BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 100009-EI
FLORIDA POWER & LIGHT COMPANY

MAY 3, 2010
(REVISED)

IN RE: NUCLEAR POWER PLANT COST RECOVERY
FOR THE YEARS ENDING
DECEMBER 2010 AND 2011

TESTIMONY & EXHIBITS OF:

STEVEN D. SCROGGS

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DIRECT TESTIMONY OF STEVEN D. SCROGGS

DOCKET NO. 100009-EI

MAY 3, 2010

Q. Please state your name and business address.

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

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

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

Q. Have you previously provided testimony in this docket?

A. Yes.

Q. Are you sponsoring any exhibits in this case?

A. Yes, I am sponsoring the following exhibits:

- SDS-9, consisting of Appendix II containing the Nuclear Filing Requirements Schedules (NFRs) for Turkey Point 6 & 7 Pre-Construction costs. Page 2 of Appendix II contains a table of contents listing the NFRs co-sponsored by FPL Witness Powers and by me, respectively.

- SDS-10, consisting of Appendix III containing the NFRs providing the Site Selection costs for Turkey Point 6 & 7 Project. Page 2 of Appendix III contains a table of contents listing the NFRs co-sponsored by FPL Witness Powers and by me, respectively.
- SDS-11, consisting of summary tables presenting the 2010 actual/estimated and 2011 projected preconstruction costs for the Turkey Point 6 & 7 project.
- SDS-12, a project memorandum describing the factors influencing, and risk management basis, for revising the Project Schedule.
- SDS-13, providing a revised project schedule and milestones.
- SDS-14, a project memorandum describing the approach taken to revising the project cost estimate.
- SDS-15, consisting of a table comparing Case C of the 2008 Cost Estimate Range to the 2010 Cost Estimate Check
- SDS-16, a project memorandum describing the factors and alternatives considered when extending the Forging Reservation Agreement.

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

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

- Provide estimated fuel cost savings for FPL's customers of approximately $1.3 billion (nominal) in the first full year of operation;

- Provide estimated fuel cost savings for FPL's customers over the life of the project of approximately $95 billion (nominal);
- Diversify FPL's fuel sources by decreasing reliance on natural gas by approximately 12% beginning in the first full year of operation;
- Reduce annual fossil fuel usage by the equivalent of 28 million barrels of oil or 177 million mmBTU of natural gas;
- And, reduce CO2 emissions by an estimated 284 million tons over the life of the project, which is the equivalent of operating FPL's entire generating system with zero CO2 emissions for 7 years.

These quantifications are set forth in FPL Witness Dr. Sim's testimony and Exhibit SRS-1.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to provide a description of how the Turkey Point 6 & 7 project is being developed, managed and controlled to meet the ultimate project objective of delivering reliable, cost-effective and fuel diverse generation to FPL customers under the earliest practicable deployment schedule. My testimony will provide insight into how project activities are managed and the factors influencing key decisions affecting the nature, cost and pace of the project. I will also describe the projected expenditures for 2010 and 2011 allowing FPL to produce and support applications for the required licenses and permits and otherwise enable steps necessary to maintain the project schedule.

Q. Please describe how your testimony is organized.

A. My testimony includes the following sections:

1. Project Approach
2. Process and Risk Management
3. Procurement
4. National Level Issues
5. Project Issues
6. Key Decisions
7. Project Activities
8. Preconstruction Cost Request
9. Project Cost and Feasibility

Q. Please summarize your testimony.

A. The primary focus of the current stage of the project has been, and remains, obtaining the necessary federal, state and local approvals for construction and operation of the Turkey Point 6 & 7 project. My testimony describes the factors affecting the pace and execution of the project, as well as the key decisions made, or those to be made, to maintain progress toward delivering the benefits of new nuclear generation to FPL customers without incurring unnecessary cost or schedule risks. In past years, FPL has made decisions to defer planned expenditures in long lead procurement and initiation of prime contracts awaiting higher predictability in project schedule and cost. The original in-service dates of 2018 and 2020 were based on the premise predictability would be achieved by 2010, or the project would defer such expenditures until a higher level of predictability is achieved. Our current

assessment is that this needed clarity and clear path to construction has not been achieved, and therefore expenditures beyond those required to obtain the necessary licenses, permits and approvals would be premature. As a result of this decision the original in-service dates will not be achieved. Revised dates of 2022 for Unit 6 and 2023 for Unit 7 are provided for planning purposes.

My testimony discusses the content of the $42.6 million of actual/estimated Pre-construction costs planned in 2010 and the $29.5 million projected Pre-construction costs planned for 2011, and why they are reasonable. Moreover, I will discuss the rationale for these expenditures and how they will be managed going forward to meet project objectives. These amounts contribute to a total company request to recover approximately ~~$29 million~~ **$31 million** in 2011, as described by FPL Witness Powers. This equates to a residential customer monthly bill impact of ~~$0.31~~ **$0.33** per 1,000 kWh. The testimony also addresses the economic and fundamental feasibility of the project, concluding the project remains feasible with the capability to deliver the cost-effective, reliable baseload generation needed in our future with no greenhouse gas emissions as envisioned in the 2008 Need Order.

PROJECT APPROACH

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

A. FPL continues to develop Turkey Point 6 & 7 through a deliberate, stepwise decision-making process navigating the project through the four phases of project development: Exploratory, Licensing, Preparation, and Construction. The approach involves continuous monitoring of the factors influencing the feasibility, cost and schedule of the Turkey Point 6 & 7 project. Opportunities will arise as the project unfolds to change the pace of the project in response to evolving issues. This allows FPL to take advantage of events offering opportunities to accelerate schedule by initiating certain activities early or lock in favorable terms for materials or services. Alternately, FPL can slow the project down or take an "off ramp", halting or limiting project expenditures altogether or in a specific area, for defined periods of time allowing for the development of more information to better manage risks. Risks can generally be separated into two areas. Implementation, or execution, risks affect the ability to achieve the ultimate objectives of the project, such as the likelihood of obtaining timely and complete Design Certification of the AP-1000 technology. Other risks influence the efficiency of achieving the objective, such as cost or schedule risks. The nature of power generation development requires FPL to monitor evolving issues and control the pace of the Turkey Point 6 & 7 project in order to effectively manage the execution and efficiency risks presented as the project proceeds.

Q. Please expand on the concept of "off-ramps" and how the risks presented in execution of the Turkey Point 6 & 7 project are controlled by key decisions informed by the continued assessment of issues affecting the project.

A. The project team monitors a host of issues at local, state and federal levels and across technical, commercial, economic and regulatory areas of interest. The affect on cost, schedule and quality are constantly being assessed through a set of routine tools and reviews. If review indicates the potential for a considerable cost or schedule impact, mitigation actions are identified and are designed to eliminate, reduce, defer or otherwise manage the impact. If the magnitude of the impact materially affects cost or schedule, or changes the feasibility of the project, a decision will be made as to whether such impact is acceptable in light of all current information. Options available include continuing with a modified budget and/or schedule along with available mitigation actions, or halting a portion of the project temporarily while the issue is further assessed or resolved. The option of slowing or halting a portion of the project in response to significant events or uncertainties, although it may postpone delivery of Turkey Point 6 & 7's benefits, offers a high level of risk control for FPL and its customers.

Q. How has this project approach specifically been applied to the activities planned for the Turkey Point 6 & 7 project in 2010 and 2011?

A. Beginning in late 2009, FPL began a review of the developments of the past year to determine the best path forward for the project. The original schedule,

with in-service dates of 2018 and 2020, required activities in the Preparation phase (detailed engineering, long lead procurement and construction planning) to be initiated by 2010, in parallel with the Licensing phase. This earliest practicable schedule assumed national level issues (energy policy, NRC design certification, NRC license review, economic and market behavior), state level issues (load growth, economic health), as well as project specific issues (pace of application reviews, commercial contracts) would have developed further than they have to date. The necessary degree of development has not occurred, and therefore expenditures beyond those required to obtain the necessary licenses, permits and approvals would be premature. FPL has therefore determined to continue to pursue Licensing phase activities (supporting applications for needed approvals) and defer Preparation phase activities (detailed engineering, long lead procurement, and construction planning) and associated expenditures. This pacing decision allows for additional information to develop while positively and actively managing risk exposure related to non-licensing related expenses. Implementation and efficiency risks presently make initiation of the considerable expenditures in the Preparation phase premature.

In the original project schedule, it was assumed developments would occur on a pace to allow the initiation of Preparation phase activities during the latter stages of the Licensing phase. However, these developments (as discussed later in this testimony) have not progressed as required to support the next step. Preparation phase activities should not be initiated before a clear path to

regulatory approvals, a risk-managed commercial agreement and a firm construction schedule are further developed. Therefore, FPL has determined it is premature to expend funds on activities related to detailed design, procurement and construction planning - a step that would necessarily initiate a series of expenditures leading to construction.

FPL's resulting plan for 2010 and 2011 is, therefore focusing all activities and associated expenditures on supporting and advancing the review of federal, state and local license and permit applications. The stepwise approach directs that the best course of action in the next two years is to continue progress on obtaining all approvals to create the option for new nuclear generation, while allowing experience to be gained from the application review processes underway, the developing commercial market for Engineering and Procurement (EP) or Engineering, Procurement and Construction (EPC) services, national and regional energy policy, and the actual experience of preceding U.S. and International projects. These developments will provide better information to inform a project execution plan reducing implementation and efficiency risks.

Q. How does this risk management decision affect the overall project schedule for Turkey Point 6 & 7?

A. It is no longer estimated the project will attain commercial operation of Units 6 & 7 in 2018 and 2020, respectively. It is currently assumed the implementation and efficiency risks will not be resolved to a point supporting

substantial Preparation phase activities before the Combined Operating License (COL) is granted by the Nuclear Regulatory Commission (NRC), in 2013. If Preparation and Construction phase activities are initiated in late 2013 or early 2014, and the same procurement and construction intervals are used as in the original project schedule, the result is an estimated in-service date of 2022 for Unit 6. The original schedule conservatively assumed two years would be required between Unit in-service dates. Current expectations indicate the time between units can be reduced to one year, resulting in an estimated in-service date of 2023 for Unit 7.

