BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 100009-EI
FLORIDA POWER & LIGHT COMPANY

MARCH 1, 2010
(REVISED)

IN RE: NUCLEAR POWER PLANT COST RECOVERY
FOR THE YEAR ENDING
DECEMBER 2009

TESTIMONY & EXHIBITS OF:

STEVEN D. SCROGGS

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FLORIDA POWER & LIGHT COMPANY

DIRECT TESTIMONY OF STEVEN D. SCROGGS

DOCKET NO. 100009-EI

MARCH 1, 2010

Q. Please state your name and business address.

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

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

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

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

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

Q. Please describe your educational background and professional experience.

A. I graduated from the University of Missouri – Columbia in 1984 with a Bachelor of Science Degree in Mechanical Engineering. From 1984 until 1994, I served in the United States Navy as a Nuclear Submarine Officer. From 1994 to 1996, I was a research associate at The Pennsylvania State University, where I earned a Masters Degree in Mechanical Engineering. I provided consulting and management services to the regulated and unregulated power generation industry through a number of positions until 2003, when I joined FPL as Manager, Resource Assessment and Planning.

Q. Are you sponsoring any exhibits in this proceeding?

A. Yes, I am sponsoring the following exhibits:

- SDS-1, consisting of Appendix II containing schedules T-1 through T-7 covering the 2009 actual period for Turkey Point 6 & 7 Pre-Construction costs. Page 2 of Appendix II contains a table of contents listing the T schedules sponsored and co-sponsored by FPL Witness Powers and by me, respectively.
- SDS-2, consisting of Appendix III containing schedules T-1 through T-7 covering the 2009 actual period for Turkey Point 6 & 7 Site Selection Costs. Page 2 of Appendix III contains a table of contents listing the T schedules sponsored and co-sponsored by FPL Witness Powers and by me, respectively.
- SDS-3, consisting of a table providing a listing of all licenses, permits and approvals FPL is preparing to support the Turkey Point 6 & 7 project.

- SDS-4, consisting of a comprehensive list of procedures and work instructions that govern the internal controls processes and expectations.
- SDS-5, providing a list describing various project reports, their periodicity and target audience.
- SDS-6, providing a comprehensive list of project instructions and forms.
- SDS-7, providing detailed tables of the 2009 expenditures.
- SDS-8, providing a discussion of the decision process behind the withdrawal of the Limited Work Authorization (LWA) request.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to describe the activities involved in the Turkey Point 6 & 7 project throughout 2009. Specifically, my testimony will describe the deliberate, stepwise process FPL is employing to create an option to provide new nuclear generation for our customers and how that process is being managed and controlled to ensure prudent expenditures and the best outcome. I will include a discussion of project internal controls and how those controls, supported by internal and external oversight, provide for diligent and professional project execution. I will discuss key issues the project has faced in 2009 and how those issues were evaluated and appropriate actions determined. Further, my testimony will discuss the actual expenditures made related to the project and compare those expenditures to the actual/estimated values provided in May 2009. Collectively, my testimony will provide the information necessary to demonstrate that FPL's management decisions with respect to the Turkey Point 6 & 7 project are the product of

properly qualified, well-informed FPL management following appropriate procedures and internal controls, and the costs incurred for the project are reasonable and prudently incurred.

Q. Please describe how your testimony is organized.

A. My testimony includes the following sections:

1. High Level Project Summary
2. Project Management Internal Controls
3. Procurement Processes and Controls
4. Internal/External Audits and Reviews
5. Project Activities and Results
6. Key Management Decisions
7. 2009 Preconstruction Costs
8. 2009 Site Selection Costs
9. Conclusion

Q. Please summarize your testimony.

A. My testimony describes the activities accomplished in 2009, a formative year for the project. During the year the project completed the studies and analyses supporting applications to federal, state and local entities for required licenses, certifications and permits to construct and operate the project. These applications describe the project in technical and environmental aspects and will be the focus of extensive agency review and deliberation over the next several years. Additionally, 2009 was a year of negotiation, analysis and review to determine how and when to take additional steps beyond the

licensing activity in preparation for project construction. My testimony demonstrates that the Turkey Point 6 & 7 project struck an appropriate balance to maintain progress towards the necessary approvals, creating the option for new nuclear generation, but has managed commitments in recognition of developing regulatory schedules and economic factors. Additionally, my testimony demonstrates that the project management process is being conducted in a well-informed, transparent and organized manner enabling executive oversight and facilitating reviews by internal and external parties. This disciplined application of process by well-qualified FPL employees and contractors results in prudent decisions with respect to project activities and expenditures.

HIGH LEVEL PROJECT SUMMARY

Q. Please summarize the Turkey Point 6 & 7 project in 2009.

A. During 2009, the Turkey Point 6 & 7 Project progressed on schedule with licensing and permitting activities, and maintained costs well within budget. As a result of commercial negotiations and engineering planning analysis, several key decisions were made that accepted an increase in risk to maintaining the current project construction schedule. These decisions included deferral of the Engineering and Procurement (EP) or Engineering, Procurement and Construction (EPC) contract, deferral of Long Lead material procurement and withdrawal of the Limited Work Authorization (LWA)

request. The project completed 2009 with total expenditures of $37.7 million dollars as compared to the May 1, 2009 filing projection of $45.6 million. Primarily, the variance is related to work scope deferred into the future. The specific variances and explanations are provided later in this testimony.

The primary activities (and majority of expenditures) in 2009 were related to finalizing the license and permit applications required to facilitate federal, state and local reviews of the project. All applications were filed June 30, 2009, with the exception of the application for the Underground Injection Control (UIC) Exploratory Well which was filed January 20, 2009. Both before and after submittal of all applications, FPL conducted a coordinated agency outreach and engagement effort to ensure the applications would be complete, sufficient and fully understood by the reviewing agencies. Additionally, FPL conducted extensive project education and interactive dialogue with community and governmental stakeholders throughout the year. These efforts took the form of bi-lateral and multi-party meetings, websites, customer correspondence, site tours and presentations to civic groups, governmental bodies and non-governmental organizations.

Along with the intensive licensing and permitting activity, FPL continued important development steps to obtain additional approvals, agreements and transactions to support the project. These include negotiations for: 1) the EP

or EPC agreement with Westinghouse/Shaw, 2) enabling federal legislation to support a land exchange with Everglades National Park, 3) commercial sources of fill for future construction, 4) Comprehensive Development Master Plan (CDMP) Amendments for a lake excavation and roadway improvements, and 5) a Joint Participation Agreement to facilitate delivery of reclaimed water from Miami-Dade County.

The project is staffed by a combination of employees fully dedicated to the project, employees from FPL business units who devote a portion of their time to the project and a select group of contractors and subcontractors whose subject matter expertise and skills are required to complete the considerable tasks related to this undertaking. Leading the staff is a project management team charged with monitoring the day-to-day execution and strategic direction of the project. The project management team provides routine, dedicated oversight of the project including a determination of the timing and content of external reviews. The project management team is supported by project controls professionals that execute the day-to-day project activities and provide direct oversight of procedural compliance. The project also benefits from routine review, supervision and direction provided by FPL executive management.

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

A. The benefits to FPL customers offered by additional nuclear generation are numerous and wholly consistent with the requirements of the Need Determination Rule. The primary benefits relate to our core mission of providing reliable electric service at reasonable rates. The fuel required for nuclear generation is not dependent on natural gas pipelines, railroad or maritime distribution systems or volatile energy markets. Therefore, nuclear generation greatly adds to the reliability of a system by increasing fuel diversity, fuel supply reliability and energy security. The historic pricing of nuclear fuel provides a stable cost input reducing the impact to monthly customer bills that results from fuel price volatility. The feasibility analysis recently reviewed and approved by the Commission demonstrates the robust cost-effective nature of nuclear generation when compared to other baseload alternatives. Finally, nuclear is recognized as an important component of meeting the state and national energy goals in addressing greenhouse gas reduction. By employing an approach that maintains progress, even through dynamic and demanding times, FPL is continuing towards delivering those benefits on the most practicable schedule.

