BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 100009-EI
FLORIDA POWER & LIGHT COMPANY

MAY 3, 2010

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

TESTIMONY & EXHIBITS OF:

JOHN J. REED

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DIRECT TESTIMONY OF JOHN J. REED

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Section I: Introduction

Q. Please state your name and business address.

A. My name is John J. Reed. My business address is 293 Boston Post Road West, Marlborough, Massachusetts 01752.

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

A. I am the Chairman and Chief Executive Officer of Concentric Energy Advisors, Inc. ("Concentric").

Q. Have you previously filed testimony in this docket?

A. Yes, I filed direct testimony on March 1, 2010.

Q. Are you sponsoring any exhibits in this case?

A. Yes. I am sponsoring Exhibits JJR-7 and JJR-8, which are attached to my direct testimony.

Exhibit JJR-7	Concentric Observation & FPL Response Table
Exhibit JJR-8	Review of New Nuclear Cost Estimates

Q. Please summarize your testimony.

A. My testimony provides an overview of Concentric's continuing review of the Florida Power & Light Company's ("FPL" or the "Company") efforts to

implement extended power uprates ("EPUs") at the Company's existing St. Lucie Units 1 & 2 ("PSL 1 & 2") and Turkey Point Units 3 & 4 ("PTN 3 & 4" and collectively the "EPU Project") nuclear power plants and to develop the option to construct two new nuclear units at FPL's Turkey Point site ("PTN 6 & 7" and collectively the "Projects"). My testimony includes a discussion of changes to FPL's project controls since late 2009 and general considerations when assessing large-scale projects such as the Projects.

Additionally, I provide a review of the processes used by FPL to review the EPU Project deployment schedules and cost estimates in 2010. For the EPU Project, this includes a discussion of the highly qualified, third party consulting firm that has been retained by FPL to assist with its efforts to develop a detailed, engineering-based project cost estimate. Finally, my testimony describes Concentric's conclusions related to a separate investigation.

My review of the PTN 6 & 7 project includes a discussion of FPL's considerations when developing a new deployment schedule for the PTN 6 & 7 Project. Similarly, I provide an overview of the process the PTN 6 & 7 project used to revisit and update its cost estimate range in 2010. This review includes a discussion of Concentric's efforts to benchmark the Company's cost estimate range against the publicly reported cost estimates for similar new nuclear units in the United States.

Lastly, my testimony includes Concentric's assessment of the feasibility analysis to evaluate the continued cost effectiveness of the Projects. This includes a review of the assumptions that form the basis of the Company's feasibility

analysis and the efforts to update these assumptions for 2010. Concentric believes the Company's feasibility analysis is a reasonable approach to assessing the continued cost effectiveness of the project.

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

A. My testimony is organized into the sections listed below.

Section 2:	Changes to the PTN 6 & 7 Project and EPU Project Controls since 2009
Section 3:	Cost and Schedule Development Procedures
Section 4:	Discussion of Project Control Implementation in the EPU Project
Section 5:	Discussion of Project Control Implementation for PTN 6 & 7
Section 6:	Description of Feasibility Analyses
Section 7:	Conclusion

Section 2: Changes to the PTN 6 & 7 Project and EPU Project Controls since 2009

Q. Were FPL's project controls reviewed in your March 2010 testimony?

A. Yes. My March 2010 direct testimony provided a full review of the project controls that were utilized by FPL to develop and implement the EPU Project and the PTN 6 & 7 project through December 31, 2009. The project controls used to develop FPL's Actual/Estimated costs for 2010 and projected costs 2011 are largely the same. However, a few changes have been made since 2009.

Q. As it relates to the EPU Project, what changes have been made since December 31, 2009?

A. The EPU Project has made certain changes to project controls. These changes include the elimination of the Weekly VP Conference call, revisions to the Extended Power Uprate Project Instructions ("EPPIs"), and revision of the project forecast for cost reporting purposes. The Weekly VP Conference call was eliminated, as it was deemed redundant due to the increased frequency of Chief Nuclear Officer briefings. The EPPIs were revised to reflect changes in the EPU Project Management structure and to strengthen the process for identifying and approving scope changes and trends. These changes were appropriate to strengthen the EPU Project Controls and better assess the EPU Project performance.

Q. What PTN 6 & 7 project controls have changed since 2009?

A. Since 2009, the PTN 6 & 7 project has made certain enhancements to its existing project controls in order to address many of the observations I provided in my March 2010 testimony. These enhancements are included in FPL's response to Concentric's prior observations, which are described below.

Q. Has FPL evaluated and responded to Concentric's observations in 2009 and 2010?

A. Yes. FPL has responded to each of Concentric's observations in 2009 and 2010. FPL's responses to our observations can be found in Exhibit JJR-7. This exhibit provides a list of Concentric's observation and FPL's response to each observation.

Q. Please describe FPL's responses to Concentric's observations.

A. FPL has adequately responded to Concentric's observations. In all cases, FPL has thoughtfully evaluated Concentric's observations and reviewed its existing procedures. In a few cases, FPL was able to identify existing procedures or processes that addressed the intent of Concentric's observations. In other cases, FPL has made enhancements to address the intent of Concentric's observations. A limited number of Concentric's observations related to the PTN 6 & 7 project remain under review by FPL.

Q. Does Concentric have any additional observations related to the EPU Project?

A. Yes. Concentric's additional observations related to the EPU Project can be found in Section 4 below.

Q. Did Concentric have any additional observations related to the PTN 6 & 7 Project?

A. At this time, Concentric does not have any specific observations related to the PTN 6 & 7 Project. Concentric did note that the PTN 6 & 7 Project has appropriately updated its estimate of the cost to construct the PTN 6 & 7 Project and the PTN 6 & 7 Project deployment schedule. Concentric believes the processes used to develop this revised cost estimate and the revised schedule are reasonable and produced appropriate results.

Q. Does Concentric have any additional observations related to the Company's feasibility analysis?

A. Yes. Concentric did identify one additional observation related to the economic feasibility analysis for both Projects, and it is discussed in Section 6 below.

Section 3: Cost and Schedule Development Procedures

Q. How do construction projects on the scale of these Projects typically progress?

A. Most large scale construction projects proceed in a definite order composed of three stages: (1) Planning and Definition, (2) Design, and (3) Procurement and Construction. The Planning and Definition phase serves to define a project's requirements and delineate its budgetary constraints. In Project Management for Engineering and Construction, Garold Oberlender notes, "Project definition involves establishing broad project characteristics, such as location, performance criteria, size, layout, equipment, services, and other owner requirements needed to establish the general aspects of the project."[1]

Q. Why is a careful review of the cost and schedule planning procedures important to establishing the reasonableness of management's decisions?

A. A careful review of the estimating and scheduling procedures is required since the estimates and forecasts processes are inherently based upon many assumptions. The very process of estimating a project's cost and planning a project's schedule can help a management team think through potential future challenges, and enables them to more fully understand the project dynamics. It is this type of understanding that enables prudent decision-making, since greater preparation for potential challenges will typically yield more sound decisions.

Q. Please describe the importance of scheduling in large scale construction projects.

A. Construction projects are intricate, time-consuming undertakings. The total development of a project normally consists of several phases requiring a diverse range of specialized services. Although major construction is subject to highly variable and unpredictable factors, a project's schedule serves as its touchstone, highlighting the entire scope of work and arranging all the functions that will result in the project's completion. The adage, "time is money," is exemplified within the scheduling function. A well-scheduled project is more likely to be completed within a shorter period of time, thus reducing the overall cost of the project.

Q. Are there any conceptual frameworks for scheduling projects of this scale?

A. Certainly. The process adopted by the company is consistent with *Practice Standard for Scheduling*, as established by the Project Management Institute.[2] Scheduling projects on this scale is necessarily stratified, and they are typically broken down along the following levels:

- Level 1 – Highlights major project activities, milestones, and key deliverables for the entire project.
- Level 2 – Depicts the overall project broken down into its major components by area and is used for higher-level management reporting

- Level 3 – Usually developed as an integrated Critical Path Method[3] overview of the project, and serves as an integrated summary of the schedule activities
- Level 4 – This is the key working level schedule displaying all of the activities that need to be accomplished by the project workforce
- Level 5 – A short term schedule used to map out the detailed tasks needed to coordinate day-to-day site work.

Q. Why is the Critical Path Method ("CPM") that you reference above important for schedule performance/adequacy?

A. Critical Path Method Scheduling encompasses information such as activity duration, relationships between activities, and calendars to calculate a detailed project schedule. CPM identifies the critical set and sequence of activities that affect the completion date for the project or an intermediate deadline. By establishing the interrelationships between all of a project's component activities, CPM helps clarify priorities and identify potential schedule challenges.

Q. Does FPL use any tools to facilitate the use of CPM scheduling?

A. Yes. FPL utilizes a software package known as Primavera P6®, which is widely deployed in the nuclear power industry to schedule refueling outages and major capital projects. Once an initial schedule has been established within the Primavera software, the addition of any new activities is automated. Interdependent relationships are established to understand the impact of such additions. In other words, activities which must be completed in a particular

sequence are updated when a single activity within the sequence is modified by a scheduler.

Q. Please describe the importance of cost estimation to large scale construction projects.

A. Early cost estimates are the basis for business decisions, and are thus extremely important in all construction projects, particularly those on the scale of the Projects. Similarly, early cost estimates can serve as a benchmark for viewing changes as projects move from the design phase to the construction or implementation phase.[4]

Q. How does cost clarity increase as construction progresses?

A. Estimating costs at the outset of a project, before the final engineering is complete and prior to the commencement of the procurement phases, is an inherently inexact science. Still, the preparation of cost estimates is important since the decision to proceed with the project at each phase is based on the estimated cost that was determined in the preceding phase. According to Oberlender, "All parties must realize that the estimated cost [of a project], at any time, is based upon the amount of information that is known about the project when the estimate was prepared. Too often this concept is not fully recognized."[5] Cost clarity necessarily increases over the course of the project. Oberlender continues, "The level of accuracy of the approximate estimate can vary significantly, depending upon the amount of information that is known about the project. With no design work it may range from +50% to -30%. After preliminary design work, it may range from +30% to -20%. On completion of

detailed design work it may range from +15% to -10%."[6] Similarly, FPL's procedures[7] for establishing contingency factors are as follows:

- 25-30 percent for conceptual estimates
- 15-25 percent for Level 1 or preliminary estimates
- 5-10 percent for Level 2 or definitive estimates

Section 4: Discussion of Project Control Implementation in the EPU Project

Q. Please describe the EPU Project.

A. FPL is implementing EPUs at PSL and PTN which are expected to enable PSL and PTN to generate collectively between 399 and 463 additional megawatts. The final increase in capacity will not be known until all design engineering is complete. This process of increasing each unit's output involves the replacement or modification of many plant components.