PROCESS AND RISK MANAGEMENT

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

A. The above described schedule decision is an example of the on-going risk management exercised by project management. The Turkey Point 6 & 7 project requires a broad span of specific experience in the development, design, construction and licensing of nuclear generation. There is also a significant volume of information generated as issues unique to new nuclear generation deployment are identified, assessed and evaluated. The project management structure of the Turkey Point 6 & 7 project provides for dedicated teams with the requisite subject matter expertise to be coordinated at all levels. This is accomplished through a project organization and

reporting structure and a deliberate contracting structure applying the best resources to each issue while maintaining transparent and open communications. The project organization relies on two principal organizations jointly responsible for the integrated execution of the project. William Maher has recently replaced Martin Gettler, following his retirement, and manages the New Nuclear Plant organization with responsibility for NRC licensing and project engineering and construction. I lead the FPL Development organization for all other facets of project development, such as state Site Certification, local zoning approvals, public relations and Florida Public Service Commission (FPSC) regulatory issues. Each organization is formed from FPL business units with specific, recent success in the licensing, NRC re-licensing and permitting of eleven power generation facilities in Florida in the past seven years and is complemented by our national operating experience with renewable, natural gas and nuclear generation assets.

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

Q. What process and risk management tools does FPL apply to obtain cost, risk and schedule objectives?

A. FPL uses industry accepted project controls, systems and practices to obtain a high level of confidence in the expenditures incurred and projected for all projects. The primary means of control are 1) the project budgeting and reporting process, 2) project schedule and activity reporting processes, 3) the contract management process for external service providers, and 4) internal and external oversight processes. These processes were fully described in my direct testimony provided in the March 1, 2010 True-up filing.

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

A. Effectiveness measures are included within some mechanisms and provided by external review processes for all. As an example, the Engineering & Construction Division Project Dashboard presents issues and the current trends for those issues. Over time, if a problematic issue continues to trend down or remains neutral, the effectiveness of the project management controls are investigated to determine if modifications are needed to effect improvement. Effectiveness of project control processes is also reviewed as a part of the project management reviews and audits.

Project Memoranda, describing the background and analysis considered in project decisions are an example of a new tool developed to ensure a higher level of documentation and transparency in the management of the project. These memoranda have documented decisions such as those involving

withdrawal of the Limited Work Authorization request, decisions made with respect to project features, contracts, cost estimates and schedules.

Additionally, a high level risk summary has been developed to record the assessment of project risks over time. This summary qualitatively gauges the probability of occurrence and affects to implementation, cost and schedule aspects of the project. This tool was recently recommended by Concentric Energy Advisors in a project management review.

Q. What audit and review activities are planned and what are the objectives of these audits?

A. FPL employs a comprehensive suite of audit activities to evaluate and document the conduct of project activities. Standard annual financial audits provide full review of project expenditures to support prudency determination in the subsequent years. Annual internal controls reviews and financial audits are conducted to ensure FPL is appropriately applying all project controls and is adopting the appropriate techniques and tools learned from other projects in the industry. Topical audits are developed as necessary to complement specific areas of key interest at each stage of the project. Examples of topical audits would include quality control audits focusing on specific processes and training audits to verify personnel are receiving required instruction.

Q. Please provide examples of the types of improvement opportunities created by these audits, and FPL's process for incorporating these improvements into existing processes.

A. FPL maintains a culture promoting continuous process improvement to improve operations and increase productivity. The project team employs a range of tools and practices to improve the quality and timeliness of work. Examples of these continuous improvement practices are the process reviews held with work teams (e.g., FPL employees and vendor staff). In addition the project team is provided periodic training in various subject areas to continuously refresh, update and introduce the latest information available to maintain the project team at the highest technical and commercial levels available industry wide. The following list provides examples of the continuous improvement project team process reviews completed in 2009-2010:

- Project Control Guidelines
- General Administrative Controls Presentation (e.g., Employee Expense Reports; Other Local Disbursements and Payroll);
- Updating Monthly Cost Report Process
- Management Meeting Process Improvements
- Ongoing review and optimization of project team reports
- Ongoing review and optimization of project team Instructions & Forms
- Ongoing review of Sarbanes-Oxley Process narratives

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

A. FPL is involved in a number of areas to address issues relevant to new nuclear deployment. The company works with the U.S. Department of Energy and

members of Congress on energy policy matters related to nuclear development.

FPL also participates in four specific groups comprised of new nuclear industry owners and design vendor(s). The collective purpose of these groups is to identify and resolve issues potentially affecting the licensing, design, construction, operation and maintenance of the AP-1000 design. Individually, each group provides a collaborative forum for owners to work with each other, the design vendor and the NRC to achieve standardized solutions to the issues facing all owners. This enables the industry to maintain a high level of standardization from the earliest stages of new nuclear deployment. Standardization of designs and processes will provide benefits to FPL customers in terms of efficiency and cost control.

PROCUREMENT

Q. Please summarize the results of the procurement activities supporting Turkey Point 6 & 7 project to date.

A. The bulk of project activities and expenditures have been spent on the development of the detailed studies and analyses required to initiate, sustain and facilitate federal, state and local reviews of the proposed project. Additional expenditures have allowed the project to undertake the initial engineering and commercial steps in the development of an execution plan for

plant deployment. FPL has used competitive bidding for the majority of total project expenditures and used single or sole source procurement when appropriate.

Q. What key procurement activities are being addressed by the project in 2010 and 2011?

A. Procurement activities in 2010 and 2011 focus on the licensing and permitting process required to support and advance the federal, state and local approval processes. Professional services will be required from technical and environmental consultants, legal service firms and subject matter experts to respond to the inquiries of the public and the reviewing agencies during the application review process. The scope and expenditures associated with these activities have been estimated in the 2010 actual/estimated and 2011 projected costs, but will not be fully known until the review process is complete.

In its May 1, 2009 filing, FPL included funds necessary to initiate the detailed site-specific design, preliminary engineering and procurement activities that would have been required to maintain the project schedule in its 2010 projection. Given the factors discussed later in this testimony related to the overall project schedule, FPL has determined to defer those expenditures beyond 2011. The issues influencing this process will be more fully discussed in the Issues and Key Decisions portion of this testimony.

NATIONAL LEVEL ISSUES

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

A. As noted in FPL's May 1, 2009 filing, developments in the economy and energy policy (at national and regional levels) have potential to affect the project. The progress of Domestic and International nuclear projects are also instructive to FPL's management decision-making.

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

A. The economic downturn has affected forward expectations for demand growth across the nation. The reduced growth rate has been cited as a reason for deferring in-service dates for some nuclear projects, but has not been a reason to cancel any projects. The current downturn is showing signs of moderating, with mixed projections on the timing of a subsequent rebound. Growth rates consistent with historic expectations, accounting for up and down economic cycles, are proper for long range planning assumptions. FPL Witness Sim addresses the affect of changes in FPL demand forecasts on the economic feasibility of Turkey Point 6 & 7, particularly in regard to projections of FPL's resource needs.

The downturn has also had an affect on the cost and availability of capital, particularly in the consumer and small business markets. These observations lead FPL to conclude no fundamental economic shift has occurred affecting FPL's near term pursuit of the Turkey Point 6 & 7 project. However, this is an area requiring continuous monitoring to determine the availability and cost of capital to fund the project at the point when considerable spending is initiated associated with the Preparation and Construction phases of the project. Additionally, the recession will have potential affects on the financial health of contractors, vendors and other firms FPL will rely upon to execute the Preparation and Construction phases of the project and will be a factor in constructing the project execution team.

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

A. National energy policy, as proposed by the current administration, is supportive of nuclear energy in general, and new nuclear energy development in specific. In a town hall meeting in New Hampshire on February 2, 2010 President Obama stated "...if you're serious about dealing with climate change, then you've got to take a serious look at the nuclear industry." This practical statement has been followed with steps to address the Department of Energy's (DOE) responsibility to provide a final disposition of used fuel and proposing a three-fold increase in the funding for DOE Loan Guarantees for new reactors.

Arguably, a solution for permanent disposition of used fuel is some years away. Recently the NRC addressed the issue of long-term fuel storage through the Waste Confidence Rule. In this ruling, the NRC re-affirms confidence in the current design technologies in use to safely store used fuel for the current generation of reactors, both wet and dry storage. These proven processes are expected to provide safe storage solutions for the life of the Turkey Point 6 & 7 project and beyond.

The administration's renewed commitment to the DOE Loan Guarantee program is laudable. As FPL has stated before, we will consider all opportunities that may provide demonstrable benefits to our customers. During the first solicitation (2007 and 2008) the DOE Loan Guarantee program had a small allocation for a large number of perceived potential applicants, was undefined in cost, benefit and structure, and would have required a truncation of FPL's deliberate technology selection process in order to meet the December 2008 COLA filing eligibility requirement. For those reasons, FPL chose not to apply at that time. FPL is monitoring the first round Loan Guarantees, which should result in a better understanding of cost, benefit and structure as 2010 unfolds. Should the proposed increased funding be made available, modifications to the DOE Loan Guarantee program qualification criteria instituted and a new solicitation opened, FPL will consider applying.

Regionally, the legislature continues to address questions related to Florida's energy mix, affirming many of the policies implemented in the Florida Energy Act of 2006. Issues cited as important in the Commission's Need Order of April 2008 have not changed. Reliability, cost-effectiveness, fuel diversity, fuel supply reliability and price stability are still benefits to be delivered by increasing nuclear generation capacity and are still needed by FPL's customers. A future plan not including new nuclear capacity prolongs reliance on fossil fuels, maintains exposure to fuel supply reliability and price volatility, and is not as effective at reducing system emissions, including greenhouse gas emissions, as a plan including new nuclear generation capacity.

Over the past year, we have continued to monitor legislative activity at national and state levels seeking to address energy policy through generation portfolio standards promoting clean energy additions. Recognition of nuclear's potential to help the state and nation achieve meaningful greenhouse gas reductions further supports the case for nuclear generation and the Turkey Point 6 & 7 project.

