

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

**DOCKET NO. 170009-EI
FLORIDA POWER & LIGHT COMPANY**

MAY 1, 2017

**IN RE: NUCLEAR POWER PLANT COST RECOVERY
FOR THE YEAR ENDING
DECEMBER 2018**

TESTIMONY & EXHIBITS OF:

STEVEN D. SCROGGS

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **FLORIDA POWER & LIGHT COMPANY**

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

4 **DOCKET NO. 170009-EI**

5 **May 1, 2017**

6

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

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

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

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

15 **Q. Have you previously provided testimony in this docket?**

16 A. Yes.

17 **Q. Are you sponsoring or co-sponsoring any exhibits in this case?**

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

- 19 • Exhibit SDS-9, Turkey Point 6 & 7 Site Selection and Preconstruction
20 Nuclear Filing Requirement (NFR) Schedules. The NFR Schedules
21 contain a table of contents listing the schedules sponsored and co-
22 sponsored by FPL Witness Grant-Keene and me, respectively.
- 23 • Exhibit SDS-10, Steps in Turkey Point 6 & 7 Licensing

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

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

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

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

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

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

1

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

11

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

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

21 A. My testimony includes the following sections:

- 22 1. Policy Considerations
- 23 2. Project Approach

1 generation as one tool to help improve fuel diversity and has been successful
2 for FPL customers, as more than 520 MW of new nuclear capacity was
3 successfully added to the system in 2013.

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

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

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

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

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

1 **Q. What specific considerations are included in the Nuclear Cost Recovery**
2 **rule as implemented by the FPSC?**

3 A. A core principle of the Nuclear Cost Recovery rule is that of transparency. In
4 order to satisfy that principle, applicants for cost recovery must satisfy a
5 number of extensive reviews. In order to enter the annual cost recovery
6 process, an applicant must first obtain an affirmative need determination
7 verifying that the proposed generation is required to provide cost-effective and
8 reliable electric generation. Annually, within the cost recovery process, the
9 applicant must provide a full accounting for all project activities and costs for
10 which a utility is seeking recovery. This transparency allows the FPSC to
11 conduct in-depth oversight of the utility's actions in real time – as the project
12 proceeds, rather than in hindsight decades after decisions are made and money
13 is spent. The FPSC then makes a “reasonableness” determination as to costs
14 projected for the project (prior to any recovery of those costs), and reviews
15 historical costs for “prudence.” Amendments to the Nuclear Cost Recovery
16 statute in 2013 provide for additional interim review steps as a project
17 proceeds from licensing to construction.

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

20 A. The statute and associated rule provide the requisite regulatory certainty
21 necessary for FPL to undertake the complex and challenging task of adding
22 new nuclear capacity to its system. The process allows FPL to take the long-
23 lead steps of licensing and pre-construction and pays off interest costs during

1 construction, reducing costs to FPL's customers. Additionally, it enables FPL
2 to go to the financial markets and obtain competitive financing rates for the
3 large amount of capital required to fund the construction of the project.

4 **Q. What developments have occurred since the Nuclear Cost Recovery Rule**
5 **was instituted that influence the decision to proceed with a new nuclear**
6 **project?**

7 A. Natural gas supply has increased with the advent of new resources and
8 extraction technologies, reducing the natural gas price to approximately
9 \$3/MMBtu – nearly 75% below the peak prices experienced in 2005.
10 Additionally, increased natural gas pipeline infrastructure and supply diversity
11 options have been developed. As we look forward, we can see that the price
12 of solar photovoltaic generation has decreased to a point supporting large
13 scale installations throughout Florida, satisfying a portion of the growing
14 demand with a non-traditional, fuel-diverse generation source. We have also
15 observed the lengthy timelines associated with the licensing of new nuclear
16 plants, and challenges experienced by the first wave of AP1000 projects in the
17 U.S. It is the combination of these factors that influence FPL's decision to
18 “pause” before proceeding to preconstruction.

19 **Q. Is it possible that factors influencing the decision to proceed with a new**
20 **nuclear project could change?**

21 A. Yes. We have seen favorable and significant shifts in generation technology,
22 fuel supply, fuel infrastructure and fuel prices in the past ten years. However,
23 history tells us that unforeseen events can influence fuel supplies, technology,

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

9

10 **PROJECT APPROACH**

11

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

13 A. FPL continues to develop Turkey Point 6 & 7 through a deliberate and careful
14 process navigating through the four phases of project development:
15 Exploratory, Licensing, Preparation, and Construction. The project is
16 currently focused on the Licensing phase which allows FPL to make progress
17 on obtaining licenses and approvals without taking on the risks and
18 expenditures that would result from committing to a specific construction
19 schedule. For example, through 2016, FPL estimates it will have spent
20 approximately 1.5% of the high end of the estimated project cost range
21 (\$21.87 billion).

22

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

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

8 A. The project team monitors issues at local, state, and federal levels and across
9 technical, commercial, economic, and regulatory areas of interest. The
10 certainty of cost, schedule, and quality are routinely assessed through tools
11 and reviews. If review indicates the potential for a considerable cost or
12 schedule impact, mitigation actions are identified and are designed to
13 eliminate, reduce, or otherwise manage the potential for impact. If the
14 magnitude of the impact materially affects overall project cost or schedule, a
15 decision is made as to whether such impact is acceptable in light of all current
16 information. Alternative courses of action include continuing with a modified
17 budget and schedule along with available mitigation actions, or halting a
18 portion of the project temporarily while the issue is further assessed or
19 resolved. The alternative of slowing or halting a portion of the project in
20 response to significant events or uncertainties offers a high level of risk
21 control for FPL and its customers.

22 **Q. Is the plan to pause between the Licensing phase and the Preparation**
23 **phase an example of this step-wise process?**

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

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

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

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FACTORS INFLUENCING THE PROJECT

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

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

Project-Specific Factors

Q. What factors in the federal license and permit review processes may affect the overall timeline of the project?

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

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

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

8

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

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

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

1 previously provided by CB&I Stone & Webster. The prior organization
2 provided a combined Engineering, Procurement and Construction (EPC) style
3 arrangement under a consortium of Westinghouse as the EP contractor, and
4 CB&I Stone & Webster as the Construction contractor. The objective of the
5 reorganized project was to put in place a more streamlined organization to
6 finish the projects, effectively an EPC organization wholly under
7 Westinghouse. As a result of the dispute resolution, a new project schedule
8 was developed that estimated Vogtle Units 3 and 4 completion in 2019 and
9 2020, respectively. This meant that the first projects of the first wave of
10 AP1000 construction in the U.S. would not be completed for several more
11 years.

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

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

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

3 **Q. What impact, if any, do the recent announcements regarding**
4 **Westinghouse's future participation in nuclear construction have on the**
5 **Turkey Point 6 & 7 project?**

6 A. The future impacts of the financial issues facing Westinghouse, and parent
7 company Toshiba, are unknown because they are still unfolding. The
8 principal issue appears to be that the first wave projects will require more
9 capital and time to complete than estimated when Westinghouse consolidated
10 Engineering, Procurement and Construction in late 2015 with the purchase of
11 CB&I Stone & Webster. The overall impact is reduced certainty with respect
12 to the timing, cost, and manner in which the first wave construction projects
13 will be completed.