Q. Does the EPU Project lifecycle reflect the progression you mentioned in Section 3?

A. Yes. The EPU project consists of four overlapping phases: (i) the Engineering Analysis Phase; (ii) the Long Lead Equipment Procurement Phase; (iii) the Engineering Design Modification Phase; and (iv) the Implementation Phase. The lifecycle puts a heavy up-front emphasis on the design and engineering portions of the EPU Project, allowing the project scope to be rendered to the highest possible degree. One slight deviation from the typical schedule laid out is the presence of the Engineering Design Modification phase after the Long Lead Procurement Phase. This addition is necessitated by the regulatory mandates that govern nuclear construction projects. The Engineering Design

Modifications will likely not impact any of the activities undertaken during the Long Lead Procurement Phase, and its placement within the EPU Project lifecycle was governed by regulatory necessity.

Q. How has the EPU Project schedule developed since its inception?

A. The EPU Project schedule has developed in accordance with the increasing levels of clarity in determining individual project components. In 2008, the Company completed its "level one" schedule, which identified the timing for certain key equipment procurement and installation, as well as other accompanying activities. Since 2008, the EPU Project has established its "level two" schedule for both sites, having generally identified each of the project components that will be required for completion, and is continuing to develop its "level three" and "level four" schedules for each successive outage.

Q. Please describe the scheduling processes for the EPU Project.

A. At its core, scheduling requires input from, and coordination by, all facets of the EPU Project. It begins at the site level, with the schedule components and milestones broken out at daily meetings both within the sites, and between the sites at the corporate-level. While these regular meetings are essential to maintaining schedule integrity, they do not compose the entire basis of the scheduling process. For instance, any threats to the schedule are tracked in a "risk register," which is reviewed at the plants on a daily basis and updated when necessary. This register assigns a high, medium, or low probability factor for schedule changes. More granular changes to the schedule are placed into the

site's Primavera P6 software, which can reflect approved changes to the schedule in near-real time.

Q. What is the relationship between project evolution and schedule clarity?

A. As the EPU Project has moved into the implementation phase, project managers have expended considerable effort to develop the initial schedule further. However, because the EPU Project is still relatively early in its phases of completion, the final project scope is not fully defined. Following the submittal of the License Amendment Requests ("LARs") in 2010 to the Nuclear Regulatory Commission ("NRC"), it is possible that additional scope will be required in response to the NRC Staff's Requests for Additional Information ("RAIs"). Once the NRC approves the LARs, the project scope will have been further defined by the Company. Finally, at the time the modification packages are final and the work order planning is complete, the implementation scope will be fully defined. This will allow the final refinements to the detailed schedule.

Q. How are the EPU Project's vendors integrated into the scheduling process?

A. Vendor scheduling, like other schedule planning, is highly structured. At the beginning of each vendor's scope of work, FPL requires the vendors to provide a reasonable target schedule from which future progress will be measured. Vendor scopes of work are also integrated into each site's Primavera database.

During their course of work, vendors are responsible for providing monthly progress reports regarding this schedule. In addition to these monthly reports, weekly meetings are held between major vendors and managers at each site to

discuss schedule progress and any foreseen challenges to schedule or cost. If any issues raised in these meetings pose a potential threat to the EPU Project schedule, a notation is made in the risk register that details the nature of the challenge and mitigation plan.

Q. How does the EPU Project currently monitor their schedule performance?

A. The EPU Project Team uses several periodic reporting mechanisms including daily, weekly, bi-weekly and monthly conference calls. In addition, the EPU Project Team issues a variety of reports that I detailed in my March testimony. Many of these reports include a discussion of the EPU Project's schedule performance as compared to an initial target schedule and updates.

Q. What role do senior managers play in tracking, reviewing, and approving changes to the EPU Project schedule?

A. Despite the recent decentralization of the EPU Project Management, FPL is maintaining a centralized project management team to provide centralized oversight for the EPU Project at PSL and PTN. As a member of the centralized project team leadership, the Project Controls Director provides direction, oversight and governance to the Project Control Supervisor at each site and holds overall responsibility for the EPU Project Controls functions including cost control, estimating, scheduling and support activities, but the process for approving schedule changes is tiered. The EPU management team reviews and tracks schedule performance through the meetings and reports I discussed above and detailed in my March testimony, including daily, weekly, bi-weekly, and monthly conference calls.

Q. How is FPL's senior management involved in reviewing the EPU Project's schedules?

A. As detailed in my March testimony, FPL's senior management is regularly apprised of the EPU Project's progress (i.e., monthly), and can track issues related to project cost and budget through routine meetings and reports.

Q. How effective is the Critical Path Method of scheduling to the EPU Project's current activities?

A. As explained in Section 3, the CPM aggregates interrelationships of activities and scheduling of costs and resources in great detail. It is an effective mechanism for overall project scheduling and detailed scheduling of construction. However, its usefulness grows as projects progress, and it can be challenged "when applied to detailed engineering design work during the early stages of a project because it requires an extensive description of the interrelationships of activities."[8] In short, the use of CPM for the EPU Project is expected to grow in effectiveness as the project progresses.

Q. How does the EPU Project track and identify risks to the project schedule?

A. The EPU Project uses a Risk Matrix to track threats to the EPU Project and its current schedule and to provide a brief explanation of these risks. The risk identification process covers identification, assessment and analysis, risk management, categorization, reporting, and mitigation. The Company defines risks as issues that affect nuclear quality, environment, project cost, schedule, safety, security, legal, plant operations, regulatory, and reputation.

Q. Please describe the planned outages as they relate to the EPU Project schedule.

A. The EPU Project modifications are expected to be performed in successive outages for each of the nuclear units, the last of which is scheduled to begin in late 2012. FPL Witness Jones provides the most current EPU Project outage schedule in Exhibit TOJ-15, Extended Power Uprate Project Schedule.

Q. Please describe the EPU Project's cost estimating efforts.

A. In 2007, FPL prepared an initial feasibility study for performing EPUs at PSL and PTN that included a conceptual cost estimate based on a conceptual scope. This study provided the basis for FPL's request for a determination of need. In February 2008, Shaw Stone & Webster ("Shaw") performed a scoping study which included a rough order-of-magnitude estimate for part of the conceptual scope and was done to confirm portions of FPL's initial feasibility study.

Q. Has the scope of modifications been finalized?

A. No. The current project schedule now includes approximately 191 EPU modifications at the St. Lucie and Turkey Point nuclear sites. The final, detailed cost estimates and schedule durations will not be known until the NRC approves the LARs and each of the modification packages is complete.

Q. Has the LAR process resulted in scope changes to date?

A. Yes. Deviation from the scoping study has resulted primarily from the engineering analyses associated with preparation of the LARs. These analyses have resulted in both increases and reductions in scope. FPL Witness Jones describes the increases and decreases in detail.

Q. How have these additions affected the cost estimate?

A. On a total project cost basis, including already incurred costs, the range is between approximately $2.05 billion and $2.30 billion. As with all previous estimates of the cost of the EPU Project, the incremental cost of operating more expensive generating units during the longer EPU outage durations are excluded from this estimate. The incremental fuel costs are, however, included in FPL's feasibility analysis. In addition, for purposes of the Company's feasibility analysis, the EPU Project relies upon "to-go" costs derived from the high end of its range.

Q. Please explain the concept of "to-go" costs.

A. "To-go" costs are the remaining costs of a project that is in the process of being completed; it is the incremental cost to complete the project from its state at a given point in time. Large infrastructure and development projects such as the construction of large power plants take years to complete and costs are incurred throughout the development process. As the project nears completion, to-go costs are expected to gradually fall until the point at which the project is complete and enters service. In short, to-go costs are the total cost of the project less those costs which have already been incurred and cannot be reversed.

Proper evaluation of to-go costs is crucial in deciding whether to continue pursuing a major infrastructure investment. The to-go cost of a project appropriately ignores sunk costs, or expenses that have already been incurred and cannot be reversed. Instead, a firm must determine whether the benefits to be gained from a major investment will exceed the total costs that remain. For

example, suppose a developer has spent six months and $2 million on the first phase of a construction project, and the cost to complete the project is an additional $5 million. In the determination of whether it is reasonable and economic to proceed, the developer must determine whether the revenue it will ultimately receive exceeds the $5 million required to complete the project. The $2 million already spent is a sunk cost in the developer's assessment; it is assumed these expenses cannot be reversed if the project is abandoned. Consequently, it should not be considered in the determination of whether to proceed. Only the to-go cost is relevant to the decision-making process.

The FL PSC acknowledged a requirement that FPL account for sunk costs in its economic and feasibility analyses in Order No. PSC-08-0237-FOF-EI:

> FPL shall provide a long-term feasibility analysis as part of its annual cost recovery process which, in this case, shall also include updated fuel forecasts, environmental forecasts, break-even costs, and capital cost estimates. In addition, FPL should account for sunk costs. Providing this information on an annual basis will allow us to monitor the feasibility regarding the continued construction of Turkey Point 6 and 7.

The irrelevance of sunk costs and the more appropriate consideration of to-go costs are basic principles of economics, and are discussed in economics textbooks, such as Principles of Microeconomics, by N. Gregory Mankiw (1998). It is my experience that this concept is applied by virtually all regulators in consideration of large capital investment projects.