Q. What do recent developments related to the progress of International and U.S. nuclear energy projects indicate with respect to the continued pursuit of the Turkey Point 6 & 7 project?

A. FPL is monitoring a host of predecessor projects to capture issues and challenges presented and to learn from the experiences of these projects. Internationally, FPL is monitoring progress on the Olkiluoto 3 (Finland; EPR), Sanmen 1 & 2 (China, AP-1000) and Haiyang 1 & 2 (China, AP-1000) projects. The Olkiluoto project is the first of the new Generation III+ EPR projects under construction. The project schedule has been extended by 36 months, mostly due to deficient construction planning and activities, and the corresponding regulatory compliance reviews. Costs have increased by approximately fifty percent from the estimate at the beginning of construction. The Sanmen and Haiyang projects represent the lead AP-1000 technology plants and have completed site preparation and the initial concrete pour for unit foundations. At present, they appear to be on schedule and within the original cost estimate.

In the United States, multiple projects are underway. The NRC is currently reviewing seven AP-1000 projects, including FPL's Turkey Point 6 & 7. Three of these projects (Southern Vogtle, South Carolina Electric & Gas Summer and Progress Levy) are well into the review process and are considered the first wave of AP-1000 projects. Scheduled delivery has not changed from inception for the Vogtle and Summer projects, but has moved back two years for the Progress Levy project. The Tennessee Valley Authority (TVA), originally the lead AP-1000 project, is under review and is no longer the lead project. Duke has moved its project dates back by

approximately four years based on reduced demand in their service areas. Progress Harris remains on its original schedule.

The collective status of International and Domestic projects demonstrates progress is being made on the next generation of nuclear projects; however, many of the lead projects are confronting issues affecting schedule and cost. Time will be required to identify common risks and successful mitigation approaches. In general, the pace of these projects indicates there is much to be learned and a choice to defer Preparation phase activities is a means to reduce implementation and efficiency risks.

Q. What federal licensing milestones is FPL monitoring to judge the pace of NRC reviews as indicators for what the Turkey Point 6 & 7 project can expect?

A. Three areas are of specific interest to FPL. First, the continued progress of the Design Certification (DC) Amendment for the AP-1000 design is critical to project success. In 2010, the DC Amendment is scheduled to complete technical reviews and move to rulemaking in 2011. The completion of rulemaking is necessary before COLAs based on the DC can be fully reviewed. The second track involves the progress of the Southern Vogtle COLA. This is the reference COLA for the AP-1000 and any general amendments or modifications will be adopted in FPL's COLA. Lastly, the Progress Levy COLA includes many geologic and seismologic similarities to

the Turkey Point COLA, and will provide significant feedback to inform the support of FPL's COLA.

PROJECT ISSUES

Q. What issues have influenced the decision to revise the project schedule and establish the project objectives for 2010 and 2011?

A. In addition to the national and industry developments discussed in the preceding section, FPL also monitors a variety of issues more specific to FPL and the Turkey Point 6&7 project. These issues include system economic developments influencing the annual feasibility analysis, the pace of permit and license application reviews, and the development of commercial agreements supporting the Preparation and Construction phases of the project.

Q. What were the major system economic developments related to the project feasibility analysis?

A. The economic slowdown has reduced demand for electricity on the FPL system, pushing out the capacity need by some years. Additionally, the economic downturn has reduced consumption in a number of sectors. As it pertains to the annual feasibility analysis, reduced natural gas demand coupled with incremental supply being identified in central U.S. shale deposits has depressed the price of natural gas.

Q. Please describe the pace of the COL application review at the Nuclear Regulatory Commission (NRC) and factors affecting the pace of the review.

A. FPL submitted its COL application to the NRC on June 30, 2009. Following an acceptance review, the application was docketed on September 4, 2009. Since that time, the NRC has been examining the application for conformance to establish the appropriate review schedule, and therefore the anticipated timing of the process that should lead to authorization of construction of the project. AP-1000 COL applicants preceding FPL have generally received an estimated review schedule within 6 months of submittal, with an average duration of the review being 41 months. Ten months after submittal, FPL has yet to receive an estimated review schedule, but anticipates one will be provided in mid-2010.

The factors influencing the pace of NRC review include the allocation of NRC resources recognizing other agency commitments, and the specific complexity of the Turkey Point 6 & 7 COLA. Currently the NRC is actively reviewing 13 COLA's (4 COLA's have suspended reviews) and 5 Design Certification Documents (DCD's). Seven of the COLA's in review are based on the AP-1000 design, and 4 of the AP-1000 COLA's have expected in-service dates before FPL's original schedule of 2018 and 2020. The Turkey Point 6 & 7 COLA includes certain unique geotechnical issues that have resulted in an early round of Request for Additional Information (RAI's) with the NRC.

These unique features may require additional NRC review and have a resulting affect on the actual review period.

FPL's assessment of NRC resources and commitments and the specific geotechnical issues at the site indicates the Turkey Point 6 & 7 COLA may experience a review schedule longer than the average 41 month schedule estimated for earlier applications. Issuance of the draft Environmental Impact Statement (EIS) (expected in early 2011) will be a critical interim milestone by which to judge overall COLA review pace. FPL estimates the COLA process should be completed by 2013. Issuance of the Army Corps of Engineers wetland permits are expected following the issuance of the final EIS in the NRC COLA process (expected in early 2012), and therefore the actual review period for COLA will directly affect the timing of the Army Corps of Engineers permits.

Q. Please describe the pace of the state Site Certification Application (SCA) review and factors affecting the pace of the review.

A. FPL submitted the SCA on June 30, 2009. The statutory timeframe described in the Florida Electrical Power Plant Siting Act results in a 15 month period between submittal and final decision, but assumes the application proceeds through the completeness review phase without significant delay. Considerable interest has been expressed by multiple agencies related to the physical environment surrounding Turkey Point and the complexity of groundwater features in the region. The result has been an unprecedented

number of completeness inquiries from agencies with an extensive level of detail. These inquiries are being actively addressed by the project team. Achieving completeness is critical to the success and validity of the Site Certification process. FPL will continue to work with all agencies to address the technical issues associated with SCA review to ensure all legitimate issues have been fully addressed prior to proceeding to the SCA Hearing (expected Summer 2011) and subsequent decision by the Power Plant Siting Board (expected Fall 2011).

Q. What were the results of commercial negotiations with the Westinghouse/ Shaw consortium in 2009?

A. Negotiations with the Westinghouse/Shaw (WS) consortium were initiated in 2008 and carried into 2009. In prior years, FPL made decisions to defer preliminary expenditures on an EP or EPC contract. These decisions avoided expenditures on site specific engineering, long lead procurement and pre-construction planning due to schedule uncertainty. FPL accepted higher risk in being able to achieve the original project schedule as an acceptable trade for reduced risk of premature or inefficient expenditures due to uncertainty in the construction schedule. In 2009, discussions with WS focused in two areas: pricing for the EP scope and the associated terms, conditions and schedule milestones for that scope. The WS consortium has entered into EPC agreements with predecessor projects (Southern, SCE&G and Progress Energy Florida) so additional effort was required to tailor an EP scope option. FPL received the EP proposal, with pricing and scope for the EP activities for

the project, in early 2009. This indicative pricing has been used to review FPL's non-binding cost estimate range for the project. Discussions on terms and conditions made progress, but were not completed. Key areas not finalized include the establishment of mutually agreeable risk sharing mechanisms to manage potential variations in commodity, equipment, and labor pricing. This means the indicative pricing, while informative, is not conclusive and given its nature as an opening bid, one can reasonably assume the pricing includes some margin in anticipation of the negotiations to follow.

A primary challenge to progress on the EP or EPC agreement relates to identifying a set of schedule milestones and corresponding expenditures providing FPL the optionality and cost controls desired in the early stages, while cost-effectively delivering the required activities. The first task would be to convert the generic AP-1000 design to a site specific design for the Turkey Point 6 & 7 project while recognizing the unique site layout, geology and hydrology. The second task would be to form a procurement team to initiate the logistical activity (contracts, design, fabrication, and shipping) necessary to deliver long lead items to meet the project schedule. The third task would be to finalize the site preparation and construction planning to guide the efficient assembly and construction of the facility. Depending on the overall project schedule, these costs would be expected to total up to $1 billion prior to any on-site construction activity.

As 2009 proceeded, it became clear expenditures toward the preliminary design, procurement and construction planning steps would run significant risk of being inefficient. Deferral of these activities, until the licensing process can further develop, provides additional risk control.

KEY DECISIONS

Q. What specific project decisions resulted from the above developments and when were these decisions made?

A. Two key decisions were made affecting the project schedule. First, it was determined the $60 million identified to be spent in 2010 for Engineering Design and Procurement, the initial components of an EP or EPC agreement, would be deferred beyond 2011. Second, it was determined the expenditures necessary to initiate the Preparation phase activities are not warranted for the above identified reasons. These reviews were initiated in late 2009 and completed in April 2010. The decision process regarding the change in project schedule is captured in Exhibit SDS-12.

Q. What affects do these decisions have on the project schedule?

A. The in-service dates for the project are necessarily affected, but the actual affect will not be known for some time. For planning purposes it is assumed the most likely timing for achieving a sufficient level of certainty in these areas will be upon completion of the licensing phase in late 2013. If the necessary design, procurement and construction activities are initiated in

2014, and the same durations for these activities used in the previous schedule are applied, the result is estimated in-service date for Unit 6 in 2022. Current information indicates the appropriate construction lag time for a two-unit project is one year, resulting in an estimated in-service date for Unit 7 of 2023. If a project execution plan with higher certainty can be developed in advance of 2013, earlier in-service dates are possible. Alternately, if the necessary certainty cannot be attained, in-service dates may occur later than this planning estimate. Exhibit SDS-13 provides a graphic illustration of the current project schedule, reflecting these assumptions.

Q. What affect will this revised schedule have on the overall costs of the project or the delivery of project benefits to FPL customers?