PROJECT MANAGEMENT INTERNAL CONTROLS

Q. Please describe the project management structure responsible for the Turkey Point 6 & 7 project.

A. The management structure for Turkey Point 6 & 7 reflects the dual nature of the project relying on a working combination of two key groups: Project Development and New Nuclear Projects. The organization of the project into these two key groups helps maintain a consistent management and reporting structure with specific focus and areas of responsibility, while allowing the project the flexibility to grow and adapt over time. The overall project management structure has remained unchanged since initial formation.

Project Development, which I lead, has the primary responsibility for the execution of development and licensing activities not within the purview of the Nuclear Regulatory Commission (NRC), as well as all project communication activities and Florida Public Service Commission (FPSC) interface. Similar to the way other generation development projects are executed within FPL, Project Development utilizes matrix relationships with key business units in the Company to provide essential support. For example, legal and environmental services are provided by those business units through assigned personnel.

Recognizing the need for specific nuclear-based skills and experience, FPL established the New Nuclear Project team within Engineering, Construction & Corporate Services Division (ECCS) to manage the complex and specialized nature of the Combined Operating License Application (COLA) process and the engineering, procurement and construction activities. This team is

managed by Martin Gettler, Vice President of New Nuclear Projects. The New Nuclear Project team has direct responsibility for the production and management of the COLA as well as the engineering, procurement, site preparation, construction and start-up aspects of the project. The New Nuclear Project team will adjust staffing as the project evolves, ensuring access to the necessary skill sets are maintained to accomplish project objectives in the most cost-effective manner.

Q. What are the key elements of the project management process used to manage the Turkey Point 6 & 7 project?

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

Q. Please describe the system of internal controls applicable to the project.

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

FPL utilizes SAP software as a part of its financial recording system and a Financial Management Information Process (FMIP) for project report generation. ECCS also utilizes an Electronic Approval Database (EAD)

system to initiate and record the management approval process for the commitment of project funds.

Exhibit SDS-4 provides a comprehensive list of procedures and work instructions that govern the internal controls processes and expectations. These procedures and work instructions are employed by dedicated and experienced project controls personnel who functionally report through ECCS Project Controls and provide project oversight and analysis. The internal controls organization helps to ensure appropriate management decisions are made based upon assessment of available information leading to reasonable costs. Accountability is clear and understood throughout the controls organization and is a cornerstone of the services they provide.

Q. Please describe the specific reports generated to monitor the project and the periodicity and audience for those reports.

A. The project relies on a series of weekly or monthly reports and has standing meetings to review forward looking analysis with project managers. Exhibit SDS-5 provides a list describing the reports, and their periodicity and target audience.

Q. Please describe the staff responsible for administering these internal controls and their specific responsibilities.

A. The internal controls staffing for the project is comprised of four personnel. A Project Controls Director provides functional leadership, governance and oversight. A Lead Project Controls professional provides cost and schedule

direction and analysis, coordinates internal and external audit requests, holds meetings with project management to review cost and schedule performance, and reviews all cost, scope changes, schedules and performance indicators. A Cost Analyst provides ~~bi-monthly~~ **monthly** reviews of all project expenditures, maintains cost templates, supports the production of documents and responses to information requests, and meets monthly or as required with department heads on forecasting and commitments. A Senior Scheduler manages the master schedule, oversees contractor schedule status and updating, produces weekly performance indicators and provides Critical Path Method analysis.

Q. How were the internal controls developed?

A. Many of the internal controls procedures, processes or work instructions were pre-existing FPL company or department processes. However, due to the unique characteristics of the Turkey Point 6 & 7 project, cost templates were specifically developed for monitoring expenditures to support FPSC filing requirements and to facilitate associated reviews. FPL has contractually placed significant reporting requirements on subcontractors by requiring trend, tracking and performance indicators. This allows the internal controls team to monitor events and trends on a forward-looking basis. As the project evolves, additional controls will be developed as necessary.

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

A. In the course of project development, FPL identified a need to develop some business processes unique to new nuclear deployment. These processes

generally involve conducting business in compliance with FPL General Operating procedures, but also recognize project-specific requirements. For example, specific instructions are needed to ensure compliance with additional NRC requirements for quality control and document retention. Direction for such specific areas of focus is provided to project staff through a set of FPL's New Nuclear Project - Project Instructions (NNP–PI). These project instructions establish a standard for the project team which provides guidance, sets expectations and drives consistency. Exhibit SDS-6 provides FPL's comprehensive list of project instructions and forms.

Q. What processes are used to manage project risk?

Cost and schedule risk is managed by ensuring the project team recognizes and understands the issues facing different sub-teams that comprise the overall project. A mix of weekly meetings with small teams, monthly meetings with select members of the project team and routine executive briefings ensure the project benefits from sufficient and timely communication. Further, the information flow begins at the working level and is integrated as it moves to the project management team to ensure the issues are adequately captured and the interaction with other portions of the project is properly assessed. These meetings result in several reports identified in Exhibit SDS-5. These routine meetings allow project management to obtain updates from key project team members, provide direction on the conduct of the project activities and maintain tight control over project progress, expenditures and key decisions.

Each week the project team holds multiple status meetings. These meetings, held by teams within the project, track project activities at a level that allows most issues to be identified, discussed and resolved at the working team level. Examples include the COLA team, Site Certification Application (SCA) team and Transmission Siting team, among others. For those issues that cannot be resolved at the working team level, project management has provided a multi-step process to elevate the issue to the appropriate level for resolution. Contractor performance is also tracked on a weekly basis. Schedule and cost metrics are monitored and reported in standard format reports to allow close monitoring of contractor performance.

The project team meets monthly to review project schedule, budget performance and key project issues. Project risk is specifically tracked and reviewed by the ECCS Project Dashboard process. This is a structured vehicle for assessing project risk exposures and tracking trends in a peer review process designed to bring project management expertise throughout the ECCS organization to each specific project. The monthly Cost Report meeting provides an opportunity to drill down on project cost issues and expectations. Project management also provides a routine update to FPL executive management. Normally once per month, this update provides the opportunity for robust dialogue between the project management team, Business Unit leaders and executive management. While the executive team is always available for consultation on developing issues and opportunities,

the routine meetings ensure a broad range of topics are regularly reviewed and discussed.

Q. What other periodic reviews are conducted to ensure the project is appropriately reviewed and analyzed?

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

The project is reviewed annually to determine its continued economic feasibility. This analysis is conducted in the same framework as the analysis validated during the Need Determination proceeding, but is updated to reflect what is currently known regarding project cost, project schedule, and the cost and viability of alternative generation technologies. The analyses presented in the May 1, 2008 and May 1, 2009 Nuclear Cost Recovery (NCR) filing, demonstrated the project remains feasible. FPL is in the process of conducting an updated feasibility study including a revised project capital cost estimate. The updated feasibility study will be filed on May 1, 2010.

Q. What steps are taken to ensure project expenditures are properly authorized?

A. Non-Legal project expenditures $5,000 or greater must be formally input and approved in the ECCS Electronic Approval Database (EAD). The EAD request serves as documented communication between the Turkey Point 6 & 7 project and the Integrated Supply Chain (ISC) identifying the need to contract for goods and services. The database is used by the Turkey Point 6 & 7 project team to document and record procurement activities and to obtain the appropriate level of management authorization. Legal expenditures are independently tracked through the legal department controls.

For Initial Commitments, an approved EAD request directs ISC to formally contract with the selected supplier. Initial Commitments require appropriate authorizations that include all documentation required by Corporate Procedures. This would include contracts, purchase orders, notice to proceed and, if required, a single or sole source justification. For Contract Change Orders (CCO), the EAD request must be authorized at the appropriate level and the CCO executed prior to releasing the supplier to perform the requested scope of work.