Q. Has FPL used any outside expertise to update its cost estimates since the initial scoping study?

A. Yes. In December 2009, the Company engaged High Bridge Associates ("High Bridge") to develop a detailed, bottom-up cost estimate for the EPU activities taking place at PTN Unit 3.

Q. Please describe High Bridge Associates.

A. High Bridge is a project management and consulting services company with offices in Atlanta, Georgia and Chattanooga, Tennessee. High Bridge has previously been retained by numerous utilities and engineering and construction firms to assist with the preparation of detailed, engineering-based cost estimates. In addition, many of employees of High Bridge have extensive backgrounds in major power plant construction projects.

Q. Why did FPL engage High Bridge to estimate PTN Unit 3 rather than all four PTN & PSL units?

A. The decision to initially limit High Bridge's scope of work to PTN Unit 3 is the result of two considerations. First, the cost to produce this type of estimate is relatively high. Thus, FPL wanted to make certain that the work product received from High Bridge would meet the needs of the project. Second was the time required to complete the estimate; High Bridge was retained in December 2009 and will not complete the estimate until May 2010.

As a result of these considerations, FPL first selected PTN for the cost estimation process rather than PSL because the two PTN units are more alike than the two PSL units. Similarly, FPL selected PTN Unit 3 rather than PTN

Unit 4 because more detailed engineering was complete for PTN Unit 3 since it is the lead unit for EPU implementation at the Turkey Point Units.

Q. Did Concentric review High Bridge's methodology for developing this estimate?

A. Yes. Concentric visited High Bridge's Chattanooga, TN, office in March 2010. During this visit, Concentric reviewed High Bridge's methodology and discussed how this methodology was being applied to PTN Unit 3. Based on its visit, Concentric expects High Bridge's analysis to be of a high quality with extensive supporting documentation.

Q. Do you believe it was appropriate to initially limit High Bridge's scope to Unit 3?

A. Yes I do. However, I also believe that, assuming High Bridge's work product is of a high quality, this process should be replicated for the PSL units and that the results of the PTN Unit 3 analysis should be applied to PTN Unit 4.

Q. Will the results of High Bridge's analysis be provided to the Commission and its Staff?

A. Yes. The results of High Bridge's analysis will be provided to the Commission and its staff once this analysis is completed.

Q. Did Concentric have any observations related to the EPU Project's cost estimate?

A. Yes. Concentric was retained by FPL to conduct a separate investigation related to the EPU Project's development of cost estimates and provision of this

information to FPL's executive management and the Florida Public Service Commission ("FL PSC"). Concentric's investigation into this matter has not identified any costs that were the result of imprudent decision-making by FPL and Concentric believes the EPU Project feasibility analyses have been, and continue to be, reasonable and appropriate.

While Concentric is still completing its work on this matter, Concentric has developed certain preliminary observations and recommendations related to 1) the EPU Project from the perspective of improving project controls and 2) the flow of information. Our preliminary recommendations related to improving project controls will be discussed in Concentric's separate report on this matter and include the following topics:

- The report ownership, sign-off and dissent process;
- The process for determining performance indicators and their underlying calculations;
- The reporting relationship of the EPU Project Controls Director ;
- The process for determining the project's contingency & release of that contingency; and
- The process for closing condition reports and associated risk mitigation plans.

We are still preparing our report but we preliminarily expect our recommendations will address 1) the flow of information within the EPU Project Team, the NCRC Docket Team, and external audiences, 2) the use and

composition of the Executive Steering Committee, 3) the use of independent cost estimates, 4) operational readiness, and 5) the importance of adequate staffing for the EPU Project.

Q. Do any of these observations impact your March 2010 testimony in this docket?

A. Yes they do. As a result of this separate investigation, Concentric believes we have identified certain instances where the EPU Project has not fully complied with the Company's policies and procedures or the EPU Project's instructions. These instances will be detailed within Concentric's separate report on this matter, and should be viewed as a supplement to my March 2010 pre-filed testimony.

Q. Would Concentric's findings in this separate investigation change your conclusions as to the prudence of the EPU Project 2009 expenditures?

A. No. This question is specifically addressed within Concentric's investigation. Although Concentric did identify instances where the EPU Project did not fully comply with the Company's policies and procedures, Concentric did not find any evidence of imprudently incurred costs.

Q. Please describe how the EPU Project 2010 budget and 2011 projection were developed.

A. The budget for the EPU Project results from a bottom-up approach that takes place at each site and is managed by the Project Controls staff. The major expenditures for the EPU Project relate to procurement and outage activities, and integrating cash flows for both are highly important to budget development.

Where vendors and contractors are concerned, FPL conducts a detailed review of cash flow projections, staffing plans, and milestone payments where applicable. This work is done in close cooperation with major contractors, notably Bechtel, in order to access the most detailed data. Items from the risk register are incorporated into the budget when called for. The process for forecasting is identical to the one used for budget development.

Q. How was FPL's senior management involved in the development and approval of the EPU Project 2010 budget and 2011 projection?

A. The budgets for each site are circulated to senior managers, and are formally reviewed twice a year by both the Director of Project Controls and the Vice President of Nuclear Power Uprates. FPL's executive management is responsible for reviewing and approving the EPU Project's budget on an annual basis. Apart from reviews by EPU Senior Management, the EPU budgets are reviewed by Nuclear Business Operations for reasonableness and consistency.

Q. Please describe how the EPU Project identifies and tracks threats to the 2010 budget and 2011 projection.

A. The EPU Project maintains two means of identifying and tracking risk or threats to the EPU Project's budgets. First, the EPU Project maintains a risk register for each site. These documents provide space for identifying new project risks, the risk's potential cost and schedule impact and the current status of the risk. The EPU Project also uses a Scope Change/Forecast Variation process which utilizes a trend register to identify specific threats to the EPU Project budget either from additional scope or revised cost expectations. Once added to a trend register, a

Scope Change/Forecast Variation form is supposed to be created in order to seek approval for a formal change to the EPU Project budget. This process is governed by EPPI-300, Project Change Control, and was revised twice in 2010. Compliance with this project instruction is improving markedly in 2010.

Section 5: Discussion of Project Control Implementation for PTN 6&7

Q. Please generally describe the PTN 6 & 7 Project.

A. Through the PTN 6 & 7 Project, FPL is seeking to develop the option to deploy approximately 2,200 MWs of additional nuclear capacity for the benefit of FPL customers. These benefits include fuel savings, reliability improvements, and reduced emissions. The Company's project management strategy is focused on preserving appropriate flexibility and multiple hold points and off-ramps if the PTN 6 & 7 Project's progress should be delayed for further analysis. If economic, regulatory, and political conditions warrant, the PTN 6 & 7 Project can be accelerated, within certain limits, to meet the revised deployment requirements. This management strategy is well documented in the revised PTN 6 & 7 Project Plan.[9]

Currently, the PTN 6 & 7 Project is focused on obtaining federal, state, and local licenses and approvals that will allow the company to construct two new nuclear units. If approved, these permits will not require FPL to immediately begin construction of a new nuclear facility. Rather, the State Certificate is valid for fifteen years, and a combined operating license ("COL") from the NRC remains valid for at least 20 years from the date of license issuance. The endurance of

these permits provides the Company valuable flexibility with respect to the rate at which it pursues the Preparation and Construction phases of the PTN 6 & 7 Project.

Q. Is the development of the PTN 6 & 7 Project expected to follow the four stages of a project defined in Section 3 above?

A. Yes, it is. FPL's project planning is defined into four stages of the project: Exploratory, Licensing, Preparation, and Construction. The Company's Exploratory Phase corresponds to the Planning and Definition Phase defined by Oberlender. Similarly, the Licensing Phase also corresponds to additional Planning and Definition activities. FPL's Preparation stage corresponds to Design and early Procurement, while the Construction stage corresponds to both Procurement and Construction.

Q. What milestones are expected to be achieved on the PTN 6 & 7 Project in 2010 and 2011?

A. As would be expected, milestones for 2010 and 2011 pertain largely to permitting and licensing activities. The Company current anticipates an Environmental Impact Statement will be published in 2011. This EIS will be used by both the NRC and Army Corp of Engineers in approving the PTN 6 & 7 Project's COL application ("COLA") and wetlands permit respectively. Achieving completeness with respect to the PTN 6 & 7's Site Certification Application ("SCA") is a major priority for the Project. SCA hearings are expected in 2011; Land Use Hhearings are expected to begin in late 2010 or early 2011 and the Site Certification hearing is expected in mid 2011. Finally, FPL expects to receive a

review schedule from the NRC for the PTN 6 & 7 COL application in mid-2010. FPL Witness Scroggs describes these activities in additional detail.

In addition to the Company's continued pursuit of licenses and permits, limited on-site work will support environmental permitting. FPL will drill exploratory and dual-zone monitoring wells to verify the geology of the land where PTN 6 & 7 will reside. These wells are part of the Underground Injection Control ("UIC") system and are intended to demonstrate that the disposal of non-hazardous waste water can be accomplished in accordance with the regulations governing UIC wells. This drilling work is expected to finish in late 2010. Exploration activities will commence in 2011.

Q. Did FPL make any adjustments to the projected commercial operation dates for the PTN 6 &7 Project?

A. Yes, it did. If construction of the new units continues to be economically viable, and if development continues on its current trajectory, the first unit is expected to reach commercial operation in 2022. The second unit is expected to follow one year later, in 2023. This development schedule is explained in greater detail in the testimony of FPL Witness Scroggs.

Q. What considerations did FPL make when developing this schedule?

A. FPL has continued to exercise conservative decision-making in its planning efforts for PTN 6 & 7. In the near term, FPL is continuing to approach the project as a licensing and permitting project in order to achieve and preserve the option to deploy new nuclear units at a later date, but not the obligation to do so. For example, as mentioned above, a COL from the NRC retains its option value

for a period of at least 20 years from issuance. This means the Company can defer the project if conditions indicate construction is not cost effective at a given time; likewise, the company maintains the ability to accelerate the development schedule within certain limits if this is the most appropriate path.

Q: What factors have influenced the development of FPL's revised deployment schedule for PTN 6 & 7?