14
15 However, it is FPL's expectation that any decision that would prevent
16 Westinghouse from participating in future projects as the Construction
17 contractor would not preclude them from maintaining the more traditional role
18 of Engineering and Procurement contractor, a position reactor design
19 companies have historically taken in nuclear construction projects. In fact,
20 throughout the recent issues, Westinghouse has continued to support the
21 design and licensing activities associated with existing and pending licenses,
22 unchanged from its position in prior years. Taking the recent reports at face
23 value, FPL would expect that a "turnkey" EPC contract with Westinghouse is

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

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

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

19 *Economic Factors*

20 **Q. What do recent economic developments indicate with respect to the**
21 **continued pursuit of the Turkey Point 6 & 7 project?**

22 A. The shift in the supply and demand balance in the natural gas industry has
23 created a near term reduction in natural gas prices and has maintained long

1 range price forecasts at historically low levels. As I mentioned in my March
2 1, 2017 testimony, the historically low trend in natural gas price forecasts
3 places continued pressure on economic benefits to be delivered by the project.

4 **Q. What do recent developments related to national and regional**
5 **environmental regulations indicate with respect to the continued pursuit**
6 **of the Turkey Point 6 & 7 project?**

7 A. It remains reasonable to assume that CO₂ compliance costs will be realized at
8 some point in the future during the projected 60 year operating lives of Turkey
9 Point Units 6 and 7. However, there is continuing uncertainty regarding the
10 level of those compliance costs and exactly when they may take effect.

11

12 **2017 PROJECT ACTIVITIES**

13

14 **Q. What is the focus of the project in 2017?**

15 A. The focus will remain on completing the federal licenses and permits
16 necessary to construct and operate the Turkey Point 6 & 7 project,
17 establishing the necessary staff and resources to maintain compliance with all
18 requirements for licenses and certifications received, and resolving the three
19 outstanding issues associated with the Site Certification. The licensing phase
20 milestones are discussed below and summarized in Exhibit SDS-10.

21 **Q. What specific milestones are expected in relation to completing the NRC**
22 **licensing process in 2017?**

1 A. A contested hearing will be held May 2, 2017 in Homestead, FL to address the
2 single remaining contention. The contention addresses certain constituents
3 contained in reclaimed water to be used at the plant and the injection of that
4 water into Underground Injection Control wells. An administrative hearing,
5 referred to as the Mandatory hearing, will be held at NRC headquarters in
6 August 2017 where the NRC Commissioners are expected to approve the
7 COL. Upon completion of the administrative and legal processes, the NRC
8 Commissioners will meet later in 2017 or early 2018 to issue the COL.

9 **Q. What specific milestones are expected related to the ACOE Section 404(b)**
10 **and Section 408 processes in 2017?**

11 A. As described in prior sections, the ACOE will utilize the NRC EIS to support
12 its Record of Decision (ROD) for the Section 404(b) permits. Thus, the
13 completion of the Final EIS in 2016 was a prerequisite for the remaining
14 ACOE reviews. The ACOE will complete a review under the Clean Water
15 Act in 2017 to determine the Least Environmentally Damaging Practicable
16 Alternative (LEDPA). This will include a wildlife consultation with the U.S.
17 Fish & Wildlife Service. The Section 408 reviews will be conducted in
18 parallel to assure that the placement of transmission infrastructure poses no
19 impacts to the structural integrity of flood control structures under the
20 ACOE's authority.

21 **Q. What specific milestones are expected related to the state Site**
22 **Certification process in 2017?**

1 A. As discussed earlier, the remand of the Site Certification will result in several
2 specific activities FPL will undertake to appropriately address the issues
3 identified in the 3rd DCA's Order, while retaining the value that has been
4 created for our customers. Also, FPL will take necessary actions required by
5 Conditions of Certification (CoC) to maintain compliance, including
6 continued development of the West Consensus Corridor.

7 **Q. What actions does the Land Exchange Agreement require of FPL in**
8 **2017?**

9 A. The Land Exchange Agreement requires FPL to pursue development of the
10 West Consensus Corridor, approved in the Site Certification Process and
11 consistent with the COC governing its development. The goal is to maximize
12 the use of the Western Consensus Corridor, and reconvey to Everglades
13 National Park (ENP) any portion of the Exchange Property (formerly ENP
14 lands) not required to complete a contiguous corridor. Therefore, FPL is
15 moving forward with the necessary design, surveys and legal reviews to
16 determine if the Western Consensus Corridor can be successfully developed in
17 a timely and cost-effective manner. These actions will be conducted in
18 compliance with the Site Certification COC, in order to maintain compliance
19 with that authorization.

20 **Q. What are the next steps in the Turkey Point Units 6 & 7 project,**
21 **following receipt of the COL?**

22 A. Receipt of the necessary licenses, permits, certifications and other approvals
23 to construct and operate the Turkey Point Units 6 & 7 project will mark a

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

10

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

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

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

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

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

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

13

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

17

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

1 feasible for nuclear construction, and qualified companies are available to
2 provide the roles of Engineering, Procurement Lead and Constructor.

3
4 Financing will be determined as the project proceeds through approvals to
5 construction. The lead projects, Vogtle and Summer, have successfully
6 obtained financing, and Vogtle has closed on a significant federal loan
7 guarantee. FPL will continue its dialogue with the financial community to
8 help maintain FPL's capability to obtain financing with reasonable terms.

9
10 Finally, as discussed earlier in this testimony, state and federal energy policy
11 continues to be generally supportive of new nuclear generation.

12

13 **PROJECT NEXT STEPS**

14

15 **Q. Does FPL intend to pursue completion of licensing for the Turkey Point 6**
16 **& 7 project so that FPL is in a position to timely move to preconstruction**
17 **when conditions warrant?**

18 A. Yes. The ability to deliver the potential benefits of the Project to FPL
19 customers is an opportunity available only if FPL completes and maintains the
20 licenses and approvals necessary to construct and operate the facility. Future
21 market conditions will determine the appropriate timing.

1 **Q. In light of the reduced certainty surrounding the first wave of new**
2 **nuclear construction projects, why is FPL continuing to pursue licensing**
3 **for the Turkey Point 6 & 7 project?**

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

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

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

1 **Q. What activities are being taken to prepare for the obligations of being an**
2 **NRC Licensee upon issuance of the COL?**

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

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

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

1 LARs into its COL to maintain it in a condition that is current and actionable.
2 FPL's participation in APOG significantly reduces the cost and time
3 associated with processing and obtaining approval for LARs.

4 **Q. What is the value to FPL's customer of maintaining the configuration**
5 **control of the COL current, once received?**

6 A. By maintaining the COL current, FPL customers will retain the option of the
7 issued COL with a minimal time to be able to move forward with
8 preconstruction and construction. By making the LARs to our COL now, we
9 are maintaining regulatory consistency with the NRC staff who have issued
10 the LARs for first wave units and obtaining these approvals at significantly
11 reduced costs.

12 **Q. How will this activity change over time?**

13 A. As indicated, the LARs will be generated in reducing number as the
14 construction concludes. Once first wave units are complete, FPL anticipates a
15 modest annual cost to maintain configuration control.

16 **Q. What are FPL's estimated costs for the Turkey Point 6 & 7 project**
17 **during this pause?**

18 A. In 2017, FPL expects to incur about \$25 million for the Project, including
19 carrying costs. FPL expects costs to decrease to about \$10 million to \$15
20 million annually, including carrying costs, during the initial years of the
21 maintenance period, and continue to decline as LARs are completed.