PROCUREMENT PROCESSES AND CONTROLS

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

A. The preferred approach for the procurement of materials or services is to use competitive bidding. FPL maintains a strong market presence allowing it to leverage corporate-wide procurement activities to the specific benefit of individual project procurement activities. Maintaining a relationship with a range of service providers offers the opportunity to assess capabilities, respond to changing resource loads and remain knowledgeable of current market trends and cost of service.

However, in certain situations the use of single or sole source procurement is in the best interest of the company and its customers. In some cases there is a limited pool of qualified entities to perform specific services or provide certain goods and materials. In other cases a service provider is engaged to conduct a specific scope of work based on a competitive bid or other analysis and additional scope is identified that the vendor can efficiently provide. Circumstances such as the above examples are common in the nuclear industry, and especially on complex long-term projects such as the Turkey Point 6 & 7 project.

Q. Do you anticipate the use of single or sole source procurement practices will change over the course of the project?

A. Yes. As the project moves through various phases, the proportion of single source procurement will shift based on the nature of the major expenditures associated with each phase. During the licensing phase, the majority of the costs are expended on the federal licensing activities, which were

competitively bid. In contrast, the next phase of the project will involve proprietary engineering and procurement activity that FPL must contract from the equipment provider, a sole source of these goods and services. Then, as the project moves to construction, FPL is taking steps to develop credible providers who can competitively bid specific scopes of the construction work. Developing a set of credible competitors, especially for the very large and complex construction phase, requires a concerted effort, but is expected to result in reduced costs regardless of which vendor is selected.

Q. Please describe the single and sole source procurement procedures that apply to the Turkey Point 6 & 7 project.

A. General Operations (GO) Procedure 705.3 requires proper documentation and senior-level approval of single or sole source procurement. The procedure calls for a review of the business interests associated with recommending a single or sole source procurement contract and a validation that the costs are reasonable. During 2008 and 2009, the process by which FPL documented compliance with GO 705.3 was reviewed. Opportunities for improvement were identified and documented. Training was conducted to ensure project staff had a working understanding of the required documentation and analysis necessary to support a sole or single source request. Throughout 2009, FPL maintained its vigilance in creating adequate single or sole source documentation.

Q. What is a Pre-Determined Source (PDS) and how has FPL used this type of source to ensure procurement decisions are prudent and costs are reasonable.

A. A PDS is a source that has demonstrated through a competitive evaluation and/or other documented economic analysis to be the preferred source for particular goods or services. A PDS is designated by the FPL Integrated Supply Chain (ISC) in accordance with the Predetermined Sources section of the FPL Procurement Process Manual. The New Nuclear Project sourcing team determined PDS designations would be appropriate for certain project sources, primarily to streamline the process being used for Contract Change Orders (CCOs). Previously, all CCO's were handled as single or sole source justifications, even if the underlying initial commitment was competitively bid. Such procurement management is a standard trade practice used to increase procurement efficiency.

For additional work beyond authorized limits, the full FPL requisition and procurement process requirements must be met in order to increase the limits as required by additional work scope being authorized. Other work awarded to the same supplier for different scopes of work are still subject to the full FPL procurement process requirements.

Currently, FPL has four vendors under PDS status for the New Nuclear Project. Bechtel, Westinghouse, Black & Veatch/Zachry (BVZ) and

Environmental and Consulting Technology, Inc. (ECT) provide specific scope services to the project. Because of their specific expertise and the evolving nature of the services provided, these vendors remain good candidates for PDS selection.

Q. What were the major contracting activities for the project during 2009?

A. The major activities related to 1) licensing and permitting, 2) engineering studies, and 3) the Forging Reservation Agreement. Negotiations with the Westinghouse/Shaw consortium were held during 2009, the results of which are discussed later in this testimony. Upon completion of the work scope to develop the licensing and permitting applications in June 2009, additional contracts were executed to engage the principal consultants for support of the application review and subsequent studies that will be required by reviewing agencies. The prior arrangement, wherein Bechtel Engineering Corporation managed the subcontractors, was no longer required for consistency and control of information and was therefore not used in the post-submittal stage of the project. Each principal consultant is now engaged by FPL directly. Black & Veatch Zachry (BVZ) completed a work scope including engineering logistics planning within the year. As described in my May 1, 2009 testimony, the results of 2009 will lead to key project reviews expected later in 2010. Therefore, the Forging Reservation Agreement was extended six months (from December 31, 2009 to June 30, 2010) to allow for 2010 planning processes to be completed prior to determining the appropriate next step.

INTERNAL/EXTERNAL AUDITS AND REVIEWS

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

A. Several audits have been conducted to ensure FPL's standards for project internal controls and cost reasonableness have been demonstrated. An FPL internal audit focused on the project financials and related controls. The results of the 2008 internal audit showed "the costs charged to the Nuclear Cost Recovery Rule are appropriate Turkey Point 6 & 7-related costs and the control environment is operating effectively." The 2009 audit is underway and the results are expected in May 2010.

Turkey Point 6 & 7 project personnel are made aware of process improvements by attending training sessions as well as being provided required reading. All action items are provided scheduled completion dates and are tracked to ensure completion. On-going recommendations are routinely reviewed.

Team-level audits and reviews are another important means of validating that the project activities are being conducted according to good policies and practices. Audit reviews are used between key process steps to ensure the project is ready to proceed to the next step. Examples of these reviews are the process reviews held with work teams (FPL employees and vendor staff) and

self-auditing checklists generated for repetitive processes (travel, etc.). Such careful and meticulous business practices help catch items before they become issues and instill policy guidance in project staff.

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

A. Concentric Energy Advisors (Concentric) has been engaged to conduct a review of the project internal controls, with a focus on management processes. The 2008 review identified a strong project management and internal control structure, and also identified opportunities for clarification and further focus. These results were discussed in the May 1, 2009 filing by FPL Witness Reed. Concentric is performing a similar review on 2009 project management and internal controls.

The FPSC Staff conducted two audits in 2009. These audits included a financial audit of the project ledger and accounts, and an internal controls audit. The results of the FPSC Staff audits conducted during the 2009 NCR process (Docket No. 090009) validated FPL's findings. Specifically, the FPSC financial audit staff had no findings related to the project. The internal controls audit report states that project processes "appear to have been reasonable and in keeping with good business practices." The FPSC audits of the 2009 financials and controls are currently underway and the results will be made available.

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

A. As described above, FPL has robust project planning, management, and execution processes in place to manage the Turkey Point 6 & 7 project. These efforts are led by personnel with significant experience in project management and development supported by project management professionals trained in the deliberate execution of critical infrastructure projects through a comprehensive set of internal controls. Additionally, FPL is able to capitalize on the experience of its other power generation development projects by implementing lessons learned by those project teams. Finally, FPL implements an ongoing internal auditing and quality assurance process to continuously monitor compliance with the controls discussed above. In summary, FPL has the right people with the right tools and oversight making decisions with the best available information. For all of these reasons, FPL is confident that its Turkey Point 6 & 7 management decisions are well-founded and reasonable. Further, FPL recognizes the unique nature of new nuclear deployment demanding a continuous watch be maintained to monitor developments in policy, regulatory and economic arenas. An ongoing analysis and incorporation of these events is necessary to ensure the appropriate actions are taken at the right time to create the option for new nuclear generation. The application of sound project management fundamentals and critical questioning provides the best results.

PROJECT ACTIVITIES AND RESULTS

Q. What were the major activities for the Turkey Point 6 & 7 project during 2009?

A. The major activities for the project in 2009 were associated with the completion and support of project license and permit applications at the local, state and federal level. Additional activities focused on other transactions and agreements necessary to support the project, as represented in the primary applications. Further, FPL continued internal planning studies and commercial negotiations for specific scopes of supply.

Q. What were the specific activities and results associated with federal licensing of the Turkey Point 6 & 7 project in 2009?