A. First, it is important to understand the limits of FPL's control over the regulatory proceedings. The original deployment schedule, which predicted on-line dates in 2018 for Unit 6 and 2020 for Unit 7, was developed under the assumption that by 2010 FPL would have been able to commence a commercial agreement for engineering, procurement, and construction of the units, and the AP1000 reactor design would be complete and certified by the NRC much earlier than is currently anticipated. In addition, FPL expected to receive a review schedule for the Project's COLA from the NRC by fall 2009. Due to protracted regulatory reviews at the state and federal levels, these milestones have not developed as expected. Finally, as a result of the deep recession from which the country is beginning to emerge, as well as the resultant demographic trends in Florida, demand expectations for the next decade are below the levels forecast in 2007, extending the date at which additional supply-side resources are required. The Company's revised demand forecast is described in greater detail in Section 6, below.

The Company has determined it is more prudent to defer initiation of the Preparation and Construction phase activities, awaiting a greater sense of

certainty to these critical path elements before committing to a more aggressive timeline for project development.

Q: What effect does FPL's revised development schedule have on expenditures that have been made up to this point?

A. FPL recognizes the full value of its Forging Reservation Agreement with Westinghouse Electric Corporation, although extended until March 2011, may not be fully transferable to the revised schedule. Negotiations to resolve the long term disposition of that agreement are expected to occur during 2010 and early 2011. Otherwise, FPL anticipates that site selection and preconstruction work and expenditures that have been completed to date will be usable whenever the construction phase of the project commences. In this respect, the PTN 6 & 7 Project Plan emphasizes preserving optionality at key decision points to ensure the Company extracts maximum value from the Project at all stages of development, and to ensure the best options are available to the Project team and the Company's customers throughout the development process. Development of the PTN 6 & 7 Project will proceed based on the results of future assessments and feasibility analyses.

Q. What mechanisms does the PTN 6 & 7 Project Management Team use to track the Project schedule?

A. As described in my March 2010 testimony, the PTN 6 & 7 Project Team monitors schedule performance on an ongoing basis using an Action Item List. This report replaces the previous 6-Week Look Ahead Report and keeps PTN 6 & 7 Project team members appraised of upcoming activities and allows them to

plan accordingly. More specifically, the Action Item List tracks upcoming activities by an activity number, and where possible, identifies a due date for each activity. Additionally, this report includes a section for notes related to the status of each activity.

In addition to this internal report, the Company requires major contractors to employ similar practices and to report contract progress to FPL on a monthly basis. For example, Bechtel, the Company's contractor for preparation for and prosecution of the COLA, provides a monthly status report summarizing the company's financial and technical performance on the contract over the most recent month. The report also identifies significant accomplishments over the previous period, as well as any noteworthy upcoming events on the Project.

Q. Did FPL's senior management review the PTN 6 & 7 schedule change?

A. Yes, they did. FPL senior management is kept apprised of progress and changes to the PTN 6 & 7 Project through reports presented to executive leaders on a roughly monthly basis.

Q. How is FPL's senior management involved in the PTN 6 & 7 Project?

A. FPL senior management provides regular review and approval of project activities, including project budgeting, cost forecasting, and schedule performance.

In addition to the periodic review and approval of project plans, there are a number of reporting processes through which senior executives are kept apprised of the planning and progress of the PTN 6 & 7 project. These

mechanisms include monthly status reports and meetings of the Risk Committee at significant decision points throughout the project's development.

Q. Does Concentric have any observations related to the process FPL has used to develop its revised schedule or the revised PTN 6 & 7 Project schedule?

A. Yes. FPL's decision to slow the development of the PTN 6 & 7 Project, and the process by which it came to this conclusion, is reasonable in the context of the information available to the Company at this time. As discussed above and in greater detail by FPL Witness Scroggs, this decision followed a methodical assessment of the pace at which the project was proceeding through the Licensing phase including the NRC and state licensing and permitting processes. Without a COLA review schedule from the NRC, and because an engineering, procurement, and construction ("EPC") or engineering and procurement ("EP") contract that adequately protects FPL's customers is not available to the Company at this time, committing development resources of the scale necessary to achieve commercial operation in the 2018-2020 timeframe would not be advisable. Thus, Concentric agrees with FPL's assessment that an elongated deployment schedule is the appropriate decision today.

Concentric has also noted that the Company remains flexible with respect to the PTN 6 & 7 development schedule. FPL is prepared to accelerate the rate of development of the PTN 6 & 7 Project, but will only consider doing so if economic, regulatory, and political conditions warrant such a change.

Q. Has the Florida PSC established any expectations pertaining to project cost updates and development timeline revisions for the PTN 6 & 7 Project?

A. Yes. In Docket 090009-EI, Commission Order No. PSC-09-0783-FOF-EI, the PSC established the expectation that FPL will file an update to PTN 6 & 7 project costs as part of the Company's feasibility analysis during the 2010 cost recovery proceeding.

Q. Did FPL revise its cost estimate for developing the PTN 6 & 7 Project?

A. Yes. FPL did revise its project cost expectations by conducting a detailed line-item analysis of plant construction requirements, with a specific focus on elements that have changed since the previous, non-binding cost estimate range was developed. As engineering has advanced on the PTN 6 & 7 Project, the costs of many plant features have become more defined, and therefore better understood. In addition, FPL has obtained greater certainty from Westinghouse and other vendors with regard to plant components required for successful execution of the PTN 6 & 7 Project.

At the time of FPL's initial cost estimate, there were many features of the PTN 6 & 7 Project design that were not yet well defined. More advanced plans for plant components have since been developed, including the water sources and construction pathways. The Company's analysis of more specific engineering requirements, plant component costs, and licensing expenses have informed a more refined estimate of expected costs for the PTN 6 & 7 Project.

Q. What is the updated estimate of project costs currently estimated for the PTN 6 & 7 Project?

A. The detailed line item estimation process conducted by FPL yields an "overnight" cost estimate of $4,991/kW for the PTN 6 & 7 Project in 2010 dollars. This overnight cost is what FPL would expect to pay if construction of the entire plant could occur overnight. The $4,991/kW overnight cost estimate includes $4,669/kW for standard development charges, plus $322/kW for associated transmission expenses. As such, it does not include escalation either in the cost of plant components or in labor during the construction period. Similarly, the overnight cost does not include the cost of financing during construction. Adjusted from 2007 to 2010, the previous cost estimate for the Project was $3,397/kW to $4,940/kW. The top end of this range is within approximately 1% of the estimate produced by FPL's detailed line item estimation process. Factoring in inflation and financing costs yields an all-in project cost. FPL currently estimates the all-in project costs for the PTN 6 & 7 Project will fall toward the higher end of the range of $12.8 billion to $18.7 billion.

The total cost and to-go cost estimates for PTN 6 & 7 are discussed in greater detail in the testimony of FPL Witness Scroggs.

Q. What level of contingency was included in the revised cost estimate?

A. Estimated costs for the PTN 6 & 7 Project include contingency of 15% in the revised cost estimate of $4,991/kW. Concentric believes that, while PTN 6 & 7 development continues with an appropriate level of caution, a contingency level

of 15% is somewhat low for a project of this magnitude and duration. However, FPL performs its PTN 6 & 7 feasibility analysis within a reasonable range that captures the cost uncertainty.

Q. In the context of your review of FPL's feasibility analysis, was the process used to revise the Company's cost estimate for PTN 6 & 7 a reasonable approach in your opinion?

A. Yes, it was. The PTN 6 & 7 Project management team conducted an assessment of expected costs for the PTN 6 & 7 Project using a line-item review. In addition, the Project team utilizes appropriate measures to ensure the Company's executive leadership is kept apprised of revisions to the Project's costs. At major decision points, and when material changes are made to the Project Plan, the PTN 6 & 7 Project team seeks approval of these changes from FPL senior management.

Q. Have you conducted a benchmarking analysis to assess the reasonableness of the revised cost estimate?

A. Yes. My assessment indicates the FPL's cost estimate range falls within a reasonable range of comparable projects currently under development in the United States.

Q. What was your approach to benchmarking these costs?

A. When comparing cost figures, it is important to ensure that figures are as directly comparable as possible. To ensure this was the case, I collected or derived overnight costs for other new nuclear projects currently under development in the US. As I discussed above, these overnight costs are independent of both

financing and escalation costs that are unique to each utility and that prevent different projects, which are scheduled to enter service on different dates, from being compared on an apples to apples basis.

The purpose of conducting this benchmark analysis is to determine whether there is significant divergence in cost between PTN 6 & 7 and similar projects. In order to identify the source of any differences, it is important to compare the PTN 6 & 7 Project to other development projects substantially similar in scale and design to ensure the comparison is meaningful. For this reason, I selected projects using the same plant design, the Westinghouse AP1000 reactor. Limiting the comparison to this specific technology design prevents the introduction of cost dispersion that would occur because of differences in highly engineered hardware components. The projects I used to benchmark the FPL cost estimate include:

- Duke Energy's William States Lee Nuclear Power Plant
- Georgia Power's Vogtle Nuclear Power Project
- Progress Energy's Levy County Project
- South Carolina Electric & Gas Company's and Santee Cooper's VC Summer Nuclear Plant

Overnight cost estimates for these plants were found in filings before state regulatory commissions. However, because there is very little publicly disclosed data regarding capital costs for the Vogtle project, I derived an overnight cost estimate based on the escalation rate and the spending curve used for the VC Summer project.

Each of the cost estimates collected was converted to constant 2010 dollars using the Handy-Whitman Total Nuclear Production Plant index. As can be seen on Exhibit JJR-7, these estimates range between approximately $3,700 to approximately $5,000 per kW of installed capacity. Total project costs, which include escalation and costs associated with financing the Project, range between $14.4 billion and $19.1 billion. Total project costs for each AP1000 project were derived using schedule and financing assumptions that are specific to the PTN 6 & 7 Project in order to provide figures that are comparable to one another.

The low end of these cost ranges represents the lead, domestic AP1000 projects (i.e., the VC Summer project and Georgia Power) while the upper end of this range is defined by the later AP1000 projects, namely FPL, Duke Energy, and Progress Energy. This range is consistent with the range produced for the PTN 6 & 7 Project.