A. The revised schedule will change the timing of estimated cash flows, and therefore estimates of time-related costs (e.g., escalation, interest during construction) will change from the original non-binding cost estimate based on the assumptions used. Similarly, deferring delivery of the project will defer delivery of fuel savings, emission compliance cost savings and other qualitative benefits to FPL's customers. However, it is important to recognize the original schedule was an estimate of the earliest practicable schedule for the project assuming certain developments would support the overlap of the Licensing and Preparation phases of the project. For the reasons provided above, those developments did not come to pass and therefore maintaining the original schedule would not result in the originally estimated cost or delivery of benefits. The Nuclear Cost Recovery Clause (NCRC) process addresses

the need for a rational economic review by requiring the annual feasibility analysis to routinely assess the economic feasibility of the project using the best information available. Further detail regarding the revised cost estimate is provided later in this testimony.

Q. Is the decision to change the planning schedule for the Turkey Point 6 & 7 project related to the Commission decision on FPL's base rate adjustment request?

A. No. The decision to manage cost risk by deferring expenditures, and therefore revise the project schedule, is based on project-specific factors identified in FPL's 2008 and 2009 NCRC filings. Additionally, FPL's assessment of industry developments and regulatory milestones supports this decision. In fact, the decision is a continuation of FPL's stepwise management approach for this project reflected in choices to defer Preparation phase expenditures (engineering design and long lead procurement) in 2008 and 2009. The current decision is consistent with the process applied in these earlier actions. Following the rate case decision, and prior to the completion of this review, FPL chose to suspend all expenditures on non-licensing activities associated with all capital projects. Upon completion of the project schedule review, it was confirmed this is the appropriate course of action for the Turkey Point 6 & 7 project over the next two years.

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

A. Yes. The most important near term activity is creating the option by obtaining the licenses and approvals necessary to construct and operate Turkey Point 6

& 7. Once approvals are obtained, FPL will be able to review the economics and the experience of other new nuclear projects as well as how state and federal energy policies have evolved. The Commission will continue to have the opportunity to review FPL's plans through the NCRC process.

FPL's decision to carefully manage the risk of inefficient expenditures will allow the project to better advance through the early uncertain periods, thereby enabling the project to proceed to a later stage where risks can be better identified, quantified and mitigated. Considering all project specific and industry factors, this is a responsible and prudent course of action to continue progress in creating the option for new nuclear generation for our customers.

Q. Were there other decisions required as a result of this project schedule review?

A. Yes. FPL executed a Forging Reservation Agreement with Westinghouse in 2008 to secure manufacturing capacity for ultra-heavy forgings needed to support the project's previous schedule. The initial agreement was set to expire in December 2009. Prior to its expiration, FPL and Westinghouse agreed to a six-month extension of the agreement to allow for completion of the project schedule review. FPL has since agreed with Westinghouse to further extend the agreement, with no changes and at no additional costs, to March 15, 2011. This allows for further development of information relevant to a forward schedule and negotiations to be held related to completion of the

requisite agreements. Exhibit SDS-16 provides a project memorandum summarizing the decision process behind extending the agreement and the alternatives considered.

Additionally, the choice to revise project schedule affects the federal and state applications and the transmission system planning studies related to the project. The current applications estimate socio-economic impacts based on the projected in-service dates. A change in projected in-service dates requires a review and revision to appropriate sections of the application specific to these projected dates. The transmission planning studies must be reviewed to determine if the revised in-service dates constitute a material change in the analysis. If so, the studies will be revised to reflect any system generation additions or transmission improvements not included in the original studies.

Q. What are the next steps in moving into the Preparation and Construction phases of the project and what are the expected timing of those steps?

A. Progress down three parallel tracks must be made to develop the information necessary to initiate the Preparation phase activities. First, the regulatory review of license and permit applications must further develop to a time when the completion of those reviews can be projected with more certainty. This will likely require another three years, with the NRC COLA process being the longest.

Second, a suitable commercial framework for the project execution team must be developed. This means determining whether an EP/C or EPC form of organization offers the best balance of cost, schedule and risk management attributes. This effort will be informed by monitoring the progress of predecessor AP-1000 projects in the U.S. and China and continuing dialogue with WS. On the current schedule, meaningful re-engagement with WS on agreements is expected towards the end of 2011.

The third parallel effort is the development of a detailed project execution plan. The project execution plan involves the integration of all aspects of the project; commercial agreements, regulatory approvals, and logistical planning into a cohesive and comprehensive vision of how the project will proceed from the early Preparation phase through construction and commissioning. The coordination of all elements must be achieved to result in an efficient execution plan with high certainty of delivering on cost and schedule. Such an execution plan is necessary to ensure roles, responsibilities, resources and activities are effectively assigned and tracked to manage overall cost and schedule. The development of an integrated execution plan is among the first considerable engineering activities undertaken prior to embarking on a program of considerable capital spending. Development of the execution plan cannot be finalized until the regulatory review and commercial structure activities have been largely completed, and therefore will not begin until 2012 or beyond.

PROJECT ACTIVITIES

Q. What are the major activities of the Turkey Point 6 & 7 project for 2010 and 2011?

A. The major project activities in 2010 and 2011 are related to the support and advancement of project license and permit applications at the local, state and federal level. This involves over 100 engineers, environmental specialists and other subject matter experts conducting numerous studies and analyses to support the regulatory requirements for review by the various licensing agencies. The studies involve field work, data analysis, modeling, and consultation with a range of agencies. Bechtel Power Corporation manages the primary contract for support of the NRC COLA. The U.S. Army Corps of Engineers Permit Application, the Site Certification Application and other permit applications are supported by a cadre of specialty contract engineering firms with experience in these areas. FPL also obtains legal advisory services through selected national, state and local firms with expertise in these areas. Westinghouse/Shaw is under contract to provide the necessary support to FPL and Bechtel in the review of the COLA.

Q. What are the key milestones in the Turkey Point 6 & 7 project schedule for 2010 and 2011?

A. The primary project milestones for 2010 relate to the review of the federal and state applications. The COLA review schedule, once published, will provide dates to inform the public about its opportunities to participate in the licensing process. A public environmental scoping meeting will be held by

the NRC where input will be solicited to inform the NRC on the issues to be considered in their review, as well as the initial steps for the environmental and safety review processes. A major milestone expected in 2011 is the publication of a draft Environmental Impact Statement (EIS). The Army Corps of Engineers wetland permit applications will utilize the NRC-produced EIS as the basis of its review and will participate in the NRC EIS process as a cooperating agency.

The Florida Electrical Power Plant Siting Act (PPSA) delineates a statutory schedule by which the Site Certification Application (SCA) is processed. As discussed earlier, the project is currently engaged in iterative cycles of questions and responses to provide all information necessary to support a determination of completeness by the Florida Department of Environmental Protection (FDEP). Following completeness, agency reviews will result in the production of various agency reports, culminating in the Project Analysis Report produced by FDEP. A Land Use hearing is expected in early 2011 and the Site Certification Hearing is expected in mid-2011. Following each of these hearings, the Administrative Law Judge will develop a recommendation to the Siting Board, comprised of Florida's Governor and Cabinet, which makes the ultimate decision. The certification process under the PPSA is expected to be complete by the end of 2011.

Q. How does the current project schedule compare to the Milestone Schedule provided as Exhibit SDS-5 to your testimony in FPL's Need Determination Filing?

A. To date, all licensing and permitting activities have continued while detailed engineering and long lead procurement activities have been deferred. The original schedule estimated a Certification Hearing in 2010, while the current SCA schedule anticipates the Certification Hearing to be held in January and February 2011. Events related to procurement and construction are essentially deferred approximately 4 years. Exhibit SDS-13 provides an illustration of the revised schedule.

2010 & 2011 PRE-CONSTRUCTION COSTS

Q. How are the 2010 actual/estimated costs and the 2011 projected costs developed?

A. As described earlier, FPL has a disciplined ground-up process to develop project budgets. This process was used in the initial project budgeting activity and is routinely reviewed and evaluated for adequacy and accuracy as additional information becomes available. The estimates of the 2010 actual/estimated and 2011 projected costs were completed in accordance with FPL's budget and accounting guidelines and policies. Where services are contracted, rate sheets are provided by the contractor and reviewed to verify the charged rates are consistent with FPL's experience in the broader industry.

The cost estimates were compared to other costs being incurred by the company for similar activities and found to be reasonable.

Q. Please provide a high level summary of the 2010 actual/estimated and the 2011 projected costs presented in this filing.

A. The $42.6 million of expenditures estimated for 2010 are solely related to the pursuit of licenses and permits for the project. All 2010 costs provide for FPL staff and contractors necessary to support and advance the various applications throughout the review period with the participating agencies. As discussed earlier in this testimony, no engineering design or procurement activities are planned for 2010. Costs in the engineering and design category are related to the construction of an exploratory well necessary to complete the Underground Injection Control (UIC) permitting process.

In 2011, it is projected $29.5 million of expenditures will be incurred to support the continued review of the project applications. Support costs for the licensing and permitting activities are expected to be lower in 2011 assuming the completion of the SCA reviews by mid-2011.

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

A. As discussed previously, the 2010 and 2011 budgets are based on estimates of the requirements to support the expected scope and schedule for application reviews and approvals. Licensing and permitting support will take the form of subject matter expertise, studies and analyses in response to agency requests. While FPL has submitted comprehensive applications meeting the respective

standards, experience indicates additional information will be requested. Budgets reflect the information requested to date. Similarly, if significant intervention is registered against the applications, the cost of supporting the applications at hearing will increase. Current estimates assume some opposition is presented.

As we have seen, the pace of these projects can change. If conditions warrant, some Preparation phase activities may be advisable in the latter part of 2011. This will be best determined next year.

Q. Please summarize the costs included in this filing for Turkey Point 6&7 Pre-Construction activities.

A. Schedule AE-6 of Appendix II presents the 2010 actual/estimated costs in the following categories: Licensing ($34,333,186); Permitting ($3,228,180); Engineering & Design ($5,068,289); Long Lead Procurement ($0); Power Block Engineering & Procurement ($0); and Transmission Engineering ($0). Schedule P-6 of Appendix II presents the 2011 projected costs in the following categories: Licensing ($22,373,379); Permitting ($2,376,092); Engineering & Design ($4,720,004); Long Lead Procurement ($0); Power Block Engineering & Procurement ($0); and Transmission Engineering ($0). Table 1 of Exhibit SDS-11 provides a summary of the actual/estimated 2010 and projected 2011 Preconstruction costs. The descriptions in the Exhibit SDS-11 tables are illustrative and not all inclusive.