A. On June 30, 2009, FPL filed a COLA and request for LWA with the NRC. The NRC conducted a review resulting in a determination the application is sufficient. The application was docketed by the NRC on September 4, 2009. Along with the sufficiency review, the NRC provided Requests for Additional Information (RAI's) seeking further information related to the application. FPL provided responses to these RAI's on November 11, 2009. At that time, FPL notified the NRC it was withdrawing the LWA due to changed circumstances. The decision process leading to the withdrawal of the LWA due to diminished value is documented in a Project Memorandum, included as Exhibit SDS–8. The NRC is expected to issue a Notice of Intent to Prepare an

Environmental Impact Statement (EIS) and an estimated review schedule in early 2010.

FPL also submitted an application to the Army Corps of Engineers (ACOE) for Section 404 and Section 10 permits on June 30, 2009 related to wetlands impacted by the project. The NRC and ACOE have a memorandum of understanding delineating the process by which the ACOE will utilize the EIS generated by the NRC as part of the COLA review as its record of decision. Therefore the ACOE process will follow the NRC time schedule up to the publication of the Final EIS.

Other federal agency reviews (e.g. US Fish and Wildlife Service, National Marine Fisheries Service, US Coast Guard, etc.) will be conducted in consultation with the NRC.

Q. What were the specific activities and results associated with state certification and permitting of the Turkey Point 6 & 7 project in 2009?

A. Recognizing the long permitting timeframe associated with a UIC well, FPL submitted the UIC Exploratory Well permit on January 20, 2009 to the FDEP. The permit was processed, culminating in a public meeting held December 14, 2009. A permit will be issued, and following appropriate notices, FPL will begin construction of the UIC exploratory and dual zone monitoring well in 2010. This process will develop the necessary information from actual well

installation and testing to confirm the suitability of the UIC well process for the project, and is therefore necessary to obtain final approvals.

An SCA was submitted to the FDEP Siting Coordination Office on June 30, 2009 to provide the procedural consolidation of state and local government reviews necessary for the construction and operation of a power plant in the state of Florida. This process begins with a completeness review by multiple agencies and governments. The application is managed in two parts; one part related to the plant and non-linear facilities and the other part related to transmission and linear facilities (pipelines for potable and reclaimed water). Completeness questions are posed by agencies and local governments that have substantive requirements related to the construction and operation of the proposed facility and the applicant responds to those questions. As of December 31, 2009 the transmission portion of the proceeding has undergone three rounds of completeness while the plant portion has undergone one round of completeness. The iterative process will continue until the FDEP is satisfied the application is complete. At that stage the substantive review by agencies will begin.

Q. What were the specific activities and results associated with obtaining local approvals supporting the Turkey Point 6 & 7 project in 2009?

A. A Comprehensive Development Master Plan (CDMP) Amendment was submitted to Miami-Dade County in October 2008 to support land use approvals for the FPL-owned fill source. This CDMP Amendment was

approved for transmittal to the Department of Community Affairs (DCA) in April 2009 and received state level review and comment from interested agencies and stakeholders. Based on this feedback, FPL revised its CDMP Amendment application and re-filed the application in November of 2009. Engineering design studies were performed to provide additional detail requested by several parties. This amendment is currently slated to be considered for transmittal to DCA in the Spring of 2010 with potential adoption in Fall 2010.

A second CDMP Amendment was filed in April 2009 to support temporary roadway improvements needed to support safe project access during construction. The amendment was transmitted to DCA in December 2009 and is expected to be considered for adoption by the Miami-Dade Board of County Commissioners in the Spring of 2010.

Q. What were the specific activities and results associated with transactions and agreements supporting the Turkey Point 6 & 7 project in 2009?

A. FPL continued negotiations with Miami-Dade County Water and Sewer Department (WASD) to develop a Joint Participation Agreement defining the roles and responsibilities for development of a reclaimed water pipeline and contains a form of Reclaimed Water Service Agreement consummating the commercial and operational relationship for water supply to the project. The negotiations have yielded a draft agreement intending to execute and be approved by both parties in early 2010. Development of this agreement is

necessary to demonstrate the viability of the project water supply plan to state and regional agencies in the Florida Power Plant Siting Act process.

FPL also maintained pursuit of a land exchange with Everglades National Park to facilitate the preferred Transmission Corridor in western Miami-Dade County. Multiple agencies are involved in the land exchange to resolve a property issue created by the expansion of the national park in the early 1980's without cost to taxpayers. Federal legislation authorizing the exchange was enacted in early 2009 and subsequent due diligence activities have been underway to support the transaction. It is anticipated the exchange can be closed by the end of 2010.

Q. What were the specific activities and results associated with internal studies and commercial negotiations related to the Turkey Point 6 & 7 project in 2009?

A. BVZ was engaged to conduct an engineering and logistics planning review to assess the specific site preparation and pre-construction activities necessary given the project design specifications contained in the license and permit applications. The review resulted in an assessment of integrated activity sequences and durations. The results of this review will inform FPL's project schedule review, to be conducted in early 2010.

FPL also conducted investigations of other sources of fill for the project beyond the FPL-owned fill source proposed in the applications. Additional

fill will be required beyond what the FPL-owned fill source is estimated to yield, so regional commercial sources are being evaluated for supply.

Commercial negotiations with Westinghouse/Shaw continued in 2009 to define the terms, scope, schedule and price for project management, engineering and procurement services needed to support the next phase of the project. The negotiations have not yielded a consolidated proposal FPL judges as suitable in price, risk sharing and schedule certainty as of December 31, 2009. Further, FPL has not made a commitment to whether an integrated EPC or an EP and C form of contracting offers the best cost, risk and schedule management. Therefore, FPL will revisit negotiations with Westinghouse/Shaw following the project schedule review and revised cost estimate analysis in 2010. Accordingly the Forging Reservation Agreement, due to expire at the end of 2009, was extended by 6 months at no cost and with no other changes to allow for these reviews.

KEY MANAGEMENT DECISIONS

Q. What were the key matters addressed by FPL project management in 2009?

A. FPL management made the following key decisions during 2009: 1) decision to defer purchase of $63.5 million in previously identified long lead materials and engineering design activities; 2) decision to defer execution of either an

EP contract or an EPC contract for the project; 3) decision to extend the Forging Reservation Agreement by six months; 4) the decision on final design features of the project for submittal in federal and state applications; and 5) withdrawal of the LWA request from the NRC COLA.

Q. Why was it determined to defer purchase of long lead materials and specific engineering design activities and what are the impacts of this decision?

A. In early 2008 FPL, in consultation with Westinghouse/Shaw, identified a set of long lead materials and the specific engineering design activities necessary to confidently meet the project schedule. Specifically, these materials are forgings and components for Reactor Coolant Pumps, tubing for the Steam Generators, secondary components for Steam Generator fabrication and Containment Vessel materials. This was included in FPL's NCR filing and subsequently approved for 2009 cost recovery. As 2009 unfolded, it became evident to FPL an agreement on an EP or EPC contract may not be in the best interest of FPL customers in 2009, and therefore associated expenses stemming from such an agreement would not be appropriate. Therefore, FPL chose to defer those costs into 2010 or later.

The most immediate impact identified was that, without the purchase of these long lead materials and engineering services, FPL would be accepting an increased risk to maintaining the project schedule for construction. Actual costs of the subject material and services may be higher or lower than what

they would have been if FPL had executed such purchases in 2009; however, the carrying costs for such expenditure will certainly be postponed for some time providing relative savings. Further, without an acceptable set of terms, conditions, and schedule to accompany the pricing, the relative risk was judged to be unacceptable.

Q. Why was it determined to defer execution of an EP or EPC contract and what are the impacts of this decision?

A. FPL and Westinghouse/Shaw conducted negotiations through 2008 and 2009. FPL's desire to preserve the option for creating competition for the Construction component of work by developing an EP contract challenged the vendor's original business model. Westinghouse/Shaw was responsive to FPL's request and provided an indicative price estimate for EP scope. However, we were not able to come to a set of acceptable terms, conditions and associated execution schedule meeting FPL's needs. Given the number of political, regulatory and commercial developments ongoing in 2009 and into 2010, deferral of contract execution was determined to be the best course of action to protect the interests of FPL's customers.