22 **Q. Does FPL intend to seek contemporaneous cost recovery for costs**
23 **incurred in 2017 or during the "pause" period prior to pre-construction?**

1 A. No. FPL will not seek contemporaneous cost recovery for costs incurred on
2 the project while we monitor the first wave AP1000 construction experience
3 leading to future decisions on project next steps; instead, FPL is seeking to
4 defer recovery of these costs.

5 **Q. What factors will FPL monitor to determine when it would be**
6 **appropriate to request approval for pre-construction work?**

7 A. FPL will be intimately involved in the details of the LARs. FPL will also
8 maintain an awareness of important cost, schedule and implementation
9 information from the first wave projects through our monitoring and
10 participation in industry groups such as APOG and the Designed Centered
11 Working Group. This information will assist in developing a comprehensive
12 review that will provide FPL and the Commission with the necessary
13 information to determine when pre-construction work is warranted to further
14 develop the contractual pricing, terms, conditions and schedule that would
15 form the basis of the construction decision.

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

17 A. Yes.

Turkey Point 6 & 7 Site Selection and Pre-Construction Costs
Nuclear Filing Requirements (NFRs)
TOR-Schedules (True-up to Original)
2017 P-Schedule (Projection)
January 2017 - December 2018

Site Selection & Pre-Construction

**Turkey Point 6 & 7 Site Selection & Pre-Construction
Nuclear Filing Requirements (NFRs)
2017 P-Schedule (Projection)
TOR-Schedules (True-up to Original)
January 2017 - December 2018**

Site Selection Table of Contents

<u>Page (s)</u>	<u>Schedule</u>	<u>Year</u>	<u>Description</u>	<u>Sponsor</u>
4	TOR-1	2018	NCRC Summary	J. Grant-Keene
5	TOR-3	2018	Summary of Annual Clause Recovery Amounts	J. Grant-Keene & S. Scroggs
6	TOR-6	2018	Capital Additions/Expenditures	J. Grant-Keene & S. Scroggs

Pre-Construction Table of Contents

<u>Page (s)</u>	<u>Schedule</u>	<u>Year</u>	<u>Description</u>	<u>Sponsor</u>
8-9	P-8	2018	Estimated Rate Impact	J. Grant-Keene
11	TOR-1	2018	NCRC Summary	J. Grant-Keene
12	TOR-2	2018	Budgeted and Actual Power Plant In-Service Costs	J. Grant-Keene & S. Scroggs
13	TOR-3	2018	Summary of Annual Clause Recovery Amounts	J. Grant-Keene & S. Scroggs
14	TOR-6	2018	Capital Additions/ Expenditures	J. Grant-Keene & S. Scroggs
15	TOR-7	2018	Power Plant Milestones	S. Scroggs

Site Selection True-Up To Original 2018

FLORIDA POWER & LIGHT COMPANY
Turkey Point Units 6&7 - Site Selection Costs
NCRC Summary - Docket No. 170009

Schedule TOR-1 (True-Up to Original)

FLORIDA PUBLIC SERVICE COMMISSION

EXPLANATION: Show the jurisdictional amounts used to calculate the final true-up, estimated true-up, projection, deferrals, and recovery of deferrals for each project included in the NCRC. The sum of the amounts should be the total amount requested for recovery in the projected period.

For the Period Ended 12/31/2018

COMPANY: FLORIDA POWER LIGHT & COMPANY

Witness: Jennifer Grant-Keene

DOCKET NO. 170009-EI

Line No.	Costs by Project	2015			2016			2017	2018	Subtotals	Deferred Recovery			Net Amounts
		A (a)	B	C (B)-(A)	D (a)	E	F (E)-(D)	G (c)	H (c)	I (C)+(F)	J	K	L	M
		Approved Actual & Estimated Amounts in Docket No. 150009-EI	Final Actual Amounts in Docket No. 170009-EI	Final True-up for 2015	Approved Projected Amounts in Docket No. 150009-EI	Actual & Amounts in Docket No. 170009-EI	True-up for 2016	Actual & Estimated Amounts for 2017 in Docket No. 170009-EI	Initial Projected Amounts for 2018 in Docket No. 170009-EI	Amounts for 2017 to be Recovered in Docket No. 170009-EI	Increase in Deferred Balance	Decrease in Deferred Balance	2018 Deferred Balance	Net Amount Requested for Recovery in 2017 in Docket No. 180009-EI

Site Selection Costs														Jurisdictional Dollars	
1	Additions	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A	\$0				\$0	
2	Carrying Costs - Construction	\$158	\$158	\$0	\$27	(\$183)	(\$210)	N/A	N/A	(\$210)				(\$210)	
3	Carrying Costs - DTA/(DTL)	\$159,586	\$159,930	\$344	\$159,561	\$159,578	\$17	N/A	N/A	\$361				\$361	
4	O&M	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A	\$0				\$0	
5	Base Rate Revenue Requirements	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A	\$0				\$0	
6	Subtotal (Sum 1-5)	\$159,744	\$160,088	\$345	\$159,588	\$159,395	(\$193)	N/A	N/A	\$151	\$0	\$0	\$0	\$151	
7															
8	Pre-Construction Costs (b)														
9	Additions														
10	Carrying Costs - Construction														
11	Carrying Costs - DTA/(DTL)														
12	O&M														
13	Base Rate Revenue Requirements														
14	Subtotal (Sum 10-14)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
15															
16	Construction Costs														
17	CWIP Balance														
18	Carrying Costs - Construction														
19	Carrying Costs - DTA/(DTL)														
20	O&M														
21	Base Rate Revenue Requirements														
22	Subtotal (Sum 20-23)	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A	\$0	\$0	\$0	\$0	\$0	
23															
24	Total (Sum 6,15,24)	\$159,744	\$160,088	\$345	\$159,588	\$159,395	(\$193)	N/A	N/A	\$151	\$0	\$0	\$0	\$151	

Notes:
29 (a) The amounts referenced were approved by the Commission in Docket No. 150009-EI (see Order No. PSC-15-0521-FOF-EI).
30 (b) Please refer to Pre-Construction TORs for further detail.
31 (c) FPL is not seeking FPSC review or recovery of 2017 and 2018 project costs at this time.
32 * Totals may not add due to rounding

Turkey Point Units 6&7
Site Selection Costs and Carrying Costs on Site Selection Cost Balance
Summary of Annual Clause Recovery Amounts

Schedule TOR-3 (True-up to Original)

FLORIDA PUBLIC SERVICE COMMISSION

EXPLANATION: Provide a summary of the actual to date and projected total amounts for the project.