Q. What major differences are noted for the 2010 and 2011 project budget when compared to FPL's prior filings?

A. The primary difference is related to FPL's decision to defer expenditures associated with design and procurement. In light of the key issues and uncertainties described earlier in this testimony, FPL has chosen not to engage in a committed price contract for major equipment and design activities. This results in reducing the 2010 actual/estimated expenditures approximately $49.1 million less than projected in the May 2009 filing.

Q. Please describe the activities included in the Licensing category for the 2010 actual/estimated costs and the 2011 projected costs.

A. For the period ending December 31, 2010, Licensing costs are projected to be $34,333,186 as shown on Line 3 of Schedule AE-6 of Appendix II. For the period ending December 31, 2011, Licensing costs are projected to be $22,373,379 as shown on Line 3 of Schedule P-6 of Appendix II. Table 2 of Exhibit SDS-11 provides a detailed breakdown of the Licensing subcategory costs.

Licensing costs consist primarily of FPL employee and contractor labor and specialty consulting services necessary to support the various license and permit applications required by the Turkey Point 6 & 7 project. The majority of the licensing expenditures are a result of the federal COLA process. This value is a combination of NNP team costs and Bechtel COLA team costs. The license and permit applications contain project specific information,

assessments and studies required by various regulatory authorities to support the reviews leading to decisions on the technical, environmental and social acceptability of the project. Other licensing activities include costs associated with the SCA, Army Corps of Engineers permits and delegated programs such as Prevention of Significant Deterioration and UIC. License and permitting costs are developed in accordance with budget and accounting guidelines and policies. Some activities are common between applications, and therefore offer opportunities to coordinate efforts and manage costs. Further, these cost estimates were compared to FPL's recent extensive experience with the development and permitting of new generation projects in Florida and found to be reasonable.

Q. What are the major differences between the 2010 actual/estimated values and those projected in the May 2009 filing for the Licensing category?

A. Differences are created by the shifting NRC COLA review schedule. Some activities scheduled for 2009 were deferred into 2010 and some 2010 activities were moved into 2011.

Q. Please describe the activities in the Permitting category for the 2010 actual/estimated costs and the 2011 projected costs.

A. For the period ending December 31, 2010, Permitting costs are projected to be $3,228,180 as shown on Line 4 of Schedule AE-6 of Appendix II. For the period ending December 31, 2011, Permitting costs are projected to be $2,376,092 as shown on Line 4 of Schedule P-6 of Appendix II. Table 3 of

Exhibit SDS-11 provides a detailed breakdown of the Permitting subcategory costs, including a description of items included within each category.

Permitting fees consist of expenditures for Project Development management, public outreach/education and environmental services. Outreach is a vital process to inform stakeholders of the project and educate the public with regard to the many processes where they can be involved. The outreach activity involves hosting informational events and providing information on the project through a variety of media platforms. FPL experience has demonstrated that a proactive outreach and education approach facilitates a sharing of concerns and perspectives improving the overall project. Development costs in 2010 include three personnel: myself, a Project Director and a Project Manager. Environmental services relate to costs associated with supporting the non-NRC applications. Legal expenditures provide necessary support to activities for all permitting and project interactions. Legal support expenditures are necessary to support the timely preparation, submission, and review of issues associated with the project at the local, state and federal agency levels.

Q. Please describe the activities in the Engineering & Design category for the 2010 actual/estimated costs and the 2011 projected costs.

A. The Engineering & Design activities performed in 2010 and 2011 are required to support the permitting effort for the Underground Injection Control (UIC) well system. For the period ending December 31, 2010, Engineering &

Design costs are projected to be $5,068,289 as shown on Line 5 of Schedule AE-6 of Appendix II. For the period ending December 31, 2011, Engineering & Design costs are projected to be $4,720,004 as shown on Line 5 of Schedule P-6 of Appendix II. Table 4 of Exhibit SDS-11 provides a detailed breakdown of the Engineering & Design subcategory costs, including a description of items included within each category. Note approximately $53 million was removed from this category as filed in May 2009. Those costs, associated with Preparation phase activities, are deferred.

Engineering and Design costs consist primarily of contract engineering and construction services necessary to develop the UIC exploratory well. The well is necessary to collect further data confirming the geology and hydrology at the site to support a properly constructed UIC well system.

Costs for participation in industry groups include the EPRI Advanced Nuclear Technology working group (with annual fees of $275,000), the Design Centered Working Group (DCWG) (no charge to participate in this group), and the APOG fee was a $150,000 contribution to support the activities of the group. These costs are necessary to obtain the benefits of membership described earlier in this testimony.

Q. Please describe the activities in the Long Lead Procurement category for the 2010 actual/estimated costs and the 2011 projected costs.

A. For the period ending December 31, 2010, Long Lead Procurement costs are projected to be $0 as shown on Line 6 of Schedule AE-6 of Appendix II. Future Long Lead Procurement costs are anticipated to be included in the Power Block Engineering and Design cost category.

Q. Please describe the activities in the Power Block Engineering and Procurement category for the 2010 actual/estimated costs and the 2011 projected costs.

A. For the period ending December 31, 2010, Power Block Engineering and Procurement costs are projected to be $0 as shown on Line 7 of Schedule AE-6 of Appendix II. For the period ending December 31, 2011, Power Block Engineering and Procurement costs are projected to be $0 as shown on Line 7 of Schedule P-6 of Appendix II.

Q. What are the major differences between the 2010 actual/estimated values and those projected in the May 2009 filing for the Power Block Engineering and Procurement category?

A. A difference of $13,750 is shown for Power Block Engineering and Procurement. This is a result of improperly classified legal costs, corrected by this filing.

Q. Please describe the activities in the Transmission Engineering category for the 2010 actual/estimated costs and the 2011 projected costs.

A. For the period ending December 31, 2010, Transmission Engineering expenditures are projected to be $0 as shown on Line 25 of Schedule AE-6 of Appendix II. For the period ending December 31, 2011, Transmission

Engineering expenditures are projected to be $0 as shown on Line 25 of Schedule P-6 of Appendix II.

All 2010 and 2011 costs associated with Transmission planning are related to the licensing and permitting activities, and therefore are appropriately included in those categories, described above. Approximately $1.2 million in design engineering costs projected in May 2009 have been deferred.

PROJECT COST AND FEASIBILITY

Q. What is the basis and background of the non-binding cost estimate range used by the project?

A. The project cost estimate range was initially developed in 2007 to support the Need Determination in 2008. The cost estimate was developed by reviewing the most comprehensive cost analysis available for a two unit, 1,370 MW U.S. new nuclear project and adjusting information for the Turkey Point project specific information available at the time. In 2007, FPL had not selected a specific technology nor had it completed any site specific project design or planning. Necessarily, the cost estimate range was broad and inclusive of a range of potential costs. The original cost estimate range was not based on firm contractual agreements, approved licenses and permits or a detailed project execution plan and schedule.

Q. Please review how the FPL cost estimate process is constructed and how it is used to help evaluate the feasibility of the project each year.

A. An overnight cost is developed using the most current information available. An overnight cost provides an estimate of the total project costs assuming all costs occur at one point in time ("overnight") and time-related costs (escalation, interest during construction) are not included. Further, recognizing many things could influence the overnight cost, a sensitivity analysis is conducted on each component of the overnight cost, resulting in a cost estimate range. The overnight cost provides an indication of the cost per kilowatt ($/kW) for the project in a given year reference. The 2008 cost estimate range was $3,108/kW to $4,540/kW for the 1,370 MW sized unit in 2007 dollars. Updating the cost estimate range to 2010 dollars, adjusting for the 1,100 MW sized units and using a net 2.5% escalation rate, results in a cost estimate range of $3,397/kW to $4,940/kW. A breakeven cost analysis is developed by FPL's Resource Assessment and Planning department, and is further discussed by FPL Witness Sim. This breakeven cost is also an overnight cost and is directly compared to the cost estimate to determine project economic feasibility.

The overnight cost estimate can then be used as an input to a time-based analysis to develop the overall project cost estimate. The time based analysis necessarily must assume a specific annual project expenditure curve, an escalation rate, the carrying costs for the construction balance, and the

mechanism for cost recovery in accordance with the NCRC rule. The original project schedule (in-service dates of 2018 and 2020) resulted in total project cost estimate range of $12.1 to $17.8 billion.

Q. How have the features and design information included in the 2008 cost estimate range changed in the past two years?

A. Most of the project features affecting the cost estimate have been developed to a conceptual design stage. Specifically, a project technology has been selected and an initial price proposal for the EP scope associated for the selected technology has been received. Further, in developing the federal and state applications, studies were conducted providing a higher level of definition for many of the project features and associated impacts. These studies provide additional information allowing for the creation of an engineering estimate for project features. This is not, however a firm contractual committed price, as would be obtained through a solicitation process.

It is important to recognize the underlying basis for a highly specific cost estimate (executed contracts, approved permits and licenses and a firm construction schedule) has not been developed. From this perspective, the information available today is no more definitive than what was available in 2008.

Q. Did FPL develop a revised project cost estimate and how is the cost estimate to be viewed relative to the 2008 non-binding cost estimate range?

A. Yes. Pursuant to the Commission's direction in Order No. PSC-09-0783-FOF-EI, FPL performed a comprehensive re-assessment of its project cost estimate. Exhibit SDS-14 captures the decision making process that guided the development of the revised cost estimate and how the estimate may be compared to the non-binding cost estimate range.