The decision to defer execution of a contract will be one of several factors that impact the overall project cost and schedule, the magnitude and contribution of which cannot be estimated at this stage. It is FPL's determination that the decision favorably limits cost risk by not signing a contract under undesirable or unacceptable terms at a time when firm schedules for the regulatory review

processes have not been established. Deferring the decision is expected to allow FPL's customers to benefit from lessons learned in other AP-1000 projects in China and the US, and enter into a more favorable and certain agreement at a later time.

Q. Please describe the decision to extend the Forging Reservation Agreement and related cost, risk or schedule impacts.

A. Based on the decision to defer an EP or EPC contract, and given anticipated developments in the review schedule of state and federal applications and the pending project schedule reviews, it was mutually agreed to extend the terms of the agreement, with no changes or added costs, by six months. This allows FPL to integrate the results of 2009 activities and the regulatory review schedules pending in early 2010 into the overall project schedule review prior to making a final disposition on the Forging Reservation Agreement. No negative cost, risk or schedule impacts are anticipated from this decision, and the option to renegotiate the Forging Reservation Agreement to favorable terms aligned with a refreshed schedule is preserved.

Q. Please describe the key decisions related to final design features of the project for submittal in federal and state applications and the implications of those decisions.

A. Four key design decisions were finalized in preparation for the submittal of license and permit applications. These decisions determined the specific design parameters and location of equipment associated with 1) the water

resources plan, 2) the wastewater management plan, 3) the construction roadway access plan and 4) the transmission preferred corridor selection.

Following extensive investigation of alternatives, it was determined the benefits of using reclaimed water as a primary supply could be attained with a proper backup supply to ensure supply reliability. Therefore the current design of the water resources plan included a nine-mile delivery pipeline connecting WASD's South District Wastewater Treatment Facility to the Turkey Point Plant Site, a wastewater treatment facility to further treat the delivered water to suitable condition for power plant use and a backup system supplying saline water via radial collector wells located on Turkey Point, just north and east of the project area. The backup system is necessary because it is the most cost effective way to provide reliability of supply. Cooling towers, reservoirs, and ancillary equipment were designed to accommodate the range of differences between the two supply sources. This selection provides environmentally sensitive water supply coupled with operational reliability at reasonable costs.

The plant wastewater streams were determined best handled through an UIC well system, similar to that used by WASD in the current disposition of treated wastewater at the South District Wastewater Treatment Facility. Such a system allows for disposal of non-hazardous waste streams (primarily cooling tower blowdown mixed with other plant effluents) to the deep

Floridan Aquifer (or Boulder Zone), a confined geologic aquifer far below aquifers used for drinking water supply. The UIC option avoids the need to discharge these effluents to surface water bodies and handles the waste streams in a manner environmentally sound and proven successful in South Florida. The selection of this means of disposal requires a significant modeling and exploratory well program subsequently initiated in early 2009.

Traffic studies indicated regional roadway networks were sufficient to support the incremental 800 employees anticipated during operation, but were not sufficient for safe and efficient access during the peak construction period where up to 4000 additional trips per day will be made by construction workers and material deliveries supporting Unit 6 & 7 construction. An access plan was developed utilizing currently impacted rights-of-way and roadways in the region to provide sufficient access to the site to support construction and not interfere with the safe and efficient operation of the existing five units on site.

The Power Plant Siting Act requires an applicant to select a preferred corridor in its application for certification of transmission lines. FPL conducted significant studies, agency workshops and community outreach over a period of eighteen months to inform a selection process leading to a preferred corridor for the transmission lines necessary to interconnect and integrate the plant to the transmission grid. The culmination of this process was the

selection and delineation of specific corridors for certification where the transmission lines would be sited. FPL was able to use existing transmission line rights-of-way for much of the length of the corridors. Two areas required new transmission corridors: a segment along the L-31N levee in western Miami-Dade County and a segment along US-1 in eastern Miami-Dade County.

Q. Why was it determined to withdraw the LWA request and what are the impacts of this decision?

A. Preliminary planning and schedule work in 2007 and 2008 indicated that a LWA could provide a potential schedule benefit by allowing the early initiation of certain NRC jurisdictional construction activities. In short, the LWA potentially provided FPL with an option to accomplish certain activities early. However, through additional construction planning reviews conducted in 2009, an increased understanding of the magnitude and duration of site excavation and preparation activities that would precede the LWA activities was obtained. These activities were more extensive than early estimates. This reduced the value of the LWA, limiting the schedule acceleration offered by a LWA. Further, monitoring of ongoing regulatory activity in other NRC proceedings indicated processing of a LWA request could increase the total amount of time required for the COLA review. Therefore, considering the combined effect of reduced schedule benefit and increased risk to lengthening the federal review schedule, it was determined the best course of action was to withdraw the LWA request prior to the NRC establishing the milestone

review schedule for FPL's COLA submittal. The analysis and decision process associated with the withdrawal of the LWA request is captured in a Project Memorandum, included as Exhibit SDS-8.

Q. Were the above described decisions reasonable?

A. Yes. The project management structure, project internal controls, staffing and oversight processes available ensure these decisions were made based upon consideration of the best information currently available, and were also properly vetted and considered at the highest levels of the organization.

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

A. FPL is an industry leader in nuclear generation, and as such, has the experience, contacts and industry presence to engage in many forums for exploration of nuclear industry issues. Nonetheless, the specific challenges of new nuclear deployment have created focus areas requiring additional coordination between entities involved in new plant licensing, construction and operation. FPL participates in four key industry groups providing value to the Turkey Point 6 & 7 project. The NuStart Consortium provides FPL access to the reference COLA (Southern Nuclear Company's Vogtle Plant) and associated information developed by other AP-1000 applicants necessary to maintain the Turkey Point 6 & 7 COLA. NuStart is also responsible for supporting the design finalization of the AP-1000 technology. This involvement is necessary to support the federal licensing process. In addition,

the Design Centered Working Group was formed to provide coordination between owners, vendors and the NRC related to design modifications of the AP-1000. This critical activity is necessary to ensure design changes for the AP-1000 are made through a consensus process with the involvement of the NRC to preserve standardization of design, a cornerstone of new nuclear development. FPL also is a member of APOG (a consortium of owners of the AP-1000 design) and the Advanced Nuclear Technology group organized by the Electric Power Research Institute (EPRI). These groups are primarily forums to identify and resolve issues that are of primary interest to owners, such as staffing, training and maintenance activities. For example, programs such as Procurement Specification Development, Equipment and Nuclear Fuel Reliability improvements, Advancing Welding Practices, and Modular Equipment Testing and Benchmarking allow FPL increased efficiency in program development and implementation resulting in future cost savings. The principle of standardization through operations and maintenance requires this level of industry coordination and dialogue. These different groups have unique and important roles in the successful execution of new nuclear deployment in the United States. Achieving the goal of industry standardization and realizing the associated economic and operational efficiencies mandates the need for active participation by industry participants in these venues.

2009 PRECONSTRUCTION COSTS

Q. Describe the preconstruction costs incurred for the Turkey Point 6 & 7 project in 2009.

A. As represented in Exhibit SDS-7 and Exhibit SDS-1, Appendix II, Schedule T-6, FPL incurred a total of $37,731,525 in pre-construction costs. This is $7,909,136 less than the May 1, 2009 Actual/Estimated costs of $45,640,661. The costs are broken down into the following categories: 1) Licensing ($30,271,612); 2) Permitting ($991,090); 3) Engineering and Design ($6,445,161); 4) Long Lead Procurement advanced payments ($0); and 5) Power Block Engineering and Procurement ($23,662).