COMPANY: FLORIDA POWER LIGHT & COMPANY

For the Period Ended 12/31/2018

DOCKET NO.170009-EI

Witness: Jennifer Grant-Keene and Steven D. Scroggs

Line No.	Description	(A) Actual 2006	(B) Actual 2007 (a)	(C) Actual 2008	(D) Actual 2009	(E) Actual 2010	(F) Actual 2011	(G) Actual 2012	(H) Actual 2013	(I) Actual 2014	(J) Actual 2015	(K) Actual 2016	(L) Total Actual PTD	(M) Actual/Estimated 2017	(N) Projected 2018	(O) To-Date Total Through 12/31/2018
Jurisdictional Dollars																
1	Site Selection Category															
a.	Additions		\$6,092,571	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,092,571	N/A	N/A	\$6,092,571
b.	O&M		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A	\$0
c.	Carrying Costs on Additions		\$134,731	\$689,750	\$343,600	(\$31,207)	(\$9,831)	\$0	\$0	(\$742)	\$158	(\$183)	\$1,126,276	N/A	N/A	\$1,126,276
d.	Carrying Costs on DTA/(DTL)		(\$90)	(\$3,023)	\$29,562	\$177,172	\$180,883	\$180,883	\$170,485	\$159,224	\$159,930	\$159,578	\$1,214,604	N/A	N/A	\$1,214,604
e.	Total Site Selection Amounts (Lines 1.a through 1.d)	\$0	\$6,227,213	\$686,727	\$373,162	\$145,965	\$171,052	\$180,883	\$170,485	\$158,482	\$160,088	\$159,395	\$8,433,452	N/A	N/A	\$8,433,452
2	Pre-Construction Category (b)															
a.	Additions															
b.	O&M															
c.	Carrying Costs on Additions															
d.	Carrying Costs on DTA/(DTL)															
e.	Total Pre-Construction Amounts (Lines 2.a through 2.d)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A	\$0
3	Construction Category															
	Additions															
	CWIP Base Eligible for a return															
a.	O&M															
b.	Carrying Costs on Additions															
c.	Carrying Costs on DTA/(DTL)															
d.	Total Construction Amounts (Lines 3.a through 3.c)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A	\$0
4	Other Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A	\$0
5	Total Actual Annual Amounts (Lines 1.e + 2.e + 3.d + 4)	\$0	\$6,227,213	\$686,727	\$373,162	\$145,965	\$171,052	\$180,883	\$170,485	\$158,482	\$160,088	\$159,395	\$8,433,452	N/A	N/A	\$8,433,452
6	Original Projected Total Annual Amounts		\$6,539,167	\$723,484	\$509,050	\$233,136	\$171,052	\$180,883	\$180,883	\$158,402	\$159,744	\$159,588	\$8,855,801	N/A	N/A	\$8,855,801
7	Difference (Line 5 - Line 6)	\$0	(\$311,953)	(\$36,758)	(\$135,888)	(\$87,171)	(\$0)	\$0	(\$10,398)	\$79	\$345	(\$193)	(\$422,349)	N/A	N/A	(\$422,349)
8	Percent Difference [(7 ÷ 6) x 100%]	0%	-5%	-5%	-27%	-37%	0%	0%	-6%	0%	0%	0%	-5%	N/A	N/A	N/A

Notes:

- 9 (a) Effective with the filing of FPL's need petition on October 16, 2007, all costs were transferred to Construction Work in Progress, Account 107, and site selection costs ceased.
- 10 (b) Please refer to Pre-Construction TORs for further detail.
- 11 (c) FPL is not seeking FPSC review or recovery of 2017 and 2018 project costs at this time.

* Totals may not add due to rounding

Turkey Point Units 6&7
Site Selection Costs and Carrying Costs on Site Selection Cost Balance
True-up to Original: Site Selection Category - Capital Additions/Expenditures

Schedule TOR-6 (True-up to Original)

FLORIDA PUBLIC SERVICE COMMISSION

COMPANY: FLORIDA POWER LIGHT & COMPANY

DOCKET NO. 170009-EI

EXPLANATION: Provide the actual to date and projected annual expenditures by major tasks performed within the site selection category for the project.

For the Period Ended 12/31/2018

Witness: Jennifer Grant-Keene and Steven D. Scroggs

Line No.	Description	(A)	(B)	(C)
		Actual 2006 (a)	Actual 2007 (a) (b)	Total Actual
1	Site Selection:			
2				
3	Activities (c)			
4	Project Staffing	\$442,676	\$320,164	\$762,840
5	Engineering	\$2,077,555	\$1,274,189	\$3,351,744
6	Environmental Services	\$113,473	\$1,106,817	\$1,220,290
7	Legal Services	\$22,482	\$760,749	\$783,231
8	Total Site Selection Costs:	<u>\$2,656,186</u>	<u>\$3,461,919</u>	<u>\$6,118,105</u>
9	Jurisdictional Factor	0.9958099	0.9958265	0.9958265
10	Total Jurisdictionalized Site Selection Costs:	<u>\$2,645,056</u>	<u>\$3,447,471</u>	<u>\$6,092,571</u>
11	Adjustments (d)			
12	Other Adjustments		(\$20,516)	(\$20,516)
13	Jurisdictional Factor	0.9958099	0.9958265	0.9958265
14	Total Jurisdictionalized Adjustments:	<u>\$0</u>	<u>(\$20,430)</u>	<u>(\$20,430)</u>
15				
16	Total Jurisdictionalized Site Selection net of adjustments	<u>\$2,645,056</u>	<u>\$3,467,901</u>	<u>\$6,113,001</u>

Notes:

- 17 (a) As filed in Docket No. 090009-EI for 2006-2007.
18 (b) Effective with the filing of FPL's need petition on October 16, 2007, all costs were transferred to Construction Work in Progress, Account 107, and site
19 selection costs ceased.
20 (c) See March 2, 2009 WP-2 Page 1 of 2 in Docket No. 090009-EI.
21 (d) See revised March 2, 2009 T-6, Line 10 in Docket No. 090009-EI.

*Totals may not add to rounding

Pre-Construction Projection

2018

Turkey Point Units 6 & 7
Pre-Construction Costs and Carrying Costs on Construction Cost Balance
Projection Filing: Estimated Rate Impact

Schedule P-8

FLOIFLORIDA PUBLIC SERVICE COMMISSION
 COMPANY: FLORIDA POWER & LIGHT COMPANY
 DOCKET NO.: 170009-EI

EXPLANATION: Using the most recent billing determinants and allocation factors available, provide an estimate of the rate impact by class of the costs requested for recovery.

For the Year Ended 12/31/2018

Witness: Jennifer Grant-Keene

Line No. **CALCULATION OF ENERGY & DEMAND ALLOCATION % BY RATE CLASS**
ESTIMATED FOR THE PERIOD OF: JANUARY 2018 THROUGH DECEMBER 2018