Q. Please describe the process used by FPL to arrive at the budget for 2010-2011.

A. Each year, the PTN 6 & 7 Project budget is created using a bottom-up approach. Key project team functions or departments provide budget recommendations required to meet relevant resource, staffing, and procurement needs. The annual budgets are based on project activities that are planned for the next year and contain a contingency to accommodate uncertainty that remains with any development project comparable in size to the PTN 6 & 7 Project.

For 2010 and 2011, budget input from key project functional teams reflect recent decisions to defer certain engineering and preconstruction expenses. In addition,

the budget for 2010-2011 reflects assumptions concerning the licensing and permitting progress for the PTN 6 & 7 Project, including reasonable expectations with respect to the timing of hearings on the Underground Injection Control permits and other critical path elements.

Q. How was FPL senior management involved in the budget process?

A. FPL senior management is kept apprised of the budgeting process through periodic presentations made by PTN 6 & 7 Project managers. Senior management reviews and approves the annual budgets that are presented in executive briefings.

Q. How has the PTN 6 & 7 budget for 2010-2011 changed from what was expected prior to revisions to the project's development schedule?

A. FPL has deferred a number of planned expenses to beyond 2011 that the Company had originally expected to incur in 2010 and 2011. Certain engineering tasks that are predicated on the execution of an EPC or EP contract have been deferred until after 2011, as has engineering associated with transmission pathways. Additionally, FPL has increased certain licensing and permitting costs by approximately $7 million. These changes are necessary to produce additional groundwater modeling and address the protracted SCA review process.

Q. How does the company manage and track its budget performance?

A. As described in my March 2010 testimony, the PTN 6 & 7 Project Team uses at least nine (9) different reports to manage the PTN 6 & 7 Project's budget performance. These reports include an Action Item List monitored weekly, keeping team members apprised of upcoming activities and allowing them to

plan accordingly. On a monthly basis, the PTN 6 & 7 Project Management receives reports detailing budget variances by department and provides explanations of those variances. In addition, these reports include a description of all costs expended in the current month, in the year-to-date, and the total cumulative spending incurred on the project.

Project performance is communicated to FPL's senior management through executive briefings that occur approximately once per month. Executive briefings include a summary of the PTN 6 & 7 Project's financial performance, the status of project milestones, and any potential schedule changes or other challenges that warrant input and feedback from senior leadership.

Q. Is FPL senior management actively involved in tracking and reviewing the PTN 6 & 7 Project's progress?

A. Yes. Senior management continues to actively review the PTN 6 & 7 Project. The PTN 6 & 7 Project Team continues to publish quarterly Due Diligence Reports for the Company's senior executives. Further, the Project Management periodically, usually monthly, presents an informal status update to FPL's senior management.

Q. Does Concentric have any observations about the process by which FPL arrived at budget levels for 2010-2011 for PTN 6 & 7?

A. Yes, Concentric notes the process used to develop budgets for 2010 and 2011 are reasonable. FPL has determined the Project milestones to be pursued during this period with the intention of acquiring the requisite permits and approvals for

the project and preserving the option to begin construction of the new units if and when the economics are compelling.

Section 6: Description of Feasibility Analysis

Q. Please describe the new nuclear cost recovery mechanism in the state of Florida.

A. As the Commission is aware, there are two primary steps required for companies seeking cost recovery for new nuclear generation in Florida, (1) filing for a Determination of Need and (2) completing separate, annual cost recovery filings.

Q. What is the process for being granted a Determination of Need?

A. The process begins with a FL PSC siting process, known as an application for a Determination of Need that is governed by statute[10] and FL PSC rule[11]. This process provides the FL PSC with the exclusive jurisdiction to determine the need for the power plant on the basis of the need for additional generating capacity, fuel diversity, or adequate reasonable cost electricity. During this proceeding the utility is required to present, among other things, information regarding the proposed generating facility including a cost estimate, capacity, fuel type, and expected capacity factor. The utility must also present an analysis which demonstrates the need for the facility and illustrates that the proposed facility is the preferred alternative.

Q. Has FPL completed the Determination of Need process?

A. Yes. FPL filed for a Determination of Need for the EPU Project at PTN and PSL in docket number 070602-EI "Petition for determination of need for

expansion of Turkey Point and St. Lucie nuclear power plants." The final order granting the FPL petition for this determination of need was issued by the FL PSC on January 7, 2008.[12] The FL PSC also granted the FPL request for a need determination for PTN 6 & 7, issuing its final order in docket number 070650-EI "Petition to determine need for Turkey Point Nuclear Units 6 and 7 electrical power plant," on April 11, 2008.[13]

Q. What is required as part of the separate cost recovery filing?

A. Following the issuance of a Determination of Need, the utility is entitled to file a petition with the Commission for alternative cost recovery under Florida Administrative Rule 25-6.0423 (the "Nuclear Cost Recovery Rule"). The proceedings commenced by the utility's Nuclear Cost Recovery Rule petition occur on an annual basis. Two separate filings, which occur on March 1st and May 1st of each year, are required under the Nuclear Cost Recovery Rule. The March 1st filing includes a detailed listing of all of the utility's actually incurred costs as of December 31st of the prior year, a description of the work performed, and a listing of all contracts executed for the project. During each annual proceeding, the FL PSC must determine whether these expenditures were prudently incurred. Once the Commission has deemed that the expense has been prudently incurred, the cost is not subject to further review except for instances of fraud, perjury or intentional withholding of information. The May 1st filing includes a projection of the project's expenses during the remainder of the current year and the immediately following year, and a description of the work to be performed during this time period. This amount is then used to set rates under the Nuclear Cost Recovery Clause ("NCRC") during the upcoming

year. Finally, the May 1st filing must include a detailed feasibility analysis which demonstrates the continued economic viability of the facility relative to other capacity resources.

Q. Did the Commission previously review & approve FPL's prior NCRC-related expenditures?

A. Yes. FPL has filed for recovery under the NCRC on two prior occasions: first in 2008 and most recently in 2009. In the first instance, the FL PSC issued its final order in November 2008[14]. The latter proceeding was conducted as docket number 090009-EI, and the final order was issued in November 2009[15].

Q. What are the key economic indicators evaluated by FPL in its feasibility analysis of the EPU and PTN 6 & 7 Projects?

A. In order to assess the economic feasibility of the EPU and PTN 6 & 7 Projects, FPL evaluated a variety of economic and demographic factors including fuel cost forecasts, forecasts of environmental compliance costs for various types of emissions including greenhouse gases ("GHG"), load forecasts for FPL's service territory and expected costs of alternative generation technology with a particular focus on natural gas. Each of these elements of the Company's feasibility analysis is described in greater detail, below.

Q. What assumptions did FPL make with respect to GHG prices and policy initiatives surrounding GHGs?

A. The Company evaluated three (3) scenarios to gauge the sensitivity of the Project's economic performance to potential carbon mitigating policy

alternatives. These (3) scenarios are derived from an independent forecast provided to the Company in late 2009 from ICF International.

Q. Why does FPL evaluate multiple scenarios for the future price for GHG emissions?

A. The uncertainty surrounding the ultimate form of GHG policy creates a considerable range of cost implications for different generation technologies. Recent domestic and international carbon policy developments call into question the assumption that new generation resources will operate under a federal, binding GHG cap and trade program similar to the proposed Waxman-Markey bill. Similarly, Senate inaction on climate change and legislation in 2009, paired with the failure of the international community to agree on a plan to achieve meaningful near-term reductions in GHG emissions in Copenhagen in December, creates additional uncertainty as to the ultimate regulatory framework for GHG emissions. This uncertainty is the reason the Company has evaluated a number of price scenarios. The Company analysis demonstrates the sensitivity of both the EPU and PTN 6 & 7 Projects' feasibility in a range of GHG policy environments.

Q. Has new GHG legislation been proposed since 2009?

A. Yes, an alternative policy framework was recently discussed by Senators Kerry, Lieberman, and Graham. The policy objectives discussed in this framework are conceptually similar to the Senate's Lieberman-Warner bill, but the execution of this alternative policy framework would involve significant departures from earlier proposals. It is expected that the new framework will involve a sector-by-

sector approach to regulated GHG emissions. If introduced and passed by Congress, this legislation could potentially involve emissions rules tailored to the specific needs of different sectors of the economy. However, the ultimate goal of this legislation is to reduce emissions to approximately 80 percent below 2005 levels. In order to achieve this goal, the alternative legislation will seek to encourage investment in clean energy technologies, including both nuclear and fossil fuels, and energy efficiency.

As of the date of this testimony, specific implementation features of this legislative proposal with respect to carbon mitigation obligations have not be disclosed in detail. However, the underlying policy objective remains the significant reduction of GHG emissions.

Q. What expectations does FPL have with regard to future load within the Company's service territory?

A. As a result of the severe economic recession affecting the entire country for the last two years, FPL's forecast for load growth in its service territory has fallen. A table depicting the trends in the Company's demand forecast can be found in the testimony of FPL Witness Sim. While this revised load forecast is a significant reduction, it must be considered in the full context of the period of time during which potential demand is being evaluated. Lower forecasted demand growth does not imply the need for new baseload generation resources will cease to exist. FPL's peak load is still forecasted to increase substantially, but at lower growth rates than in previous forecasts. In addition, even absent new load

growth, new baseload generating capacity could still be needed on the basis of fuel savings, lower emissions or increased fuel diversity.

Q. Has FPL considered the comparative economic performance of generation technologies other than nuclear power?

A. FPL's 2008 petition for a Certification of Need included a comparison to an Integrated Gasification Combined Cycle ("IGCC") plant. However, that comparison was discontinued due to increased costs and concerns regarding the viability for IGCC technology.

Instead, FPL evaluated the economic potential of an advanced natural gas combined-cycle ("NGCC") facility as an alternative source of generation for both the PTN 6 & 7 Project and the EPU Project. FPL is currently constructing advanced NGCC units for its system, and plans to construct additional units of this technology.