Q. Please describe the review of the project cost estimate conducted by FPL in early 2010.

A. The overnight cost estimate developed in 2008 was reviewed and each line item was re-evaluated given the most current information. Additional line items were added, as necessary, to capture the level of detail currently available. The indicative pricing proposal provided by Westinghouse/Shaw was integrated into the cost estimate and studies associated with specific project features were reviewed and incorporated as appropriate. This single point cost estimate was compared to the existing cost estimate range.

Q. What were the results of this review?

A. A comparative table is provided in Exhibit SDS-15. This table shows the original 2008 cost estimate cases, reorganized into the most current line item schedule, and compared to the current 2010 cost estimate check. The results are consistent with the testimony I provided in 2009 indicating the current cost estimate was close to the high end of the existing cost estimate range.

Specifically, the cost estimate check indicates an overnight cost of $4,991/kW compared to the high end of the cost estimate range (Case C) of $4,940/kW, a difference of approximately one percent.

Q. How does the assumed generating capacity upon which each cost estimate was based differ, and how are cost comparisons affected?

A. The original cost estimate was developed assuming two 1,371 MW units, while the current cost estimate check assumed two 1,100 MW units. An adjustment, described in Exhibit SDS-8 of the Need Determination Docket (070650-EI), of $47/kW is added to address the difference in capacity. When comparing the costs the unit cost ($/kW), adjusted to be in the same year dollars, provides the best comparison.

Q. What were the revisions resulting in the largest changes compared to the 2008 cost estimate range?

A. The cost estimate can be discussed in six broad categories of cost. Standard Plant costs (42% of total overnight costs), Balance of Plant (7% of total), Site Work (5% of total), Construction Labor (19% of total), Owner's costs (8% of total) and Transmission costs (6% of total). Note the magnitude of change provided in the following discussion is developed by contrasting the unit cost of the 2010 cost estimate to the unit cost of the high end (Case C) of the cost estimate range, adjusted to 2010 dollars.

The Standard Plant cost, the largest single category of costs, is approximately 3% lower than the high end of the cost estimate range. Balance of Plant and

Site Work (making up about 13% of all overnight costs) are twice as high, based on the as-filed design providing a more specific basis for the cost estimate. The primary contributors are the inclusion of a reclaimed water treatment facility, necessary to effectively utilize reclaimed water as the cooling water supply, and additional site work determined necessary to establish the foundation for the facility. Alternately, costs associated with Cooling Towers and Security infrastructure are lower. Construction labor costs are estimated to be lower by about 5%. Permitting and licensing costs for the facility are estimated to be approximately twice the original estimate within the Owner's Cost category, providing for the longer and more intensive review schedule now anticipated. Transmission infrastructure costs are estimated to be 25% higher than the original estimate although switchyard costs are expected to be reduced.

Q. Please provide an update of the analysis of the transmission facilities needed to interconnect and integrate Turkey Point 6 & 7 to the transmission grid.

A. The system planning studies conducted in 2009 led to a more defined set of transmission system improvements necessary to interconnect and integrate the Turkey Point 6 & 7 project to FPL's transmission system and the bulk electric system. FPL submitted, in June 2009, a Site Certification Application (SCA) under the Power Plant Siting Act (PPSA) for the proposed Turkey Point Units 6 & 7, including a number of transmission lines. Specifically, FPL's SCA includes: two proposed new 500-kV transmission lines between the proposed

Clear Sky substation on the Turkey Point site and the existing Levee substation in northwest Miami-Dade County (Clear Sky-Levee 1 and 2 Lines); a new 230-kV transmission line between the proposed Clear Sky substation and the existing Pennsuco substation in northern Miami-Dade County (Clear Sky-Pennsuco Line); a new 230-kV transmission line between the proposed Clear Sky substation and the existing Turkey Point substation which is also within FPL's Turkey Point property (Clear Sky-Turkey Point Line); and a 230-kV transmission line connecting the proposed Clear Sky substation to the existing Davis substation in southeast Miami-Dade County and the existing Miami substation in downtown Miami (Clear Sky-Davis-Miami Line). With respect to the other items identified as needed in the system planning analyses, FPL will pursue the applicable permitting and approvals for those items separately from the PPSA process.

The system planning analyses demonstrate the transmission lines proposed in FPL's SCA address the need for transmission lines to reliably interconnect and integrate Turkey Point Units 6 & 7 to the transmission grid was determined by the Public Service Commission in Final Order No. PSC-08-0237-FOF-EI. FPL cannot meet the need determined by the PSC to reliably interconnect Turkey Point Units 6 & 7 Nuclear Plant into the FPL transmission system and comply with mandatory reliability standards without each of the transmission lines proposed in FPL's SCA for the project.

Q. Please describe how this analysis of the transmission facilities needed to interconnect and integrate Turkey Point 6 & 7 to the transmission grid affected the overnight cost estimate.

A. Revised costs were developed based on the scope contained in the system planning analyses conducted in 2009. These revised costs were included in the overnight cost estimate check. Cost increased over the initial estimate for two main reasons. First, the cost for improvements needed on the Florida/Southern interface were not included in the initial estimate. These improvements, adding approximately $85 million, are required to provide stability in the event of the loss of a single large turbine-generator. Additionally, the estimated costs increased following further definition of the proposed corridors, substation improvements and a more refined estimate of land and easement acquisition costs.

Q. What factors affect the overall project cost estimate when time-related costs such as price escalation and carrying costs are included?

A. As one would expect, the actual cost escalation influencing the final cost of the project will be the result of macroeconomic and industry specific economic factors present during the Preparation and Construction periods. The pace of expenditure, escalation and carrying costs may be estimated to provide an understanding of their relative contribution to the overall project cost. The time-related factor most influential on the total project cost is expected to be the actual pace of expenditures experienced during the procurement and construction period. If the period is prolonged, these time-

related costs will have a proportionally higher affect on the overall project cost. This is why it is critical to have a fully vetted project execution plan with high predictability in cost, schedule and project controls. A well-designed execution plan will stage major procurement expenditures to occur as late as possible without affecting the construction schedule in order to minimize carrying costs. Further, the optimal execution plan will provide for clockwork sequential execution of major project construction events to maximize efficiency of financial, material and labor resources.

Q. Recognizing the planning scenario for in-service dates has changed, what is the affect on the estimated total project costs if this scenario were the actual schedule?

A. As described above, there are a number of assumptions made to arrive at this estimate. In 2008, the original overnight cost estimate range and the 2018/2020 in-service date schedule resulted in a total project cost estimate of $12.1 billion to $17.8 billion for a 2,200 MW project. In order to provide the most meaningful comparison, the planning scenario was modeled using the same time-related cost analysis method. Under the revised 2022/2023 in-service date schedule, and using the original overnight cost estimate range, the total project cost range becomes $12.8 billion to $18.7 billion for the 2,200 MW project. The increase to the estimated total project cost is solely a result of the affect the assumed cost escalation (2.5% per year) has on expenditures that will be made later than planned in the original schedule. The actual escalation may be higher or lower than the assumption.

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

A. As discussed by FPL witness Sim, the most current feasibility analysis affirms the cost effectiveness and benefits associated with the Turkey Point 6 & 7 project using the same approach applied in the Need Determination Proceeding for the project and the two prior NCRC filings. The analysis calculated a projected "break-even" cost for new nuclear; a cost that would result in the same life cycle costs (or cumulative present value of revenue requirements (CPVRR)) as an alternative plan relying on natural gas combined cycle units. The analysis was conducted for seven scenarios comprised of three fuel and three emission cost scenarios. The projected break-even costs were higher than FPL's non-binding cost estimate range in all seven scenarios. The closest scenario, assuming low natural gas and low CO2 costs, results in a breakeven cost that is 33% higher than FPL's 2010 single point check and 34% higher than the high end of the cost estimate range.

Q. In February 2010, FPSC Staff provided a list of factors for consideration in the 2010 Feasibility Analysis. Have those factors been considered?

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

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

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

Significant federal, state and local approvals are required to allow for the construction and operation of the project. No fatal flaws have been identified in the due diligence activities undertaken to design the project, or in the reviews conducted by participating agencies to date. The intense review process currently underway will result in each agency identifying its perspective on the project and describing conditions upon which the project approvals may be granted. While the review process has taken longer than originally anticipated compared to our experience with Turkey Point Unit 5 and other recent development activity, the process is proceeding substantively as expected.

Financing will be determined as the project proceeds through approvals to construction. Recent activity on predecessor projects shows a strong interest in the investment community to participate in new nuclear financing. For instance, Municipal Electric Authority of Georgia (MEAG) recently conducted a successful solicitation for $2.7 billion dollars of project bonds for its share of the Vogtle Units 3 & 4 AP-1000 project. More interest was displayed than was required for the solicitation and the net Build America

Bonds Rate for the three categories of bonds were 4.33%, 4.31% and 4.59%, respectively.

As discussed earlier in this testimony, state and federal energy policy continues to be supportive of new nuclear generation for a host of reasons. The high reliability, low and stable cost and zero greenhouse gas emission profile of the technology is highly compatible with key energy policy objectives.

Q. How are the impacts to customers recognized and addressed in a decision to continue or stop the project?

A. Customer impacts resulting from project decisions are addressed inherently in the initiating Need Order and the annual economic feasibility analysis accomplished as a part of the Nuclear Cost Recovery Clause docket. The initiating Need Order takes into account the need for electric system reliability and integrity, the need for adequate electricity at a reasonable cost, the need for fuel diversity and supply reliability, and whether the plant is the most cost-effective alternative. Each year the feasibility analysis addresses changes in system and project-related factors to determine if the project remains economically viable. The analysis looks at a range of potential future economic and regulatory scenarios to ensure the project viability is robustly demonstrated.

Moreover, the management of project risk using a stepwise decision making process inherently recognizes the impacts to customers in each decision. For example, the decision to manage project risk by deferring design and procurement activities recognizes an outcome of the decision is the postponement of the benefits offered by new nuclear generation for some undetermined amount of time. However, the long term incremental benefit is weighed against the alternative of proceeding at this stage. Under the latter strategy, to proceed with those activities now assumes cost and schedule risks that could severely degrade or negate the incremental benefits of delivering the project a year or two earlier. Further, assuming unmitigated cost and schedule risk early in the project jeopardizes the project as a whole, potentially precluding the delivery of any of the benefits of new nuclear generation if the option is not created.