Line No.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	RATE SCHEDULE	AVG 12CP Load Factor at Meter (%) ^(a)	Projected Sales at Meter (kwh) ^(b)	Projected AVG 12CP at Meter (kW) ^(c)	Demand Loss Expansion Factor ^(d)	Energy Loss Expansion Factor ^(e)	Projected Sales at Generation (kwh) ^(f)	Projected AVG 12CP at Generation (kW) ^(g)	Percentage of Sales at Generation (%) ^(h)	Percentage of Demand at Generation (%) ⁽ⁱ⁾
4	RS1/RTR1	60.247%	57,483,949,536	10,891,986	1.05776787	1.04423633	60,026,828,497	11,521,193	53.25397%	58.79541%
5	GS1/GST1	64.142%	6,008,203,182	1,069,291	1.05776787	1.04423633	6,273,984,041	1,131,062	5.56609%	5.77208%
6	GSD1/GSDT1/HLFT1	73.438%	25,977,598,105	4,038,064	1.05769151	1.04417958	27,125,277,479	4,271,026	24.06472%	21.79607%
7	OS2	132.242%	10,819,466	934	1.05150490	1.02646495	11,105,803	982	0.00985%	0.00501%
8	GSLD1/GSLDT1/CS1/CST1/HLFT2	75.357%	10,572,732,222	1,601,627	1.05682066	1.04355690	11,033,247,662	1,692,633	9.78836%	8.63791%
9	GSLD2/GSLDT2/CS2/CST2/HLFT3	89.125%	2,513,919,140	321,993	1.04985073	1.03811686	2,609,741,844	338,045	2.31528%	1.72512%
10	GSLD3/GSLDT3/CS3/CST3	89.022%	175,793,917	22,542	1.02155421	1.01697515	178,778,045	23,028	0.15861%	0.11752%
11	SST1T	101.486%	89,667,754	10,086	1.02155421	1.01697515	91,189,878	10,303	0.08090%	0.05258%
12	SST1D1/SST1D2/SST1D3	80.582%	11,856,926	1,680	1.03411504	1.02646495	12,170,719	1,737	0.01080%	0.00887%
13	CILC D/CILC G	88.049%	2,790,632,003	361,804	1.04907700	1.03788716	2,896,361,124	379,560	2.56956%	1.93699%
14	CILC T	92.458%	1,532,560,735	189,221	1.02155421	1.01697515	1,558,576,183	193,300	1.38272%	0.98645%
15	MET	74.705%	91,241,144	13,942	1.03411504	1.02646495	93,655,836	14,418	0.08309%	0.07358%
16	OL1/SL1/SL1M/PL1/LT1	1,609.525%	668,389,683	4,741	1.05776787	1.04423633	697,956,790	5,015	0.61921%	0.02559%
17	SL2/SL2M/GSCU1	96.393%	104,537,486	12,380	1.05776787	1.04423633	109,161,841	13,095	0.09685%	0.06683%
19	TOTAL		108,031,901,299	18,540,291			112,718,035,741	19,595,396	100.00000%	100.00000%

^(a) AVG 12 CP load factor based on 2013-2015 load research data and 2017 projections.

^(b) Projected kwh sales for the period January 2018 through December 2018.

^(c) Calculated: Col(3)/(8760 hours * Col(2))

^(d) Based on 2017 demand losses.

^(e) Based on 2017 energy losses.

^(f) Col(3) * Col(6)

^(g) Col(4) * Col(5)

^(h) Col(7) / Total for Col(7)

⁽ⁱ⁾ Col(8) / Total for Col(8)

Note: There are currently no customers taking service on Schedules ISST1(D) and ISST1(T). Should any customer begin taking service on these schedules during the period, they will be billed using the applicable SST1 factor.

Totals may not add due to rounding.

Turkey Point Units 6 & 7
Pre-Construction Costs and Carrying Costs on Construction Cost Balance
Projection Filing: Estimated Rate Impact

Schedule P-8

FLORIDA PUBLIC SERVICE COMMISSION
 COMPANY: FLORIDA POWER & LIGHT COMPANY
 DOCKET NO.: 170009-EI

EXPLANATION: Using the most recent billing determinants and allocation factors available, provide an estimate of the rate impact by class of the costs requested for recovery.

For the Year Ended 12/31/2018
 Witness: Jennifer Grant-Keene

CALCULATION OF CAPACITY PAYMENT RECOVERY FACTOR
ESTIMATED FOR THE PERIOD OF: JANUARY 2018 THROUGH DECEMBER 2018

Line No.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	RATE SCHEDULE	Percentage of Sales at Generation (%) (a)	Percentage of Demand at Generation (%) (b)	Energy Related Cost (\$) (c)	Demand Related Cost (\$) (d)	Total Capacity Costs (\$) (e)	Projected Sales at Meter (kwh) (f)	Billing KW Load Factor (%) (g)	Projected Billed KW at Meter (KW) (h)	Capacity Recovery Factor (\$/KW) (i)	Capacity Recovery Factor (\$/kwh) (j)	RDC (\$/KW) (k)	SDD (\$/KW) (l)
4	RS1/RTR1	53.25397%	58.79541%	(\$299,470)	(\$3,967,584)	(\$4,267,054)	57,483,949,536	-	-	-	(0.00007)	-	-
5	GS1/GST1	5.56609%	5.77208%	(\$31,301)	(\$389,507)	(\$420,807)	6,008,203,182	-	-	-	(0.00007)	-	-
6	GSD1/GSDT1/HLFT1	24.06472%	21.79607%	(\$135,326)	(\$1,470,825)	(\$1,606,151)	25,977,598,105	49.84229%	71,396,701	(0.02)	-	-	-
7	OS2	0.00985%	0.00501%	(\$55)	(\$338)	(\$394)	10,819,466	-	-	-	(0.00004)	-	-
8	GSLD1/GSLDT1/CS1/CST1/HL	9.78836%	8.63791%	(\$55,044)	(\$582,896)	(\$637,941)	10,572,732,222	58.50168%	24,756,887	(0.03)	-	-	-
9	GSLD2/GSLDT2/CS2/CST2/HL	2.31528%	1.72512%	(\$13,020)	(\$116,413)	(\$129,433)	2,513,919,140	66.18315%	5,203,326	(0.02)	-	-	-
10	GSLD3/GSLDT3/CS3/CST3	0.15861%	0.11752%	(\$892)	(\$7,930)	(\$8,822)	175,793,917	64.49420%	373,388	(0.02)	-	-	-
11	SST1T	0.08090%	0.05258%	(\$455)	(\$3,548)	(\$4,003)	89,667,754	12.32043%	996,983	-	-	(\$0.00)	(\$0.00)
12	SST1D1/SST1D2/SST1D3	0.01080%	0.00887%	(\$61)	(\$598)	(\$659)	11,856,926	29.33276%	55,373	-	-	(\$0.00)	(\$0.00)
13	CILC D/CILC G	2.56956%	1.93699%	(\$14,450)	(\$130,710)	(\$145,160)	2,790,632,003	73.96625%	5,168,281	(0.03)	-	-	-
14	CILC T	1.38272%	0.98645%	(\$7,776)	(\$66,567)	(\$74,343)	1,532,560,735	76.16413%	2,756,413	(0.03)	-	-	-
15	MET	0.08309%	0.07358%	(\$467)	(\$4,965)	(\$5,432)	91,241,144	64.16476%	194,792	(0.03)	-	-	-
16	OL1/SL1/SL1M/PL1/LT1	0.61921%	0.02559%	(\$3,482)	(\$1,727)	(\$5,209)	668,389,683	-	-	-	(0.00001)	-	-
17	SL2/SL2M/GSCU1	0.09685%	0.06683%	(\$545)	(\$4,510)	(\$5,054)	104,537,486	-	-	-	(0.00005)	-	-
18													
19	TOTAL			(\$562,343)	(\$6,748,119)	(\$7,310,462)	108,031,901,299		110,902,144				

21 (a) Obtained from Page 1, Col(9)
 22 (b) Obtained from Page 1, Col(10)
 23 (c) (Total Capacity Costs/13) * Col(2)
 24 (d) (Total Capacity Costs/13 * 12) * Col(3)
 25 (e) Col(4) + Col(5)
 26 (f) Projected kwh sales for the period January 2018 through December 2018.
 27 (g) (kWh sales / 8760 hours)/((avg customer NCP)/(8760 hours))
 28 (h) Col(7) / (Col(8) *730)
 29 (i) Col(6) / Col(9)
 30 (j) Col(6) / Col(7)
 31 (k) RDC = Reservation Demand Charge - (Total Col 6)/(Page 1 Total Col 8)/(Page 1 Col 5)/12 Months
 32 (l) SDD = Sum of Daily Demand Charge - (Total Col 6)/(Page 1 Total Col 8)/(21 onpeak days)/(Page 1 Col 5)/12 Months
 33
 34 Note: There are currently no customers taking service on Schedules ISST1(D) and ISST1(T). Should any customer begin
 35 taking service on these schedules during the period, they will be billed using the applicable SST1 factor.