Both nuclear and NGCC technologies were evaluated with updated assumptions related to penetration of renewable energy and energy efficiency to ensure that the feasibility analysis assessed a meaningful generation alternative after first accounting for other projected increased contributions from other resource options.

Q. What assumptions has FPL made in its feasibility analysis with respect to demand side management ("DSM") and energy efficiency ("EE")?

A. In late December 2009, the FL PSC established new DSM goals for 2010 through 2019 (Order No. PSC-09-0855-FOF-EG). These goals address annual

summer and winter demand reductions, as well as energy consumption reductions for each year in the 10-year period. In its analysis of the feasibility of the EPU and PTN 6 & 7 Projects, FPL assumed in its planning models these DSM goals are fully met in each year. In addition, FPL's load forecast accounts for the projected incremental impacts of federal appliance efficiency and lighting standards.

FPL's feasibility analysis indicates that without the additional capacity from the EPU Project, if the Company is able to achieve these EE & DSM targets and the federal appliance efficiency and lighting standards achieve their projected reductions, there will be no need for incremental baseload power until 2021. However, even with the new capacity from the EPU Project, there will be a need for additional resources in 2022 in order to maintain system reliability.

Q. Has FPL made any changes to its approach to the feasibility analysis it has conducted for 2010?

A. In addition to the use of To-Go costs which is discussed in Sections 4 and 5 above, the Company has made two noteworthy changes to its feasibility methodology for its 2010 analysis. The first departure from the 2009 analysis involved the discount rate used to derive the net present value of investment required to construct the new nuclear capacity. In FPL's most recent rate case, the PSC set the Company's allowable Return on Equity (ROE) at 10.00%. This has the effect of lowering the financing cost of major capital investments and also lowering the total system costs from the Projects due to the associated lower discount rate. FPL has evaluated the feasibility of the EPU and PTN 6 & 7

Projects using a higher equity cost of 11.75% which is consistent with the ROE used in the Need Filing for these projects. This was done to evaluate the economic feasibility of the projects under a range of potential ROEs.

Second, FPL has changed the way it models nuclear fuel expenses. Historically, FPL acquired nuclear fuel under a lease from FPL Fuels, Inc, an FPL subsidiary. This lease agreement was terminated in March 2010 in compliance with FPL's most recent rate case decision. For 2010 the Company has begun to model the return on the "net investment value" of nuclear fuel included in rate base. This change diminishes the cost advantage of nuclear fuel relative to other commodities.

Q. What are the results of the company's economic analysis of advanced NGCC capacity alternatives to PTN 6 & 7 and the EPU Project?

A. As described in my March 2010 testimony, natural gas prices have fallen from recent highs observed in 2008, improving the forecasted economic performance of combined cycle gas facilities. However, these prices have been extremely volatile over the past decade, rendering the prospect of accurately predicting future prices extremely challenging.

As was done in 2009, in order to compare the likely costs of nuclear and natural gas-fueled capacity, FPL calculated a "break-even" cost for the PTN 6 & 7 Project. This involves calculating the maximum net present value of overnight construction costs nuclear could have, while still "breaking even" relative to a natural gas alternative.

Under all of the seven scenarios FPL evaluated, the derived break-even costs for the nuclear units remains lower than the estimated cost to develop, construct and operate the alternative NGCC baseload capacity project, indicating the PTN 6 & 7 Project remains the cost effective baseload generation option.

Evaluating the cost effectiveness of the EPU Project also remains consistent with the process used in 2009. To assess the EPU Project, FPL conducts a direct comparison of the economic performance of resource plans including the EPU Project to plans that do not. FPL's analysis, which is described in greater detail by FPL Witness Sim, has determined that the EPU Project remains cost effective in all seven scenarios.

Q. How have cost estimates for other available resources changed since 2007?

A. The expected capital cost of the natural gas alternative has evolved over the past several years, and will continue to change over time. While the estimate fell between 2008 and 2009, it has risen over the past year, reflecting the power generation industry's recent experience with capital costs. The combined cycle capital cost estimate is discussed at greater length below, and in the testimony and exhibits of FPL Witness Sim.

Q. Please describe how FPL developed its long range natural gas price forecast.

A. FPL's natural gas price forecast is comprised of several phases. The first phase, which contains data for the current year and the next two years, is based on forward price curves for gas at the Henry Hub, a gas trading hub commonly used for natural gas commodity studies. The next phase, lasting until 2025, makes use

of a natural gas price forecast developed by PIRA Energy Group, an independent consulting firm FPL has engaged for this purpose. For the long-range period, from 2025 through 2061, FPL escalates the gas price at the rate used by the Energy Information Agency in its Annual Energy Outlook.

Because gas has to be transported to FPL's service territory, the forecast price of gas at the Henry Hub is not appropriate for use in FPL's planning analyses. Consequently, FPL adds transportation costs, also called the "basis differential", to these prices to arrive at the fuel costs used in the Company's feasibility studies.

Q. What do you observe as current investor expectations for the natural gas market?

A. Just as natural gas prices have fallen over the past two years, futures contracts have shown a similar trend. Expectations for the next decade are approximately 20% below levels observed just two years ago.

Q. How does this compare to the Company's natural gas price forecast?

A. FPL's gas price forecast reflects the current market expectations and includes three different price scenarios. The medium forecast indicates prices will remain lower than their 2008 peak, but will begin to rise at a modest pace in future years.

Q. Is shale gas expected to have any impact on future gas prices?

A. Yes. Shale gas holds the potential to significantly alter the market for natural gas in the United States. Industry experts have suggested that unconventional gas resources such as shale formations could triple in production by 2018. Similarly, the Energy Information Administration has stated natural gas imports will shrink

from 13% of consumption in 2008 to just 2% by 2030. Shale gas is cited as a primary reason for this decline in projected natural gas imports.

The increase in the domestic supply of natural gas from shale and other unconventional resources could provide stability to the lower commodity prices currently being observed. However, while shale gas is expected to raise domestic production of natural gas, the magnitudes of this shift and the persistence of its insulating effect on natural gas commodity prices remain highly uncertain. In recent years other supply resources have become available, but each has been followed by significant price increases. For example, substantial imports from Canada came on-line in 1998, new supplies in the Gulf of Mexico became available in 2002-3, and in 2005 new gas resources were discovered in the Rocky Mountains. Despite great promise associated with each of these sources of supply, production lagged below early optimistic expectations. Clearly, the natural gas market has demonstrated significant volatility. Projecting the future price impact of shale gas resources remains extremely difficult and is likely to remain so for the next decade until the true costs and potential of recovering unconventional gas becomes better understood.

Q. With these considerations in mind, how appropriate are the trends that FPL has incorporated in its feasibility analyses?

A. The three different natural gas price scenarios FPL has incorporated into its feasibility analysis, including a lower gas price scenario, adequately evaluate the feasibility of nuclear power in a low-gas cost environment. The range of

possibilities explored by the Company in its analysis is reasonable and appropriate.

Q. What assumptions has FPL made with respect to the cost of building baseload generation facilities that are alternatives to nuclear power, such as combined cycle natural gas facilities?

A. As discussed above, FPL has modeled an advanced combined cycle facility as a natural gas powered baseload alternative to nuclear power. The specific technology used in the Company's feasibility analysis is an H-class combined cycle gas turbine using a Siemens design. The average full-load heat rate of this technology is approximately 6,500 btu/kW-hr. The capital cost to build this alternative is approximately $697/kW in 2010 dollars. This cost does not include the cost of associated transmission infrastructure.

Q. Are the assumptions FPL has made regarding the natural gas baseload alternative reasonable?

A. The assumptions FPL has used to model the Siemens H class gas turbine units reflect the lower end of the range of values observed throughout the industry. However, the use of this figure in FPL's feasibility analysis is appropriate for a conservative feasibility analysis. The lower capital cost for a gas facility would only enhance the economics of the NGCC alternative. The Company's assumptions are a reasonable and appropriate approximation of a generic advanced gas unit.

Q. What other feasibility considerations has FPL considered with respect to the EPU and PTN 6 & 7 Projects?

A. FPL continues to carefully monitor the permitting & licensing processes that are currently underway for both projects.

With respect to the PTN 6 & 7 Project, a considerable amount of the work in 2010 and 2011 will be dedicated to acquiring the permits and approvals required to continue development of the Project. Similarly, work will continue in 2010 on completing the three LARs that remain to be submitted to the NRC.

In addition, the Company continues to monitor the availability of labor and material resources required to construct the Projects. FPL does not currently expect the market for raw materials to be constrained at the time construction of the Project commences. The Company continues to monitor the market for long lead components, including ultra-heavy forgings, that for PTN 6 & 7 must be fabricated at a particular facility owned and operated by Japan Steel Works.

The input representing the greatest risk for the Company is skilled labor trained to construct advanced nuclear facilities. At this time, however, FPL does not anticipate any major problems with respect to procurement of raw materials, long lead components, or skilled workers. Nevertheless, with development in the nuclear industry gaining steam, competition for these resources will increase.

Q. Does Concentric have any specific observations related to FPL's feasibility analysis?

A. Yes, we have noted in FPL's natural gas price forecast, FPL relies on forward price contracts from a single-day to develop a forecast of prices in the next two years. In order to mitigate acute market distortions, Concentric recommends that the Company use an average of the future price curves for no less than twenty (20) consecutive trading days to develop near-term natural gas forecasts for future feasibility analyses. This will help eliminate any short-term market aberrations. Concentric has reviewed the impact of this change on the Company's most recent natural gas price forecast and believes this is not likely to have a material impact on the current forecast. Based upon Concentric's review of the Company's analysis, using a 20-day average in the Company's current forecast produces near-term natural gas prices that are approximately 2-3% higher than the Company's current near-term forecast of natural gas prices. In 2010, this would have the effect of increasing the cost effectiveness of the Projects. Additionally, the earliest a NGCC alternative is expected to come online is 2022 & 2023. Thus the first two years of the natural gas price forecast are unlikely to have an effect on the analysis. Nonetheless, Concentric believes the Company should evaluate this approach on a going-forward basis to mitigate the risk of a short-term market trend impacting the overall natural gas price forecast.