Q. Does this conclude your direct testimony?

A. Yes.

Appendix II is in a separate book.

Appendix III is in a separate book.

Table 1. 2010 – 2011 Preconstruction Costs

Category	2010 Actual / Estimated Costs	2011 Projected Costs
Licensing	$34,333,186	$22,373,379
Permitting	$3,228,180	$2,376,092
Engineering & Design	$5,068,289	$4,720,004
Long Lead Procurement	$0	$0
Power Block Engineering & Procurement	$0	$0
Total Preconstruction Costs	**$42,629,655**	**$29,469,475**
Transmission	$0	$0
Total Preconstruction Costs & Transmission	**$42,629,655**	**$29,469,475**

Table 2. 2010 – 2011 Licensing Costs

Category	2010 Actual / Estimated Costs	2011 Projected Costs
NNP Team Costs – NNP FPL payroll and expenses, FPL Project Team Facilities, FPL Engineering, FPL Licensing	$4,791,273	$5,322,252
Application Production – COLA/SCA Contractor, Project A&E, NRC and DCWG fees;	$13,680,968	$8,776,445
SCA Oversight	$963,076	$0
SCA Subcontractors:		
• Transmission	$612,473	$0
• Environmental	$540,730	$0
• Underground Injection	$219,566	$0
SCA Total	$2,335,845	$0
Environmental Services – FPL payroll and expenses, External support expenses	$3,831,956	$1,878,287
Power Systems – FPL payroll and expenses, System studies, licensing and permitting support and design activities	$1,150,306	$641,440
Licensing Legal – FPL payroll and expenses, External Legal Services, Expert Witnesses	$3,887,199	$1,944,405
• Regulatory Affairs	$658,500	$736,260
• Regulatory Accounting	$238,210	$251,485
Total Regulatory Support	$896,710	$987,745
Contingency	$3,758,929	$2,822,805
Total Licensing	**$34,333,186**	**$22,373,379**

Table 3. 2010 – 2011 Permitting Costs

Category	2010 Actual / Estimated Costs	2011 Projected Costs
Marketing and Communications – FPL payroll and expenses, External Media Support, Surveys, and Outreach Support, Graphics and Collateral materials	$423,722	$387,606
Development – FPL payroll and expenses, various studies	$774,597	$798,314
Legal – FPL payroll and expenses, external support for permitting legal specialists	$349,120	$169,132
Contingency	$1,680,741	$1,021,040
Total Permitting	**$3,228,180**	**$2,376,092**

Table 4. 2010 – 2011 Engineering and Design Costs

Category	2010 Actual / Estimated Costs	2011 Projected Costs
Underground Injection Controls Wells	$4,375,289	$4,125,000
APOG Membership Participation	$150,499	$150,000
EPRI Advanced Nuclear Technology	$275,000	$275,000
FEMA Fees	$267,501	$170,004
Total Engineering and Design	**$5,068,289**	**$4,720,004**

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PTN 6&7 Project Memorandum

Memo No. 2010 - 005 Date: April 15, 2010

From: Steven Scroggs **FPLMTF-10-0140**

Subject: 2010 Project Schedule Revision

Background

The PTN 6&7 project was developed to create the option for new nuclear generation so that FPL customers would benefit from unique economic, environmental, reliability, fuel diversity and energy security attributes offered by nuclear generation. The process required to develop, license, engineer, procure and construct a nuclear project is highly complex and lengthy. Moreover, the process has not been accomplished in the United States in over 30 years, and has never been accomplished using the currently in-place licensing and certification processes or the envisioned Generation III+ designs.

The project schedule for the PTN 6&7 project provided in the Need Determination filing in 2008, and pursued throughout the first two years of the project, was developed with four key phases; the Exploratory phase, the Licensing phase, the Preparation phase and the Construction phase. A key assumption to maintaining the pace set by that schedule was the overlap of some of the Licensing phase and Preparation phase activities. For example, long lead procurement activities were identified to begin as early as 2009 with detailed engineering and site preparation following in 2010 and 2011. At the beginning of the PTN 6&7 project, uncertainties associated with cost, schedule, and the regulatory review process were identified. The key risk management strategy determined to provide the best cost control was to actively manage the pace of project expenditures. It was recognized that these decisions might result in deferring the ultimate in-service dates of the proposed units.

The first key decision related to the overall project schedule was whether or not to initiate long lead procurement expenditures in 2009. Based on an assessment of the market for these procurement items and the issues that will be discussed in what follows, it was determined that those expenditures were not warranted and could be deferred without modifying the overall project schedule. The second key decision relates to the initiation of preparation phase activities (site specific detailed engineering design, detailed construction site preparation planning and creating a project team to initiate procurement and management activities in preparation for construction). In order to maintain the original schedule, the project would need to initiate these activities in 2010.

Situational Analysis

FPL has conducted a review of the issues influencing the overall pace and risks associated with the PTN 6&7 project. In order to create and preserve the option for new nuclear generation, the overall project must be executed while minimizing unwarranted expenditures. Issues that are unresolved, or otherwise introduce risk to the project schedule are identified and their impacts are considered in balance with other factors.

Industry Issues Considered in Project Schedule Revision:

Maturity of Federal Licensing Process – The federal licensing process under Part 52, USC, has not been fully demonstrated. In the next two years, two key events are scheduled to occur. First, the review of the design certification amendment for the AP-1000 will be completed in 2010, and the subsequent rulemaking will occur in 2011. This process has been slowed recently based on additional reviews of specific design features. Additionally, several of the leading U.S. projects will complete the technical and environmental reviews and begin the deliberations before the Atomic Safety Licensing Board. Timely completion of these complex tasks and legal/quasi-legal proceedings will be a key test for the new process.

Energy Policy Issues – Developments in national energy policy have produced negative and positive results as leading indicators for the success of new nuclear generation. Progress towards developing a national repository at Yucca Mountain for used nuclear fuel has been halted. DOE has initiated a new effort to address the issue, but the general assessment is that final resolution has been considerably delayed. However, in recognition of the economic stabilizing and environmentally beneficial attributes of nuclear generation, the Obama administration has undertaken what is judged to be a renewed and genuine interest in furthering development of new nuclear generation. Initial loan guarantees are in advanced stages of negotiation, and the 2010 budget proposes to expand the allocation available for further loan guarantees. Such developments are promising and confirm FPL's assessment of the value offered by new nuclear generation. State energy policy has likewise shown negative and positive activity over the past two years. Nuclear Cost Recovery has been challenged by proposed bills in the legislature and discussions continue with respect to recognition of the environmental benefits of nuclear energy in the states generation portfolio.

Development of Financial Issues – The economic slowdown has created pressures in a number of areas. Immediately, the impact to FPL's customers has reduced demand and demand growth on the system. In the broader capital market, the downturn has tightened the availability and increased the cost of capital for infrastructure investments. Directly, multiple factors could affect FPL's financial health and its ability to undertake large capital projects such as the PTN 6&7 project at competitive costs. Indirectly, the downturn and capital market constriction have impacts on the financial health of equipment vendors, constructors and the broader supply chain that is in the nascent stages of development as predecessor projects to PTN 6&7 move from licensing to construction. The extent of the recession, and the ultimate impact to FPL and other companies involved in new nuclear generation, has yet to be determined.

Lessons Learned from Predecessor Projects – FPL made a fundamental decision early on to position the project as an early, but not a "first wave" U.S. project. Additionally, relevant international projects were underway that would also be instructive. This decision was part of the overall risk management approach that allowed the project to benefit from information developed in these predecessor projects during licensing, commercial, construction and early operation periods. A review of international projects yields mixed results: Olkiluoto (Finland) and Flamanville (France) using the Areva EPR design are behind the initial schedule and over budget, while Chinese projects (Sanmen, Haiyang) using the Westinghouse AP-1000 design are essentially on schedule. Key U.S. developments have seen TVA Bellefonte, the leading AP-1000 project, relinquishing the reference COLA position to the Southern Vogtle project, as TVA responds to reduced economic growth in its service territory. Additionally, several U.S. COLA projects have been suspended or withdrawn due to a range of economic, regulatory or design issues.

Project Specific Issues Considered in Project Schedule Revision:

Pace of Licensing Phase – The Exploratory Phase was accomplished in keeping with the expected overall schedule. The early stages of the Licensing Phase, production and submittal of the federal and state license and permit applications, was accomplished on an aggressive schedule. The initial plan was to develop and submit the COLA and other applications within 15 months of the start of the process. The final timeline required 18 months, faster than any prior COLA effort, so as to include additional seismic and geologic information requested by the NRC in the Progress Levy project. By incorporating this information in the original submittal, it is believed that the COLA will not experience additional delays on these topics during the review process. These early stage activities were largely under the control of FPL and its contractors.

The review of the submitted applications is not directly under the control of FPL. For example, the statutory timeline anticipated in the state Site Certification process has been extended based on a significant number of additional information requests from participating agencies. It is currently anticipated that the Site Certification will not be resolved until late 2011. An initial step in the NRC review process is the publication of a Federal Register Notice and Estimated Review Schedule. In prior COLA submittals by other U.S. projects, this action was taken within the first six months following submittal. To date, FPL has not received an Estimated Review Schedule from the NRC.

Development of Project Specific Commercial Agreements – A key factor in creating a detailed and integrated execution plan for the project is the development of Engineering, Procurement and Construction (EP/C or EPC) contracts and agreements that define the roles, responsibilities, pricing, terms, conditions and schedule milestones of all parties associated with the Preparation and Construction phases of the project. Progress towards an agreement with Westinghouse/Shaw has been measured and has not resulted in a compelling offer that would induce FPL to initiate the considerable expenditures that would be associated with entering in to such an agreement. This is interrelated to the careful approach FPL has been exercising and the uncertainty with regard to the specific forward schedule. However, negotiations were fruitful enough to yield an indicative pricing estimate. Developments in predecessor projects over the next two years are expected to be

instructive regarding the alignment of interests and success of risk sharing mechanisms to manage contract costs.