Totals may not add due to rounding.

Pre-Construction True-Up To Original

2018

FLORIDA POWER & LIGHT COMPANY
Turkey Point Units 6&7 - Pre-Construction Costs
NCRC Summary - Dkt. 170009

Schedule TOR-1 (True-up to Original)

FLORIDA PUBLIC SERVICE COMMISSION

EXPLANATION: Show the jurisdictional amounts used to calculate the final true-up, estimated true-up, projection, deferrals, and recovery of deferrals for each project included in the NCRC. The sum of the amounts should be the total amount requested for recovery in the projected period.

For the Period Ended 12/31/2018

COMPANY: FLORIDA POWER LIGHT & COMPANY

Witness: Jennifer Grant-Keene

DOCKET NO.170009-EI

Line No.	Costs by Project	2015			2016			2017	2018	Subtotals	Deferred Recovery			Net Amounts
		A (b)	B	C (B)-(A)	D (b)	E	F (E)-(D)	G	H	I (C)+(F)	J	K	L	M
		Approved Actual & Estimated Amounts in Docket No. 150009-EI	Final Actual Amounts in Docket No. 170009-EI	Final True-up for 2015	Approved Projected Amounts in Docket No. 150009-EI	Final Actual Amounts in Docket No. 170009-EI (d)	Final True-up for 2016	Actual & Estimated Amounts for 2017 in Docket No. 170009-EI (e)	Initial Projected Amounts for 2018 in Docket No. 170009-EI (e)	Amounts to be Recovered in Docket No. 170009-EI (d)	Increase in Deferred Balance	Decrease in Deferred Balance	2018 Deferred Balance	Net Amount Requested for Recovery in 2018 in Docket No. 170009-EI

Site Selection Costs (c)

Jurisdictional Dollars

1	Additions													
2	Carrying Costs - Construction													
3	Carrying Costs - DTA/DTL													
4	O&M													
5	Base Rate Revenue Requirements													
6	Subtotal (Sum 1-5)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Pre-Construction Costs

10	Additions (a)	\$18,638,220	\$17,309,494	(\$1,328,727)	\$21,057,310	\$15,673,982	(\$5,383,328)	N/A	N/A	(\$6,712,054)	-	-	-	(\$6,712,054)
11	Carrying Costs - Construction	(\$62,774)	(\$57,109)	\$5,665	\$246,400	\$26,460	(\$219,940)	N/A	N/A	(\$214,274)	-	-	-	(\$214,274)
12	Carrying Costs - DTA/DTL	\$6,709,332	\$6,725,838	\$16,505	\$7,376,121	\$6,980,591	(\$395,530)	N/A	N/A	(\$379,024)	-	-	-	(\$379,024)
13	O&M	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A	\$0	-	-	-	\$0
14	Base Rate Revenue Requirements	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A	\$0	-	-	-	\$0
15	Subtotal (Sum 10-14)	\$25,284,779	\$23,978,223	(\$1,306,556)	\$28,679,830	\$22,681,033	(\$5,998,797)	N/A	N/A	(\$7,305,353)	\$0	\$0	\$0	(\$7,305,353)

Construction Costs

19	CWIP Balance													
20	Carrying Costs - Construction													
21	Carrying Costs - DTA/DTL													
22	O&M													
23	Base Rate Revenue Requirements													
24	Subtotal (Sum 20-23)	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A	\$0	\$0	\$0	\$0	\$0
26	Total (Sum 6,15,24)	\$25,284,779	\$23,978,223	(\$1,306,556)	\$28,679,830	\$22,681,033	(\$5,998,797)	N/A	N/A	(\$7,305,353)	\$0	\$0	\$0	(\$7,305,353)

(a) Additions are pre-construction costs that, absent Section 366.93, F.S., would be recorded as CWIP.

(b) The amounts referenced were approved by the Commission in Docket No. 150009-EI (see Order No. PSC-15-0521-FOF-EI).

(c) Refer to Site Selection TORs for further details.

(d) Initial assessment costs reflected on TOR-6 are not included in additions for 2016 Final True Up. FPL is not seeking to recover these costs at this time.

(e) FPL is not seeking FPSC review or recovery of 2017 and 2018 costs at this time.

* Totals may not add due to rounding

Turkey Point Units 6&7
Site Selection, Pre-Construction Costs, and Carrying Costs on Construction Cost Balance
True-up to Original: Budgeted and Actual Power Plant In-Service Costs

Schedule TOR-2 (True-Up to Original)

[Section (8)(f)]

FLORIDA PUBLIC SERVICE COMMISSION
 COMPANY: Florida Power & Light Company
 DOCKET NO.170009-EI

EXPLANATION: Report the budgeted and actual costs as compared to the estimated in-service costs of the proposed power plant as provided in the petition for need determination or revised estimate as necessary.

For the Period Ended 12/31/2018

Witness: Jennifer Grant-Keene and Steven D. Scroggs

Line No.		Actual Costs as of December 31, 2016	Remaining Budget Costs to Complete Plant		Total Estimated In-Service Cost		Estimated Cost Provided in the Petition for Need determination	
			Low Range	High Range	Low Range	High Range	Low Range	High Range
1	Site Selection	\$6,118,105	\$0	\$0	\$6,118,105	\$6,118,105	\$8,000,000	\$8,000,000
2	Pre-Construction	\$253,680,617	\$93,125,585	\$128,958,195	\$346,806,203	\$382,638,812	\$465,000,000	\$465,000,000
3	Construction	\$0	\$11,155,665,197	\$16,406,703,271	\$11,155,665,197	\$16,406,703,271	\$8,149,000,000	\$12,124,000,000
4	Carrying Charges & AFUDC	\$48,281,188	\$3,405,359,711	\$5,031,009,079	\$3,453,640,899	\$5,079,290,267	\$3,461,000,000	\$5,160,000,000
5	Total	<u>\$308,079,911</u>	<u>\$14,654,150,493</u>	<u>\$21,566,670,544</u>	<u>\$14,962,230,404</u>	<u>\$21,874,750,455</u>	<u>\$12,083,000,000</u>	<u>\$17,757,000,000</u>

- 6 (a) Actual Sunk Costs represent costs incurred on the project as of December 31, 2016. This amount does not include any termination or other
 7 cancellation costs that could be incurred in the event of project cancellation or deferral.
 8 (b) Carrying Costs on (over)/under recoveries are not included as part of Sunk Costs.
 9 (c) AFUDC is calculated on the non-incremental costs total company and includes carrying costs.
 10 (d) Actual AFUDC through December 31, 2016 represents the retail jurisdictional portion.

11
 12 *Totals may not add due to rounding.

Turkey Point Units 6&7
Pre-Construction Costs and Carrying Costs on Construction Cost Balance
Summary of Annual Clause Recovery Amounts

Schedule TOR-3 (True-up to Original)

FLORIDA PUBLIC SERVICE COMMISSION

EXPLANATION: Provide a summary of the actual to date and projected total amounts for the project.