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

A. In 2009, Licensing costs were $30,271,612 as shown in Exhibit SDS-7 Table 2 and Exhibit SDS-1, Appendix II, Schedule T-6, Line 3. Licensing costs consist primarily of FPL employee, contractor labor and specialty consulting services necessary to develop the federal COLA application required for construction and operation of the Turkey Point 6 & 7 project and the state SCA providing state certification of the project.

The largest portion of these expenditures ($15,868,758) was a result of costs incurred supporting the COLA process. This value is a combination of COLA Team Costs and Bechtel COLA contract payments. The permit and license applications contain project specific information, assessments and studies

required by the NRC, FDEP and other federal, state and local entities to support the reviews leading to decisions on the technical, environmental and social acceptability of the project. Some activities are common between applications, and therefore offer opportunities to coordinate efforts and manage costs. However, each application analyzes each issue from a unique perspective and may require differing levels of detail.

The COLA development costs were estimated based on the Bechtel proposal obtained through a competitively bid process. The proposal was reviewed to verify the scope adequately described the activities necessary and reasonable labor rates and resource costs were utilized. Other licensing and permitting costs were developed in accordance with FPL's budget and accounting guidelines and policies. Further, these cost estimates were compared to FPL's recent extensive experience with the development and permitting of new generation projects in Florida and were found to be reasonable.

Q. **Please explain the reasons behind the variances between the actual Licensing costs and the costs projected in the 2009 Nuclear Cost Recovery filing in Docket No. 090009-EI.**

A. Overall, FPL spent $5,164,519 less than planned in 2009. This variance is the result of lower than planned NRC fees, Bechtel COLA contract support, transmission line permitting, SCA support, New Nuclear Project staffing, and unused contingency. The NRC fees were $1,368,129 less than expected due to a lag in receiving the NRC review schedule and subsequent required

reviews shifted into 2010; the Bechtel COLA contract support was $1,267,765 less than expected primarily attributable to the change in application filing dates shifting a portion of planned support for RAI's into 2010; Power Systems costs were $819,896 less than expected primarily due to lower than anticipated costs associated with environmental studies supporting the transmission line siting activity. SCA production costs were $530,424 higher than anticipated due to additional conceptual engineering and modeling required to respond to agency requests. Costs for the New Nuclear Project team were $216,835 more than expected due to the staffing activities associated with the COLA review prior to submittal. The contingency amount of $2,007,004 was not required.

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

A. In 2009, Permitting costs were $991,090 as shown in Exhibit SDS-7 Table 3 and Exhibit SDS-1, Appendix II, Schedule T-6, Line 4. Permitting costs consist primarily of FPL employees, communications and legal services necessary to support the various license and permit applications required by the Turkey Point 6 & 7 project. Exhibit SDS-7, Table 3 provides a detailed breakdown of the Permitting subcategory costs in 2009, including a description of items included within each category.

The Marketing and Communications department supports the project by ensuring project information is prepared, reviewed and available for distribution to media, customers and key stakeholders. Expenses in this

category include personnel dedicated to supporting the many project outreach activities, external contractors who provide specific services (e.g., graphic arts, mass mailings), and printing of mailing and collateral materials. Development costs in 2009 include three personnel: myself, a Project Director and a Project Manager. Legal expenditures provide necessary support to activities for all permitting and project interactions. Contingency is established to provide for emerging issues, unanticipated required studies or activities previously unknown.

Q. Please explain any variance between the actual Permitting costs and the costs projected in the 2009 Nuclear Cost Recovery filing.

A. The project spent $960,060 below plan in 2009 in the Permitting subcategory. This variance is a result of the communications expenditures being under budget by $354,088, due in part to the change in application filing dates shifting a portion of planned support into 2010. Legal costs were $402,564 less than expected due primarily to a reclassification of $280,261 in 2008 and 2009 costs. Taking these costs out of the project offset actual costs in this area. Finally, $204,122 of contingency was not required.

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

A. In 2009, Engineering and Design costs were $6,445,161 as shown in Exhibit SDS-7 Table 4 and Exhibit SDS-1, Appendix II, Schedule T-6, Line 5. Engineering and Design costs consist primarily of FPL employee services and/or engineering consulting services necessary to develop the construction

execution plan for the Turkey Point 6 & 7 project. Exhibit SDS-7 Table 4 provides a detailed breakdown of the Engineering and Design subcategory costs in 2009, including a description of items included within each category.

In 2009, the majority of costs in the Engineering and Design subcategory were split between staffing for the project construction staff and contracting with BVZ to undertake the initial construction planning activities. Costs associated with EPRI's Advanced Nuclear Technology working group and membership in the APOG industry group are also included in this category.

Q. Please explain any variance between the actual Engineering and Design costs and the costs projected in the 2009 Nuclear Cost Recovery filing.

A. Overall, the project incurred costs were $1,786,327 below plan in 2009 in the Engineering and Design subcategory. The variance of $856,026 was composed in part by cost deferrals resulting from reduced construction team staffing relative to plan. This reduction was appropriate given deferral of engineering design and EP or EPC contract engagement in 2009. The balance of the variance of $933,864 was a result of reducing the scope of the BVZ activities in 2009, a decision made following interim analysis of the results of BVZ's construction planning studies.

Q. Please describe the costs incurred in the Long Lead Procurement subcategory.

A. In 2009 there were no Long Lead Procurement costs, for the reasons described previously in this testimony.

Q. Please describe any variance between the actual Long Lead Procurement costs and the costs projected in the 2009 Nuclear Cost Recovery filing.

A. No variance exists in this category.

Q. Please describe the costs incurred in the Power Block Engineering and Procurement subcategory.

A. In 2009, Power Block Engineering and Procurement costs were $23,662 as shown in Exhibit SDS-7 Table 5 and Exhibit SDS-1, Appendix II, Schedule T-6, Line 7. Power Block Engineering and Procurement costs consist of FPL payroll and expenses supporting negotiations with Westinghouse/Shaw. Exhibit SDS-7 Table 5 provides a detailed breakdown of the Power Block Engineering and Procurement subcategory costs in 2009, including a description of items included within each category.

Q. Was there a variance between the actual Power Block Engineering and Procurement costs and the costs projected in the 2009 Nuclear Cost Recovery filing?

A. Yes. The project incurred costs of $1,769 above plan in 2009 in Power Block Engineering and Procurement subcategory. The variance relates to legal support for the reclaimed water activity and should be a part of the permitting costs. A reclassification of these expenses will be made.

Q. Were any costs expended in the Transmission category prior to or during 2009?

A. No. All costs associated with Transmission planning or engineering are related to the licensing and permitting activities, and therefore are

appropriately included in those categories, described above. When activities move from the licensing/permitting support phase to detailed engineering of the transmission improvements, costs will then begin to be expended in these categories.

Q. Were the 2009 project activities prudent and were the related costs reasonable?

A. Yes. All costs were incurred as a result of the deliberately managed process at the direction of well-informed, properly qualified management. The costs were incurred in the process of conducting the necessary pre-construction activities such as obtaining the necessary licenses and permits, and the process of obtaining the necessary manufacturing space reservations for the Turkey Point 6 & 7 project. All costs were reviewed and approved under the direction of the Turkey Point 6 & 7 management team and were made fully subject to project internal controls. Costs were processed using FPL standard procurement procedures and authorization processes, and are reasonable.

PROJECT SITE SELECTION COSTS

Q. Please describe the Site Selection costs incurred in 2009.

A. FPL's Site Selection work completed in October 2007 with the filing of the Need Petition. The costs of ~~$372,818~~ **$373,162** in this category relate to carrying charges. FPL Witness Powers supports the calculation of carrying charges.

CONCLUSION

Q. Please summarize your testimony.

A. During 2009, the Turkey Point 6 & 7 project progressed on schedule with licensing and permitting activities, and maintained costs well within budget. As a result of commercial negotiations and engineering planning analysis, several key decisions were made accepting risk to the project construction schedule. These included deferral of the EP or EPC contract, deferral of Long Lead material procurement and withdrawal of the LWA request. These decisions were carefully analyzed and fully vetted, resulting in stepwise management of the project maintaining important progress to create the option of new nuclear generation without incurring unnecessary cost exposure.