FPL System Needs and Power Generation Economic Factors – The economic downturn beginning at the end of 2008 has had a profound effect on the forecasted demand and demand growth for the FPL system. Based on current projections, and assuming the completion of planned re-powering activities at Plant Canaveral and Plant Riviera, the next anticipated need for new generation capacity is in the summer of 2022. Additionally, developments in the fuels market have recognized a shift in the natural gas supply/demand balance based on new supplies coming to market from shale gas deposits in the south central U.S. This has reduced natural gas prices in the near term.

Alternative Paths and Analysis of Risk:

Alternative paths include 1) termination of the project, 2) continue licensing phase only, 3) continue licensing phase and initiate construction planning activities without entering into EP or EPC contract, 4) continue licensing phase, initiate construction planning and EP or EPC contract commitments without procurement actions, or 5) continue licensing phase, initiate construction planning and full EP or EPC contract commitments.

Risk can be assessed in qualitative and quantitative ways. As stated previously, the objectives of the project are to deliver the benefits of nuclear generation to our customers in a manner that manages risk. For the purposes of managing the PTN 6&7 project, the primary project risks being managed are 1) the risk to ultimately achieving the project objectives, and 2) the risk that expenditures are inefficient (i.e., do not achieve the objective at a reasonable cost and within a reasonable time). Accepting these functional definitions, the alternative paths can be compared and contrasted relative to their ability to address the primary risks.

Termination of the project prevents any further expenditure, and therefore no expenditure can then be inefficient. However this choice also precludes achieving the ultimate project objectives. If efficient expenditures can be made while maintaining a reasonable likelihood of achieving project objectives, then this course of action is not optimal.

Continuing the licensing phase with no other expenditures maintains progress toward the project objectives and focuses project resources economically on the near term goal of achieving necessary approvals to construct and operate the project. Because these approvals are valid for a considerable time after being granted (for all practical purposes COL approximately 20 years, SCA 15 years by statute) the expenditures are highly efficient because the value of the investment is preserved. Suspension of Preparation phase and Construction phase expenditures until higher predictability can be obtained in regulatory application reviews, project schedule, and commercial agreements eliminates inefficient expenditures; however it postpones delivery of the ultimate project objectives. The history of generation II nuclear plant construction in the U.S. illustrates that the key factors to success include a high degree of schedule certainty, with a design that is stable (design highly complete, with minimal revisions during construction). Initiating Preparation or Construction phase expenditures in advance of addressing those success factors would accept a higher risk of inefficient expenditures.

Additional alternative paths essentially take graduated steps towards full project initiation and commitment. The current estimated project spend through 2011 is approximately $176 million. The original estimate, maintaining pace for the 2018/2020 in service dates, was $523 million through 2011. Discussions with Westinghouse indicated a spend curve that would have resulted in approximately $1 billion in expenditures through 2011.

Expenditures necessary to support and defend project applications are essential to meeting the ultimate project objectives. However, considering the issues previously discussed, expenditures above what is necessary to maintain progress on licenses and permits in the next two years are premature and run a significant risk of being inefficient.

Determination

It is in the best interests of FPL customers to maintain progress towards obtaining all licenses, permits and approvals for construction and operation of the PTN 6&7 project. Once obtained, the licenses, permits and approvals must be maintained. However, Preparation and Construction phase expenditures should be suspended until the criteria identified above can be demonstrably satisfied.

Docket No. 100009-EI
Project Schedule
and Milestones
Exhibit SDS-13, Page 1 of 1

FPL

PTN 6&7 Project Memorandum

Memo No. 2010 - 03 Date: March 23, 2010

From: Steven Scroggs **FPLMTF-10-0138**

Subject: Capital Cost Estimate Revision Method and Results

Background

In the 2009 Nuclear Cost Recovery Order, it was ordered that "FPL shall file updated capital cost estimates in its next annual NCRC filing." FPL has reviewed the basis for its non-binding cost estimate range and opportunities for revising and updating its capital cost estimate. The following provides a description of what was considered in this review and the foundation for the method employed to update the capital cost estimate.

Situational Analysis

The original capital cost estimate for the PTN 6&7 project was developed in 2007. This cost estimate was presented in the Need Determination Filing and is the basis for the current non-binding capital cost estimate for the project. At the time this estimate was developed FPL did not have five key elements that are necessary to inform a cost estimate. These included:

- A specific technology (and therefore a capacity)
- A conceptual design of the project
- Commercial contracts for Engineering, Procurement or Construction
- Approvals with associated conditions of certification/approval
- A firm detailed project execution schedule

Information Available as of January 2010:

Since this time, FPL has continued to further define the project leading to completion and submission of permit and license applications. This process resulted in selection of a specific technology (Westinghouse AP-1000) and conceptual design of multiple project features. In parallel, FPL conducted negotiations with Westinghouse/Shaw regarding the scope, terms, conditions, schedule and pricing of an EP contract supporting the 2018/2020 COD schedule. However, no commercial contracts have been initiated, no approvals with or without conditions have been obtained, and accordingly no firm detailed project execution schedule has been developed.

PTN 6&7 Project Memorandum 2010 – 003 **03/23/2010**

Approach to Revising Capital Cost Estimate:

Based on the additional information developed since 2008, a cost estimate can be constructed to update the current estimate recognizing the selection of a specific technology (and corresponding capacity) and the conceptual definition of project features collectively captured in the June 2009 application submittals. Such an estimate will represent a more recent estimate of cost – but not necessarily a more accurate cost estimate range.

Determination

Fundamentally, sufficient actionable information cannot be developed at this stage of the project that would represent a truly meaningful refinement to the existing cost estimate range. However the most current information can be included to provide a comparison to the existing cost estimate range.

The following approach was determined to best represent the current status of the cost estimate given the best information available:

- The existing cost estimate range developed in the Need Determination will be retained as the underlying basis for the PTN 6&7 project non-binding cost estimate.
- The cost estimate range will be adjusted to specifically reflect the selection of the AP-1000 technology, adding $47/kW to the original range, to reflect the 2,200 MW project capacity.
- The cost estimate range would be retained, but brought forward to 2010 to reflect the range in current (2010) dollars.
- A cost estimate will be developed using the updated specific information that is currently available, and that cost estimate will be compared to the updated cost estimate range.

Exhibit SDS-15 Comparison of 2008 Case C and 2010 Cost Estimate Revision

Category	2008 Cost Estimate (Case C; 2010$, $/kW)	% total	2010 Cost Estimate Check (2010$, $/kW)	% total	Difference between 2008 and 2010 Estimate
Standard Plant	$2,180	44%	$2,118	42%	-3%
Balance of Plant	$146	3%	$342	7%	134%
Site Development	$111	2%	$225	5%	103%
Const Labor	$999	20%	$951	19%	-5%
Owners Cost	$432	9%	$381	8%	-12%
Transmission	$257	5%	$322	6%	25%
Contingency	$815	16%	$651	13%	-20%
Total Overnight Cost	$4,940		$4,991		1%

Note: 2008 cost estimate is adjusted to appropriate capacity by addition of $47/kW and then escalated to 2010 dollars using a 2.5 percent per year escalation factor.

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PTN 6&7 Project Memorandum

Memo No. 2010 - 004 Date: March 26, 2010

From: Steven Scroggs **FPLMTF-10-0139**

Subject: Decision to Extend the Forging Reservation Agreement

Background

In 2008, FPL entered into a Forging Reservation Agreement with Westinghouse Corporation to reserve manufacturing space for certain Ultra Heavy Forgings necessary for a two unit AP-1000 project. The agreement called for initiation of a follow on agreement or termination by December 31, 2009. By mutual consent, the agreement was extended six months with no changes to the terms or conditions of the agreement. The extension was instituted recognizing that several key project reviews would be undertaken in early 2010, providing guidance for the appropriate final disposition of Forging Reservation Agreement.

Situational Analysis

As the project schedule review is concluding, it is evident that FPL will not initiate an EP or EPC form of contract in the next year. This milestone was envisioned as the terminating milestone for the original Forging Reservation Agreement. Further, market conditions have resulted in reduced demand for the manufacturing capability reserved by the agreement.

Looking to the future, the need for the manufacturing capability will still be required, but the dates associated with that need are yet to be determined.

Options for Consideration:

Alternatives available include 1) dissolve agreement and seek the maximum refund available, 2) renegotiate agreement to leverage invested funds for a different scope of work, or 3) renegotiate to extend the term of the agreement, preserve current reservations and minimize incremental cost.

Dissolution of the agreement carries with it risk to the recovery of a significant portion of the reservation fee. The terms of the agreement provide for an 85% refund under the condition that Westinghouse is able to remarket the manufacturing slots to another buyer. Given current market conditions and the reduced demand for ultra-heavy forgings in this time frame there is a possibility that the remarketing term would not be satisfied, resulting in little or no refund. Additionally, dissolution of the agreement does not address the eventual need for this manufacturing capability at some future point.

FPL currently compensates Westinghouse/Shaw for engineering support for the Combined License Application before the NRC. As the project moves into the engineering design, procurement and construction phases, FPL will continue to engage Westinghouse/Shaw on an increasing basis for these services. The value represented by the reservation fee might be converted into other services, after compensating Westinghouse for costs experienced to obtain and manage the reservation to date. While this alternative is plausible, lack of a firm schedule for delivery of substituted services adds complexity to a renegotiation. As with the dissolution option, the inevitable need for forging manufacturing capability is not addressed.

Extension of the current terms and conditions offers all the benefits of the current agreement and preserves the option to exercise the forging activity. Westinghouse would need to manage the forging slots into the future on behalf of FPL through coordination with Japan Steel Works. Market demand and scheduling would impact the availability of this option. Additionally, the lack of a firm schedule for delivery means that the length of time the reservation could be extended into the future is likely to be limited. Additionally, if the extension were to come at a cost, an evaluation of the incremental cost and benefit of the extended agreement would be required.

Determination

FPL has determined, given due consideration of all factors described above, that the better course of action is to extend the existing agreement one year, to March 2011 if such extension can be accomplished at no additional cost and all options currently in the agreement can be retained.