Q. What benefits can FPL residents expect from continuing development of the EPU and PTN 6 & 7 Projects?

A. As I discussed in my March 2010 testimony, nuclear power has been a part of the Florida energy mix for over thirty years. Throughout the last three decades, FPL's nuclear units have reliably produced emissions-free energy, substantially decreased total fuel costs, enhanced the diversity of fuels used to generate power and insulated the Company's customers from commodity price spikes.

Continuing with development of the EPU Project and PTN 6 & 7 preserves the potential to extend these benefits to FPL customers with a greater contribution of nuclear power in the generation mix. Foreclosing on the option to continue development of the Projects could eliminate the potential to create these benefits for the foreseeable future.

Q. Is Florida's NCRC important to the feasibility of the EPU and PTN 6 & 7 Projects?

A. Yes. The NCRC is critical to the success of FPL's nuclear development projects. The NCRC is designed specifically to help mitigate the additional business and financial risks that are associated with an investment in nuclear generation.

In addition to helping mitigate significant risks borne by project sponsors, the NCRC provides an opportunity for the company to avoid the expense of capitalized financing costs. There have been instances during the past several years wherein nuclear development projects have been put on hold indefinitely due to a lack of certainty regarding cost recovery.

Section 7: Conclusion

Q. Please describe your conclusions related to the EPU Project.

A. Concentric's specific observations related to the EPU Project are discussed in Sections 2 and 4 above.

In 2010, the EPU Project has revised its cost estimates and more closely aligned this estimate with the EPU Project Risk Register. Following the completion of the High Bridge study, this analysis will also include a robust, statistically defined allowance for scope not defined.

The EPU Project is continuing to improve both its project instructions and compliance with those instructions. This is due to a greater commitment to reviewing the project instructions and has resulted in several revisions in late 2009 and 2010. This process includes greater commitment to reporting and tracking scope changes and forecast variations per the process outlined in EPPI-300 and developing a more robust cost estimate that is more closely aligned with EPU Project's risk register. Nonetheless, additional opportunities to improve the EPU Project's controls exist and the new EPU project management is taking reasonable steps to address those opportunities.

Q. Please describe your conclusions related to the PTN 6 & 7 Project

A. Overall, the PTN 6 & 7 Project has maintained its methodic, stepwise approach to managing the deployment of two new nuclear units. This includes appropriately evaluating the PTN 6 & 7 reports and processes in response to Concentric's observations in 2009 and March 2010. Similarly, the PTN 6 & 7

has used reasonable processes to produce a revised project schedule and updated cost estimate. In addition, the updated PTN 6 &7 Project Plan continues to emphasize maximizing the optionality of the PTN 6 & 7 and avoiding prematurely committing customer funds to the deployment of PTN 6 & 7.

Q. Does this conclude your testimony?

A. Yes it does.

[1] Oberlender, 3
[2] *The Practice Standard for Scheduling.* Project Management Institute, 2007, 43.
[3] Described in greater detail later in my testimony
[4] Oberlender, 47
[5] Oberlender, 79
[6] Oberlender, 80
[7] "FPL Nuclear Projects Department Instructions 304 – Estimate Preparation," 4.7.6, pg 7.
[8] Oberlender, 144
[9] FPL New Nuclear Projects, Project Plan for Turkey Point Units 6 & 7, 15 March 2010, Rev 1.
[10] F.S. 403.519, Exclusive forum for determination of need
[11] Rules 25-22.080 – 22.082, Florida Administrative Code, Electrical Power Permitting Proceedings
[12] Order Number: PSC-08-0021-FOF-EI
[13] Order Number: PSC-08-0237-FOF-EI
[14] In re Nuclear Cost Recovery Clause, Docket No. 080009-EI, Order No. PSC-08-0749-FOF-EI (Nov. 12, 2008).
[15] In re Nuclear Cost Recovery Clause, Docket No. 090009-EI, Order No. PSC-09-0783-FOF-EI (Nov. 19, 2009)

2009 Concentric Observations

Concentric Observation	FPL Response
EPU Project: Concentric recommends the EPU Project undertake a sustained effort in 2009 to ensure that key positions are filled in a timely fashion. Our recommended means of moving forward with this effort is to produce a monthly report that indicates which positions have been vacant for more than 30 days and why they remain vacant.	EPU Project Instruction EPPI-110, EPU Project Expectations and Conduct of Business, has been revised to add staffing vacancies and the reasons for staffing vacancies to the Monthly Report template.
EPU Project: Concentric has observed that a number of large infrastructure projects are slated to be constructed in the Southeastern U.S. over the next decade. Thus, the available labor resources necessary to complete the project may be constrained by the increased demand for these resources. As a result, the EPU Project should consider developing a workforce contingency plan to address any labor shortfalls that might be experienced by the EPU Project.	Availability of labor resources has been added to the risk register. Current mitigation strategy is to monitor and take further actions if an adverse trend develops.
EPU Project: Concentric notes the upcoming prudence reviews before the FPSC would be facilitated by the use of "Key Decision Memoranda" which include a discussion of the information that was known at the time of the key project decisions (i.e., where the magnitude of the decision is above 1% of the project costs), what decision was made and the basis for that decision. This process would allow the EPU Project and third parties to review past decisions more easily and to understand both the strategy and trade-offs that were considered at the time of the decision.	Meeting Presentation packages typically provide key management decisions and basis for the decisions. Recently, several key decisions and the basis for those decisions have been documented in white papers (e.g., exciter rewinds, condenser replacement, moisture carryover, and steam pressure) and some issues have been reviewed by the Technical Challenge Review Board in accordance with the EPU Governance and Oversight Protocol.
EPU Project: Concentric is recommending FPL provide additional detail in the Monthly Budget Variance Reports published by the EPU Project. Currently, this report identifies the line items which varied positively or negatively relative to the budget, but provides no explanation of the cause of the variance.	EPU Project Instruction EPPI-150 has been revised to include variance reporting. The content of the monthly budget variance reports has been revised to include more detailed explanations of variances.

Concentric Observation	FPL Response
EPU Project: Concentric is recommending the EPU Project develop a clear process for ensuring that the EPU Project's vendors with similar scopes of work at the Company's regulated and NextEra's unregulated plants appropriately bill each site for the work being performed. The need for this separation should be communicated to relevant project vendors on an annual basis through a written notice, and copies of this notice should be maintained for later reference. Concentric has not found evidence that this is a problem that has not been captured by the Company's existing overlapping processes. Concentric is making this recommendation to make certain that as spending with these vendors increases, the costs associated with each site are kept separate.	EPU ISC sent letters to Westinghouse, Siemens, Shaw and Bechtel on 8/31/2009. A project action item has been created for EPU ISC to send such letters annually.
PTN 6 & 7 Project: Concentric has observed that a large number of infrastructure construction projects in the Southeastern U.S. are expected to enter construction within the next decade. As a result the region's labor resources could be constrained by the increase in demand for these resources. The PTN 6 & 7 Project should consider develop a workforce contingency plan to address this possible shortage. It is important to note, however, that the PTN 6 & 7 Project is still several years from entering the construction phase of the project, and adequate time exists to plan for such a scenario.	This is an area of ongoing monitoring, including continued involvement in industry forums. Project considers this an activity for future planning.
PTN 6 & 7 Project: Concentric also notes that upcoming prudence reviews before the FPSC would be facilitated by the use of "Key Decision Memoranda" to memorialize critical project decisions (i.e., where the magnitude of the decision is above 1% of the project costs). These memoranda would include a discussion of the information that was known at the time of the decision, what decision was made and the basis for that decision, and would allow management and third parties to quickly review previous decision-making processes. The PTN 6 & 7 Project completed a similar process for certain major decisions such as the selection of the Turkey Point site and the AP 1000 reactor. A more concise memorandum (i.e., 1-2 pages) could be used to document lesser key project decisions.	This approach has been instituted; however not with a specific threshold.

Concentric Observation	FPL Response
PTN 6 & 7 Project: Finally, Concentric is recommending the PTN 6 & 7 Project Instruction "Quality Assurance for New Nuclear Projects - Project Instructions" ("QI-2-NNP-001") be updated on a scheduled (i.e., annual) basis. This document has been described by members of the PTN 6 & 7 Project team as the "bridge document" which defines which Nuclear Division policies and procedures are applicable to the PTN 6 & 7 Project. Thus it is necessary to make certain that this bridge document is routinely updated to reflect the dynamic nature of the PTN 6 & 7 Project. The PTN 6 & 7 Project has indicated it plans to assign an "owner" for each NNP-PI. These owners will be responsible for reviewing each NNP-PI on an annual basis and updating them as necessary.	Project Instructions (QI-2-NNP-001) will be updated on a scheduled biennial basis consistent with the operating plants. Based on project needs, it may be reviewed for necessary changes on a more periodic basis. The PTN 6 & 7 Project assigned an owner for each NNP-PI. The owner will be responsible for reviewing each NNP-PI on a biennial basis and ensuring each NNP-PI is updated as necessary.
PTN 6 & 7 Project: Developing a process that documents why a change in a contract price is or is not a result of a change in the original contract scope	The New Nuclear Project Business Unit determines whether a change is a price or scope change based on input from the vendor and evaluation of the ongoing requirements. This process has been in place since the beginning of the PTN 6&7 project and is completed for every change order on a case by case basis, based on the nature of the vendor contract and the task or tasks in question. Procurement Policy Manual section titled "Contract Change Orders" dated July 1, 2005 guides the process used.
PTN 6 & 7 Project: Developing an annual review process to make sure Bechtel is billing the PTN 6 & 7 Project for the use of subcontractors in accordance with the terms and conditions of its contract	Project Controls has prepared a white paper supporting the decision not requiring an annual Bechtel audit; maintaining the option to audit as provided in the contract.