The project is being managed by a professional team of engineers, analysts and managers to ensure process controls are maintained and activities are compliant with applicable corporate procedures and project specific instructions. The project management process is being conducted in a well-informed, transparent and organized manner enabling executive oversight and facilitating reviews by internal and external parties. The Turkey Point 6 & 7 project team has the skills, experience and executive oversight to guide the project through critical decisions using the best available information. This disciplined application of process by well-qualified FPL managers and their

staff, results in prudent decisions with respect to project activities and expenditures.

Q. Does this conclude your testimony?

A. Yes.

Appendix II is in a separate book.

Appendix III is in a separate book.

FEDERAL AUTHORIZATIONS

Jurisdictional Agency	Authority, Law, or Regulation	Description of Requirement	Activity Covered
NRC	10 CFR Part 30	By-Product License	Possession of fuel.
NRC	10 CFR Part 40	Source Material License	Possession of source material.
NRC	10 CFR Part 50	Licensing of nuclear power plant	Approval for construction of nuclear power plant.
NRC	10 CFR Part 51, 10 CFR Part 52	NRC approval of an Environmental Report	Evaluation of environmental impacts from construction and operation of a nuclear power plant.
NRC	10 CFR Part 52	COL or LWA	Construction and safety review of the nuclear power plant site.
NRC	10 CFR Part 61	Licensing requirements for land disposal of radioactive wastes	Land disposal of radioactive waste that contains byproduct source and Special Nuclear Material (SNM).
NRC	10 CFR Part 70	Special Nuclear Material License	Possession of SNM.
NRC	10 CFR Part 71	Packaging and transportation of radioactive material	Packaging and transportation of licensed radioactive material.
DOE	Nuclear Waste Policy Act (42 U.S.C 10101 et seq.) and 10 CFR Part 961	Spent Fuel Contract	Disposal of spent nuclear fuel.
USACE	Clean Water Act of 1976 /33 U.S.C section 1344	Section 404 Permit	Discharge of dredge and fill materials into Waters of the United States.
USACE	Rivers and Harbors Act of 1899/ 33 U.S.C. section 401 et. seq.	Section 10 - Rivers and Harbors Act Permit	Excavation or filling within navigable waters of the United States.
USFWS	16 U.S.C 1539(a)(1)(A); 50 CFR Parts 13, 17	Endangered species permit to take American crocodile during monitoring	Provides authorization to take (capture, examine, weigh, sex, collect tissue samples, mark, radio-tag, radio-track, relocate, release) endangered American crocodile individuals during population monitoring.
USFWS	16 U.S.C 703-712	Special purpose salvage permit, migratory birds	Provides authorization to: salvage dead migratory birds, abandoned nests, and addled eggs after nesting season; dead bald or golden eagles; and possess live migratory birds for transport to permitted rehabilitator.

Jurisdictional Agency	Authority, Law, or Regulation	Description of Requirement	Activity Covered
USFWS	16 U.S.C. 703-7121 50 CFR Part 13:50 CFR 21.41	Federal Fish and Wildlife Permit	Emergency relocation of active migratory bird nests when birds, nests, or eggs pose a direct threat to human health and safety or when the safety of the bird is at risk if the nest and/or birds are not removed.

STATE OF FLORIDA AUTHORIZATIONS

Jurisdictional Agency	Authority, Law, or Regulation	Description of Requirement	Activity Covered
FDEP, Siting Board	F.S. § 403.501-.518, F.S	Power Plant Certification. Licenses*	Construction of a power plant with more than 75 MW of steam generated power and associated facilities.
FDEP, USEPA Region IV review	Chapter 62-621, F.A.C.	NPDES Storm water Operations Permit for Industrial Activities	Operation of an industrial facility.
FDEP	Chapter 403 F.S.	Exploratory Well Construction Permit	Allows for the construction of the exploratory well and dual-zone monitor well.
FDEP	Chapter 403 F.S.	UIC Well Construction Permit	Allows for the conversion of the exploratory well to an injection well and perform operational testing for up to 2 years.
FDEP	Chapter 403 F.S.	Class I Well Operation Permit	Allows for the operation of the injection wells. This permit must be renewed every 5 years.
FDEP, USEPA Region IV review	Chapter 62-212, F.A.C.v	Prevention of Significant Deterioration Construction Permit	Construction and operation of facilities that generate air emissions.
FDEP, USEPA Region IV review	F.S. § 403.0885 F.S.	Modification of Industrial Wastewater Treatment Facility (IWW) permit	Construction of Units 6 & 7 within the industrial wastewater facility.
FDEP/USEPA	Chapters 62-25, 62-40 F.A.C	NPDES Construction Storm water Permit	Construction of any facility that disturbs 1 acre or more.
Florida Fish and Wildlife Conservation Commission	Title 68A, F.A.C. (68A-9.002; 68A-25.002; 68A-27.003)	Special purpose live-capture permit	Provides authorization for live-capture, insertion of data loggers in nests, and collection of samples, on FPL properties of American crocodiles for mark/recapture and scientific data collection; also provides for live-capture, relocation, and release of American alligators and Eastern indigo snakes and other endangered or threatened species or species of special concern.

Jurisdictional Agency	Authority, Law, or Regulation	Description of Requirement	Activity Covered
FDEP	403.087, F.S. and F.A.C. 62-4, 62-520, 62-522, 62-528 62-550, 62-600, 62-601	Operation of Class V, Group 3 domestic wastewater injection (gravity flow) well	Operation of IW-1.
FDEP	403, F.S. and F.A.C. 62-600, 62-601, 62-602, 62-620, 62-640, 62-699	Operation of domestic wastewater treatment facility (WWTF)	Operation of Turkey Point Power Plant WWTF.
FDEP	F.A.C. 62-213	Title V Operations Permit	Operations of facilities that generate air emissions.
FEDP, South Florida Water Management District	F.A.C. 40B-3	Well Construction Permit	Construct, repair, modify, or abandon a well.
South Florida Water Management District	F.A.C. 40E-3	Well Abandonment Permit	Well abandonment permits.
State of Florida	F.A.C. 40E-3	Well Abandonment Permit	Application to construct, repair, modify, or abandon well.
FWCC	F.A.C. 68A-9.002, 68A-9.025, 68A-27	Carcass Salvage Permit	Salvage, mount, and display wildlife carcasses upon encounter for educational or scientific purposes.
FWCC	F.A.C. 68A-9.002, 68A-27.005	Removal of nests and ospreys	Removal and replacement of inactive nests of ospreys and other migratory birds.

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

FOREIGN STATE AUTHORIZATIONS

Jurisdictional Agency	**Authority, Law, or Regulation**	**Description of Requirement**	**Activity Covered**
Utah Department of Environmental Quality Division of Radiation Control	R313-26 of the Utah Radiation Control Rules	Revision of existing General Site Access Permit	Transport of radioactive materials into the State of Utah.
Tennessee Department of Environment and Conservation Division of Radiological Health	TDEC Rule 1200-2-10.32	Revision of existing Tennessee Radioactive Waste License-for-Delivery	Transport of radioactive waste into the state of Tennessee.