COMPANY: FLORIDA POWER LIGHT & COMPANY

For the Period Ended 12/31/2018

DOCKET NO. 170009-EI

Witness: Jennifer Grant-Keene and Steven D. Scroggs

Line No.	Description	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(L)	(K)	(M)	(N)	(O)
		Actual 2006	Actual 2007	Actual 2008	Actual 2009	Actual 2010	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Actual 2015	Actual 2016 (b)	Total Actual	Actual/Estimated 2017 (c)	Projected 2018 (c)	To-Date Total Through 12/31/2018
Jurisdictional Dollars																
1	Site Selection Category (a)															
	a. Additions															
	b. O&M															
	c. Carrying Costs on (over)/under recoveries															
	d. Carrying Costs on DTA/(DTL)															
	e. Total Site Selection Amounts (Lines 1.a through 1.d)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2	Pre-Construction Category															
	a. Additions	\$0	\$2,522,692	\$47,049,854	\$37,599,045	\$25,287,720	\$22,877,377	\$29,034,114	\$28,209,654	\$18,448,666	\$17,309,494	\$15,673,982	\$244,012,597	N/A	N/A	\$244,012,597
	b. O&M	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A	\$0
	c. Carrying Costs on (over)/under recoveries	\$0	\$20,555	\$2,204,114	(\$691,521)	(\$9,331,680)	(\$5,974,180)	(\$2,666,490)	(\$1,525,282)	(\$1,179,841)	(\$57,109)	\$26,460	(\$19,174,974)	N/A	N/A	(\$19,174,974)
	d. Carrying Costs on DTA/(DTL)	\$0	(\$8)	(\$4,359)	\$1,549,215	\$3,481,362	\$4,418,565	\$5,406,452	\$6,190,204	\$6,149,897	\$6,725,838	\$6,980,591	\$40,897,755	N/A	N/A	\$40,897,755
	e. Total Pre-Construction Amounts (Lines 2.a through 2.d)	\$0	\$2,543,239	\$49,249,608	\$38,456,738	\$19,437,402	\$21,321,762	\$31,774,076	\$32,874,575	\$23,418,721	\$23,978,223	\$22,681,033	\$265,735,378	N/A	N/A	\$265,735,378
3	Construction Category															
	Additions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	CWIP Base Eligible for a return	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	a. O&M	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	b. Carrying Costs on Additions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	c. Carrying Costs on DTA/(DTL)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	d. Total Construction Amounts (Lines 3.a through 3.c)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A	\$0
4	Other Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A	\$0
5	Total Actual Annual Amounts (Lines 1.e + 2.e + 3.d + 4)	\$0	\$2,543,239	\$49,249,608	\$38,456,738	\$19,437,402	\$21,321,762	\$31,774,076	\$32,874,575	\$23,418,721	\$23,978,223	\$22,681,033	\$265,735,378	N/A	N/A	\$265,735,378
6	Original Projected Total Annual Amounts	\$0	\$2,543,239	\$73,042,554	\$116,885,727	\$91,627,859	\$31,310,395	\$36,642,378	\$34,813,272	\$23,970,235	\$19,183,748	\$21,057,310	\$451,076,717	N/A	N/A	\$451,076,717
7	Difference (Line 5 - Line 6)	\$0	\$0	(\$23,792,946)	(\$78,428,989)	(\$72,190,457)	(\$9,988,634)	(\$4,868,302)	(\$1,938,697)	(\$551,513)	\$4,794,475	\$1,623,724	(\$185,341,339)	N/A	N/A	(\$185,341,339)
8	Percent Difference [(7 ÷ 6) x 100%]	N/A	N/A	-33%	-67%	-79%	-32%	-13%	-6%	-2%	25%	8%	-41%	N/A	N/A	N/A

9 (a) Refer to Site Selection TORs for further details.

10 (b) Initial Assessment costs reflected on TOR-6 are not included in additions for 2016 Actual costs. FPL is not seeking to recover these costs at this time.

11 (c) FPL is not seeking FPSC review or recovery of 2017 and 2018 project costs at this time.

12 * Totals may not add due to rounding

Turkey Point Units 6&7
Pre-Construction Costs and Carrying Costs on Construction Cost Balance
True-up to Original: Pre-Construction Capital Additions/Expenditures

Schedule TOR-6 (True-up to Original)

FLORIDA PUBLIC SERVICE COMMISSION

EXPLANATION: Provide the actual to date and projected annual expenditures by major tasks performed within pre-construction for the project.

For the Period Ended 12/31/2018

COMPANY: FLORIDA POWER LIGHT & COMPANY

All pre-construction category costs also included in site selection costs or construction costs must be identified.

Witness: Jennifer Grant-Keene and Steven D. Scroggs

DOCKET NO. 170009-EI

Line No.	Description	(A) Actual 2007	(B) Actual 2008	(C) Actual 2009	(D) Actual 2010	(E) Actual 2011	(F) Actual 2012	(G) Actual 2013	(H) Actual 2014	(I) Actual 2015	(J) Actual 2016	(K) Total Actual	(L) Actual/Estimated 2017 (c)	(M) Projections 2018 (c)
1	Pre-Construction:													
2														
3	Generation:													
4	Licensing	\$2,017,181	\$31,085,381	\$30,271,612	\$23,181,548	\$19,339,344	\$22,569,507	\$25,637,988	\$16,072,491	\$14,778,172	\$14,056,556	\$199,009,779	N/A	N/A
5	Permitting	\$516,084	\$1,694,555	\$991,090	\$1,223,203	\$679,397	\$1,004,333	\$1,231,174	\$414,704	\$187,118	\$221,004	\$8,162,662	N/A	N/A
6	Engineering and Design	\$0	\$3,542,947	\$6,445,161	\$1,185,396	\$3,132,238	\$5,991,791	\$1,859,326	\$2,916,303	\$3,326,281	\$3,105,727	\$31,505,170	N/A	N/A
7	Long lead procurement advanced payments	\$0	\$10,860,960	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,860,960	N/A	N/A
8	Power Block Engineering and Procurement	\$0	\$31,789	\$23,662	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$55,451	N/A	N/A
9	Initial Assessment (a)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,480,242	\$809,801	\$2,290,043	N/A	N/A
10	Total Generation Costs	\$2,533,265	\$47,215,633	\$37,731,525	\$25,590,147	\$23,150,978	\$29,565,631	\$28,728,488	\$19,403,498	\$19,771,813	\$18,193,088	\$251,884,066	N/A	N/A
11	Adjustments													
12	Non-Cash Accruals	\$587,128	\$6,678,052	(\$4,978,314)	\$931,345	\$1,204,389	\$0	\$0	\$0	\$0	\$0	\$4,422,600	N/A	N/A
13	Other Adjustments (b)	(\$14,344)	(\$176,256)	(\$187,874)	(\$110,607)	(\$137,153)	\$0	\$0	\$0	\$1,480,242	\$1,618,052	\$2,472,059	N/A	N/A
14	Total Adjustments	\$572,783	\$6,501,796	(\$5,166,188)	\$820,738	\$1,067,236	\$0	\$0	\$0	\$1,480,242	\$1,618,052	\$6,894,659	N/A	N/A
15														
16	Total Generation Costs Net of Adjustments (Line 10 - Line 14)	\$1,960,482	\$40,713,837	\$42,897,713	\$24,769,409	\$22,083,742	\$29,565,631	\$28,728,488	\$19,403,498	\$18,291,571	\$16,575,036	\$244,989,407	N/A	N/A
17	Jurisdictional Factor	0.9958265	0.99648888	0.99648888	0.98818187	0.98818187	0.98202247	0.98194011	0.95079073	0.94630981	0.94563790		N/A	N/A
18	Total Jurisdictional Generation Costs Net of Adjustments	\$1,952,300	\$40,570,886	\$42,747,094	\$24,476,681	\$21,822,754	\$29,034,114	\$28,209,654	\$18,448,666	\$17,309,494	\$15,673,982	\$240,245,624	N/A	N/A
19														
20	Transmission:													
21	Line Engineering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A
22	Substation Engineering	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A
23	Clearing	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A
24	Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A
25	Total Transmission Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A
26	Jurisdictional Factor	0.99412116	0.99412116	0.99412116	0.88696801	0.88696801	0.90431145	0.89472420	0.88498196	0.88498196	0.88718019		N/A	N/A
27	Total Jurisdictional Transmission Costs	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A
28	Adjustments													
29	Non-Cash Accruals	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A
30	Other Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A
31	Total Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A
32	Jurisdictional Factor	0.99412116	0.99412116	0.99412116	0.88696801	0.88696801	0.90431145	0.89472420	0.88498196	0.88498196	0.88718019		N/A	N/A
33	Total Jurisdictional Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A
34														
35	Total Jurisdictional Transmission Costs Net of Adjustments	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	N/A	N/A
36														
37	Total Jurisdictional Pre-Construction Costs	\$1,952,300	\$40,570,886	\$42,747,094	\$24,476,681	\$21,822,754	\$29,034,114	\$28,209,654	\$18,448,666	\$17,309,494	\$15,673,982	\$240,245,624	N/A	N/A
38														
39	Construction:													
40														
41	N/A- At this stage, construction has not commenced.													
42														
43														
44	(a) Reflected on line 9 are initial assessment costs which FPL is not seeking to recover at this time, and therefore these costs are adjusted out on line 13. Instead, FPL will capitalize these costs as incurred and accrue allowance for funds used during construction (AFUDC).													
45	(b) Reflects adjustments for Initial Assessment costs and Property Held for Future Use.													
46	(c) FPL is not seeking FPSC review or recovery of 2017 and 2018 project costs at this time.													
47														
48														
49	* Totals may not add due to rounding													