March 2010 Concentric Observations

Concentric Observation	FPL Response
EPU Project: The initial cost estimate used to develop this budget has likely gone stale. This initial scoping estimate was completed in 2007 and represented an estimate of the EPU Projects' scope of plant modifications. Since that time, the magnitude of these changes has consistently increased. Thus, it is likely necessary for the Company to revisit this cost estimate.	The EPU project has developed a current cost forecast range that is included in the May 2010 Testimony of FPL Witness Terry O. Jones. The cost forecast range includes costs associated with added scope, risk items, and unidentified scope. In addition, FPL has contracted a third party estimating expert to develop a detailed cost estimate for known PTN-3 scope that is expected to be completed in the second quarter of 2010.
EPU Project: Concentric has also noted an increasing focus on transparency in reporting both within the project team and to the Company's senior management. Early in 2009, the impact of project decisions on the EPU Projects' budgets was not clearly defined in the projects' documented report mechanisms. Since the summer of 2009, the quantity and quality of this information has notably improved. Concentric believes further effort should be expended to make sure project team members clearly communicate throughout the EPU organization. This improvement in communication should include the projects' plans for addressing current project challenges such as the availability of vendor and Company resources.	The EPU project team ensures a high level of transparency through a series of daily, weekly, and monthly reports as listed in Exhibit TOJ-4 of FPL Witness Jones' March 2010 Testimony.
EPU Project: Concentric has further noted that the EPU Projects have struggled to obtain the resources necessary to complete the LARs during 2009. This has resulted in resource sharing between projects and a decision to prioritize certain LARs. This concern appears to have affected both the EPU Project staff and the EPU Projects' vendors. Concentric is aware that the availability of capable, qualified individuals is a general concern that is facing the entire nuclear industry. In light of these constraints, FPL's management has responded reasonably to these challenges by prioritizing activities and allocating additional resources to the project. Concentric believes the EPU Project Team should include additional staffing information in their standard reports to FPL's senior management. This information might include further highlighting this issue with a discussion of current staffing levels relative to staffing plans.	The EPU Project Team identifies staffing limitations in the LAR challenges matrix and dashboards included in FPL's senior management presentations. The EPU Project Team continues to assess resource needs and dynamically manage resources to support the EPU LAR project schedules. This will continue through the summer of 2010 when the remaining EPU LARs (PTN and PSL2) will be substantially completed. Once the LARs are substantially completed, the EPU Project Team will reduce LAR staffing levels by reassigning or releasing some staff consistent with the LAR staffing plans. In addition, the project now includes the status of vacant positions in the CNO presentation.

Concentric Observation	FPL Response
EPU Project: Concentric believes one further enhancement related to the EPU Projects' procurement procedures could be made in 2010. Concentric believes a need may exist for a formal guideline related to procurements in excess of $5 million. This guideline would state that any bids received in response to an RFP, in excess of $5 million, are reviewed by the ISC roughly contemporaneously and with at least two people participating in the review process. Similarly, when a material delay is granted to one RFP respondent, all bidders should be notified of an opportunity to further revise their bid. Concentric has not observed, and does not believe there have been, any instances of impropriety in the EPU Projects' RFP process in 2009 or prior years. This observation is made solely with the intent to prevent future challenges or concerns before they occur.	Following receipt of this Concentric recommendation, FPL discussed the recommendation with Concentric to understand in greater depth what potential improprieties were being addressed and how the recommended changes would serve to prevent or reduce the probability of occurrence. Based on these reviews and discussions, FPL concluded that its current practices adequately address the issue raised in the Concentric recommendation. Weekly ISC request for proposal (RFP) and award review meetings currently provides for multiple party involvements including ISC senior leadership along with applicable procurement agents and managers for all RFPs and procurement decisions greater than $2 million. In addition, a guideline will be specifically documented providing, again consistent with current practice, for the contemporaneous opening of bids to occur following the earlier of the bid due date or receipt of all bids. That current practice is effective has been demonstrated by repeated successful internal audit results assuring compliance.
EPU Project: Concentric noted a potential need to reinforce the QA/QC department with an individual with design engineering experience. It is Concentric's understanding that the EPU Project Team is currently solely responsible for reviewing design engineering work. It was further noted during our interviews that FPL's design engineering capabilities have not historically encountered significant quality deficiencies and thus this control and review process may be adequate. However, a lack of expertise within the QA/QC department was identified to Concentric by members of the EPU Project Team as an area for potential improvement.	FPL typically uses engineering personnel to perform the owner's review of design engineering work prepared by vendors under the vendors QA program. FPL relies on its QA organization to perform audits and surveillances of vendors to ensure they are in compliance with their QA programs.
EPU Project: Concentric noted that a potential challenge to the EPU Projects implementation may exist with the turbine rotors being procured from Siemens. The manufacturing process of these turbines is being adequately monitored by the Company's QA/QC department, but additional management oversight may be warranted in the future.	FPL has established a series of witness points for Siemens manufacturing activities. In addition, FPL is currently developing an action plan to perform routine surveillances of the Siemens Budapest manufacturing facility.

Concentric Observation	FPL Response
PTN 6 & 7: Concentric did note a need to revisit the PTN 6 & 7 Monthly Dashboard Report and specifically the Key Performance Indicators ("KPIs") which are presented in this report. These KPIs are mainly focused on metrics that are relevant to the engineering, procurement and construction of the proposed PTN 6 & 7 facility. Thus these KPIs provide little insight into the current pace and performance of the project. The PTN 6 & 7 Project should consider revising these KPIs to focus on metrics which are relevant to the licensing and permitting activities.	This recommendation is under consideration at this time.
PTN 6 & 7: The PTN 6 & 7 Project Team should revisit the KPIs presented in the Monthly Dashboard Reports and discussed earlier in this section of my testimony to make certain the KPIs remain relevant to the current scope of development.	This recommendation is under consideration at this time.
PTN 6 & 7: Concentric believes that while the ISC and invoice review and approval processes functioned appropriately in 2009, opportunities to further strengthen these controls for future procurements may exist. These enhancements could include a formal guideline for procurements in excess of $5 million that any such bids received in response to an RFP are reviewed by the ISC roughly contemporaneously and with at least two people participating in the review process. Similarly, when a material delay is granted to one RFP respondent, all bidders should be notified of an opportunity to further revise their bid. Concentric has not observed, and does not believe there have been, any instances of impropriety in the PTN 6 & 7 RFP process in 2009 or prior years. This observation is made solely with the intent to prevent future challenges or concerns before they occur.	Following receipt of this Concentric recommendation, FPL discussed the recommendation with Concentric to understand in greater depth what potential improprieties were being addressed and how the recommended changes would serve to prevent or reduce the probability of occurrence. Based on these reviews and discussions, FPL concluded that its current practices adequately address the issue raised in the Concentric recommendation. Weekly ISC request for proposal (RFP) and award review meetings currently provides for multiple party involvements including ISC senior leadership along with applicable procurement agents and managers for all RFPs and procurement decisions greater than $2 million. In addition, a guideline will be specifically documented providing, again consistent with current practice, for the contemporaneous opening of bids to occur following the earlier of the bid due date or receipt of all bids. That current practice is effective has been demonstrated by repeated successful internal audit results assuring compliance.

Concentric Observation	FPL Response
PTN 6 &7 Project: Concentric has also observed potential enhancements to the invoice review and approval process. Again, Concentric has not observed instances where a deficiency exists in the current system, but believes further enhancements are warranted to ensure continued adequacy of this control. One manner of addressing this observation might include developing a simple spreadsheet to track invoice credits which are expected from project vendors. This centralized tracking mechanism would allow for a more robust review of potential invoice credits and assist the Business Manager's staff in making certain that these invoice credits are received on time and as expected.	Project Controls has created a spreadsheet to track credits pending from invoices processed through E&C and Development.
C **PTN 6 & 7:** concentric noted two opportunities to improve the transparency of the Invoice Review and Approval process. Examples of how to improve this transparency include modifying the existing Invoice Review/Approval Checklist to include the magnitude of each individual's approval authority. This will create a more transparent audit trail and is consistent with the PTN 6 & 7 Project's past practices. Additionally, FPL could modify the Invoice Review/Approval Checklist to eliminate the column whereby the technical representatives check a box to concur with the invoice. The review process could then be modified such that the persons responsible for the invoice review do not execute the Invoice Review/Approval Checklist unless they concur with the invoice.	Project Controls has implemented the two improvements. The invoice Review/Approval Checklist now includes the approver's authority level; not each individual reviewer's authority level. Additionally, the column (box) to check for concurrence with the invoice has been eliminated.
PTN 6 & 7: Concentric believes it necessary to make certain that the PTN 6 & 7 Project is reviewed by the RiskCom no less frequently than annually. If used appropriately, this peer review process can provide invaluable guidance from FPL's wide breadth and depth of subject matter experts. In addition, this process can assist the PTN 6 & 7 Project management with identifying potential future project risks.	RiskCom meetings are scheduled based on need. It is expected that this should occur at least annually; however, specific project activities may warrant more or less frequent reviews.
PTN 6 & 7: Concentric believes it would be useful for each department providing support to the PTN 6 & 7 Project to consider maintaining its own list of project risks. Concentric understands that the current process calls for each supporting department to meet with the PTN 6 & 7 Project management to describe and discuss project risk. A consolidated risk tracker is then maintained by the PTN 6 & 7 Project management. Concentric believes that by having the supporting departments develop and maintain their own risk trackers which provide input to the master project risk tracker these supporting departments are more likely to maintain a sense of ownership of each risk.	This recommendation is under consideration at this time. The Project is instituting a consolidated Risk Assessment process. As this process evolves, business unit or project team risk assessments may be appropriate.

Project	COD	Overnight Costs ($2010/kW)	Projected Total Project Cost ($nominal, billions)	Notes
Scana - VC Summer	2016, 2019	$3,720	$14.1	
Georgia Power - Vogtle	2016, 2017	$3,816	$14.5	*Includes transmission*
Progress Energy - Levy County	2016, 2018	$4,549	$17.3	
Duke Energy - WS Lee	2021, 2023	$4,941	$18.8	*Presumed to include transmission*
Florida Power & Light - Turkey Point	2022, 2023	$4,940	$18.7	*Figure includes full owner's scope and cost, and includes transmission costs*

Docket No. 100009-EI
Review of New Nuclear Cost Estimates
Exhibit JJR – 8, Page 1 of 1