aware that FPL plans to establish QA/QC plans well in advance of beginning the implementation phase of PTN6&7.

2.3 Contract Oversight and Management

FPL's contract management and oversight systems remain intact from a year ago. The company uses project management, technical representatives, and QA personnel to monitor vendor performance. Vendors are required to provide regular progress reports.

Integrated Supply Chain sourcing specialists and contract managers monitor change orders and invoicing for anomalies. Items outside established contractual norms are routinely reported up the chain of command. Schedule and cost risks are identified, prioritized, and quantified. This information is then used to formulate responsive solutions.

FPL continues to employ systems, policies, procedures and processes to identify any invoice mistakes or vendor overcharges. Invoicing specialists review invoices for accuracy in meeting contract provisions and labor rates. Billed hours are scrutinized and checked against job categories. Travel expense requests are checked for applicability, authorization, required justification, and linkage to an existing contract.

2.3.1 Contract Oversight

FPL's controls to communicate procedures and provide ongoing oversight are unchanged from a year ago. These include policies and instructions, authorization requirements, approval methodologies, invoicing and control procedures. FPL has made no revisions or changes to contractor selection and management policies and procedures during 2015. No revisions are anticipated through May 2016.

Audit staff's review reaffirmed that FPL's invoicing policies and procedures are well understood and that contract and invoicing personnel follow company policies, practices, and procedures. Required authorizations are present and in adherence with specified procedures. Vendor invoices and supporting documentation are vetted. Evidence of challenges to invoiced amounts and appropriate level of push back of questionable or unsupported charges were observed. FPL opened no warranty claims against project contractors during 2015 and 2016 year-to-date.

2.3.2 Contracts Executed or Modified

As seen in **Exhibit 4**, two new contracts were signed in 2015 for the PTN6&7 project. The Bechtel Power Corporation contract was competitively bid while the WareReuse Foundation contract was single sourced. Commission audit staff verified that required letters of single source justification were present and in compliance with FPL internal policies and procedures.

Florida Power & Light Company Turkey Point 6&7 New Contracts Greater than \$100,000 2015-YTD 2016				
Vendor	Description	Terms	Issued	Expire Date
WareReuse Foundation	Reclaimed Water for Reuse Application and Wetland Rehydration	Fixed Price	09/28/15	05/15/17
Bechtel Power Corp.	PTN 6&7 Initial Assessment and Review of Site	T&M	10/05/15	12/31/16

EXHIBIT 4

Source: FPL Response to Document Request 1.29

As shown in **Exhibit 5**, there are currently 11 contracts valued at more than \$250,000, representing original contract value and any subsequent change order.

Change orders represent added or deleted scope, increasing or decreasing contract value, or an administrative adjustment without monetary impact. FPL executed three contract change orders valued at \$50,000 or more in 2015. There were no change orders from January through May 2016. The 2015 change orders extended the contract end date or added scope of work but were not observed to involve issues of contractor performance or inadequate oversight.

Florida Power & Light Company Turkey Point 6&7 Existing Contracts Greater than \$250,000 2015-YTD 2016		
Vendor	Description	Type*
AMEC Environment & Infrastructure	RAI response review / FSAR 2.5.4	S
Bechtel Power Corporation	COLA / SCA prep & RAI support	C, S, P
Bechtel Power Corporation	PTN 6&7 Initial Assessment and Review of Site	C
Environmental Consulting & Technology	SCA & post-submittal support	S, P
EPRI - Electric Power Research Institute	Nuclear technology; membership	S
Golder & Associates Inc.	Post-SCA submittal support	S, P
McCallum Turner, Inc.	COLA site selection RAI support	S
McNabb Hydrogeologic Consulting	Post-SCA / UIC licensing support	S, P
Paul C. Rizzo Associates, Inc.	Field Investigation; FSAR 2.5 Revision	S
Power Engineers, Inc.	Prelim Analysis of Miami River crossing and Davis/Miami Line	S
Westinghouse Electric Co.	COLA prep & RAI support	C, S, P
* C = Competitive Bid S = Single/Sole Source P = Predetermined Source		

EXHIBIT 5

Source: Docket 160009-EI, AE-7A, May 2016

Commission audit staff reviewed all 2015 and year-to-date 2016 contract justifications. No discrepancies were found. The Bechtel contract dealing with COLA/SCA support is the largest contract. Signed in 2007, this contract now has 58 change orders that have altered scope and value. Due to the probability of project schedule extensions, it is likely that the Bechtel contract will continue to increase.