**Turkey Point Units 6&7
Pre-Construction Costs and Carrying Costs on Construction Cost Balance
Power Plant Milestones**

Schedule TOR-7 (True-up to Original)

[Section (6)(c)1.c.]

FLORIDA PUBLIC SERVICE COMMISSION

EXPLANATION: Provide initial project milestones in terms of costs, budget levels, initiation dates and completion dates.

For the Period Ended 12/31/2018

COMPANY: FLORIDA POWER & LIGHT COMPANY

Provide all revised milestones and reasons for each revision.

Witness: Steven D. Scroggs

DOCKET NO.: 170009-EI

Line
No.

Line No.		Initial Milestones	Revised Milestones	Reasons for Variance(s)
1				
2				
3	Licensing/Permits/Authorizations/Legal	Initiate 2007	no change	N/A
4		Complete 2012	2017	Current expectation for COL issuance
5	Site/Site Preparation	Initiate 2010	Under Review	Construction will await license approvals
6		Complete 2012	Under Review	Initial date has changed
7	Related Facilities ¹	Initiate 2010	Under Review	Construction will await license approvals
8		Complete 2018/2020	Under Review	Initial date has changed
9	Generation Plant	Initiate 2013/2015	Under Review	Construction will await license approvals
10		Complete 2018/2020	Under Review	Initial date has changed
11	Transmission Facilities	Initiate 2010	Under Review	Construction will await license approvals
12		Complete 2020	Under Review	Initial date has changed

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Estimated Cost Provided in the Petition for Need Determination (in millions)			
Year	Case A	Case B	Case C
2006	\$4	\$4	\$4
2007	\$8	\$8	\$8
2008	\$113	\$113	\$113
2009	\$223	\$223	\$223
2010	\$373	\$373	\$373
2011	\$523	\$523	\$523
2012	\$1,293	\$1,183	\$1,506
2013	\$2,483	\$2,201	\$3,025
2014	\$4,023	\$3,521	\$4,993
2015	\$6,091	\$5,291	\$7,632
2016	\$8,522	\$7,373	\$10,736
2017	\$10,610	\$9,161	\$13,402
2018	\$12,705	\$10,956	\$16,077
2019	\$13,431	\$11,578	\$17,005
2020	\$14,020	\$12,082	\$17,757
2021			
2022			
2023			
2024			
2025			
2026			
2027			
2028			
2029			
2030			
2031			
2032			

Total Current Estimated in Service Costs (in millions)		
Year	Low Range	High Range
2006		
2007	\$11	\$11
2008	\$73	\$73
2009	\$122	\$122
2010	\$155	\$155
2011	\$185	\$185
2012	\$223	\$224
2013	\$261	\$261
2014	\$286	\$287
2015	\$312	\$312
2016	\$335	\$336
2017	\$360	\$361
2018	\$371	\$377
2019	\$376	\$384
2020	\$381	\$391
2021	\$383	\$395
2022	\$459	\$506
2023	\$523	\$601
2024	\$1,080	\$1,421
2025	\$2,301	\$3,220
2026	\$4,109	\$5,885
2027	\$6,310	\$9,127
2028	\$8,655	\$12,582
2029	\$10,814	\$15,763
2030	\$12,792	\$18,677
2031	\$14,552	\$21,271
2032	\$14,962	\$21,875

(1) Turkey Point Unit 6 targeted for 2031, Unit 7 targeted for 2032.
Values include Site Selection, Pre-Construction and Construction Costs.

Steps to Obtain Key State and Federal Licenses for Turkey Point 6 & 7



Licensing Activity	2015	2016	2017
Site Certification			
Siting Board/Certification			
Potential Appeal	[Bar spanning Q1-Q4 2015]		
Final Unappealable Certification ¹		[Green X]	
Army Corps of Engineers Application			
404(b) Public Notice	[Green square]		
Least Environmentally Damaging Practicable Alternative Review	[Bar spanning Q1-Q4 2015]		
Final Record of Decision			[Green square]
Permit Issued			[Green X]
Combined License Application (COLA)			
Revised COLA Schedule			
Safety Review	[Bar spanning Q1-Q4 2015]		
Advanced Final Safety Evaluation Report (SER)		[Green square]	
Advisory Committee on Reactor Safeguards Meeting		[Green square]	
Final SER		[Green square]	
Environmental Review	[Blue bar]		
Draft Environmental Impact Statement (EIS)	[Green square]		
Completion of EIS	[Bar spanning Q1-Q4 2015]		
Final EIS		[Green square]	
Atomic Safety and Licensing Board Hearing ²			[Blue bar]
NRC COL Decision ²			[Green X]

All future dates are estimated based on recent state or federal communications.

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

²COL decision timing is estimated

**CERTIFICATE OF SERVICE
DOCKET NO. 170009-EI**

I HEREBY CERTIFY that a true and correct copy of FPL's Testimony and Exhibits of Steven Scroggs was served electronically this 1st day of May, 2017, to the following:

Kyesha Mapp, Esq.
Margo Leathers, Esq.
Division of Legal Services
Florida Public Service Commission
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