LOCAL AUTHORIZATIONS

Jurisdictional Agency	Authority, Law, or Regulation	Description of Requirement	Activity Covered
Miami-Dade County	Chapter 163 F.S.; Miami-Dade County Comprehensive Plan and adopted regulations	Land use and zoning conditional approval (unusual use approval)	Unusual Use to permit a nuclear power plant (atomic reactors) and ancillary structures and equipment.
Miami-Dade County	Chapter 163 F.S.; Miami-Dade County Comprehensive Plan and adopted regulations	Comprehensive Plan amendment zoning change and conditional approval (unusual use approval)	Excavation for fill source.
Miami-Dade County	County Ordinances	IW6 Permit (Industrial Well field) for site investigation	Land use - non-residential, within major well field protection areas not served by sanitary sewers.
Miami-Dade County Health Department	Chapter 373 F.S.; County Ordinances	Well construction for site investigation including pump test and observation wells	Well installation for hydrologic investigation.
Miami-Dade County	Miami-Dade County Code Chapter 24	Domestic wastewater annual operating permit	Stabilization treatment facility
Miami-Dade County	Miami-Dade County Code Chapter 24	Operation of pollution control facility	Operation of fleet vehicle maintenance facility that generates waste oil, coolant, and used batteries with a solvent wash tank and served by septic tank.
Miami-Dade County	Miami-Dade County Ordinances, Chapter 14	Burn Permit	Onsite combustion of construction debris.
Miami-Dade County	Miami-Dade County Ordinances, Section 24-35	IW5 Permit (or waiver)	Hazardous materials or hazardous waste – large user or generator.
Miami-Dade County	Miami-Dade County Ordinances, Section 24	Stratospheric Ozone Protection Annual Operations Permit	Use of refrigerants R-12, R-22, R-502 for Robinair Recovery Units, Models 25200, 25200A, 25200B.
Miami-Dade County	Miami-Dade County Ordinances, Section 24	Industrial Waste Annual Operations Permit	Onsite disposal of Class III industrial solid waste consisting of earth and earth-like products, concrete, rock, bricks, and land clearing debris.
Miami-Dade County	Miami-Dade County Ordinances, 89-104	Marine Facilities Annual Operations Permit	Operation of 1 wet slip, 1 dry slip, 2 commercial vessels.
South Florida Water Management District (SFWMD)	Chapter 373 F.S.	Water well construction permits	Pump test for test wells.

PROCEDURES and WORK INSTRUCTIONS

GO 2 FPL Group Internal Control Policy
GO 7 FPL Documents - Monthly Closing Schedule
GO 300 Cash Disbursement
GO 354 Non-PO Invoice - General
GO 356 Creating an Account Assignment Model
GO 358 Framework PO Invoice - Entering an Invoice
GO 362 Entering a Framework PO Credit Memo
GO 606 Specific ER – General
GO 700 Integrated Supply Chain – Policy
GO 702 Utilization of Small Business Concerns
GO 705 Purchasing Goods and Services – Policies and Definitions
GO 705.1 Methods of Purchasing Goods and Services - Types of Goods and Services
GO 705.3 Purchasing Goods and Services – Using Purchase Orders and Contracts
GO 705.9 Purchasing Goods and Services - Procurement System Controls
GO 720.4 Purchase Order - Receipt of Materials and Services
GO 740 Transportation Freight Payments
QI4-NSC-1Rev6ProcurementControl
NP-1100 Nuclear Division Procurement Control r16
Engineering &Construction Project Controls Process Overview 09-16-09
Engineering &Construction Accrual Process Narrative rev 03-31-09
Engineering &Construction Utility Fixed Assets Process narrative 06-30-09
Engineering &Construction Monthly Invoice Processing & Accrual Schedule 2010
Engineering &Construction Project Controls Monthly Deliverables 2010
Desktop online Authorization Procedure_rev17_12_17_06
Contract Retention white paper rev 4-28-08
Electronic Invoice Scan Process
NPP-DESKTOP-GUIDE-012009
Updating Monthly Cost Report Process
Work Breakdown Structure -012009
Project Control Guidelines Memo 3-21-08
Rules of Engagement

PROJECT REPORTS

REPORT	REPORT DESCRIPTION	PERIODICITY	AUDIENCE
6 Week Look-ahead Schedule, organized by resource*	All FPL activities scheduled within the next six weeks	Weekly	All project staff personnel, project management and project controls
Schedule Resource profiles*	Graphic profile of all FPL resources allocated to scheduled activities	Weekly	All staff on the project assigned as a resource and management
Performance Indicator Earned man hour burn rates*	Graphic comparison of earned to budgeted man hours	Weekly	Project Management
Performance Indicators Activity early finish variance*	Graphic comparison of original schedule finishes to current schedule finishes	Weekly	Project Management
Performance Indicators Activity total float variance*	Graphic comparison of float variances from previous week	Weekly	Project Management
Performance Indicators Scheduled starts and finishes from previous week variance*	Graphic comparison of scheduled starts and finishes to actual starts and finishes	Weekly	Project Management
Project Dashboard (Cost)	Comprehensive report covering schedule, budget, costs, performance, permitting, safety, and risks	Monthly	Project Management

REPORT	REPORT DESCRIPTION	PERIODICITY	AUDIENCE
Corporate Variance (Cost)	Financial status compared to corporate budget including Current Month (CM), Quarter (QTR), Year-To-Date (YTD) and End-Of-Year (EOY) with variance explanations	Monthly	Executive Management
Annual Forecast Analysis (Cost)	Compares year end forecasts monthly with variance explanations	Monthly	Project Management
Nuclear Filing Requirement (NFR) Cost Summary	Compares filing projections by major category to actual/forecast with variance explanations	Monthly	Project Management
NFR Summary	Compares filing projections by department	Monthly	Project Management and department heads
NFR Variances	Compares filing projections by department projections to actual/forecast with variance explanations and major milestone schedule dates	Monthly	Project Management and department heads
Project Cost Summary	Financial status by budget responsibility including CM, QTR, YTD, Period-To-Date (PTD) and EOY	Monthly	Project Management

REPORT	REPORT DESCRIPTION	PERIODICITY	AUDIENCE
Cost Recovery by Detail	Compares pre-construction NFR filing projection details to actual/forecast for CM, YTD and EOY	Monthly	Project Management
Pre-Construction Cumulative Spend Graph	Visually compares Corporate Budget, May 08 NFR Projection, May 09 NFR Projection to actual expense and forecast	Monthly	Project Management and department heads
Due Diligence Report	Project status and potential liabilities that may require disclosure in company financial reports	Quarterly	Executive Management

*Reports generated through June 30, 2009, the point of submittal of the Combined Operating License and the Site Certification Application.

NNP PROJECT INSTRUCTIONS & FORM LIST

Procedure Number	Title	Revision Number	Effective Date
NNP-PI-01	Request For Information (RFI) and RFI Response	1	03/22/2009
NNP-PI-02	Preparation, Revision, Review, and Approval of New Nuclear Projects – Project Instructions	2	06/15/2009
NNP-PI-03	NNP Project Document Retention	0	04/28/2008
NNP-PI-04	COLA Configuration Control and Responses to Requests for Additional Information for Project Applications	1	08/06/2009
NNP-PI-05	NNP Correspondence	0	09/25/2008
NNP-PI-06	NNP NRC Correspondence	0	02/22/2008
NNP-PI-07	NNP Department Training	1	04/17/2008
NNP-PI-08	NNP COLA Review & Approval Process	3	12/08/2009
NNP-PI-09	NNP COLA Submittal	1	06/22/2009
NNP-PI-010	NNP PTN COLA Related Project Management Briefs and COLA Related Document Reviews	1	01/25/2010
NNP-PI-011	Change Control for COL Application Plant Specific Design Information	1	06/10/2009
NNP-PI-012	Visiting Dignitaries	0	08/17/2009
NNP-PI-013	Verification of Document Information (Title subject to change)	0	To be determined
NNP-PI-014	Document Retention Instructions Related to PTN 6&7 Combined License Proceeding (Title subject to change)	0	To be determined
NNP-PI-100	Project Schedule and Configuration Control	0	08/03/2009
QI-2-NNP-01	Quality Assurance During the Pr-Construction Phase of the PTN 6 & 7 New Nuclear Project	1	06/15/2009

NNP PROJECT INSTRUCTIONS & FORM LIST

Desk Top Instruction Number	Title	Revision Number	Effective Date
NNP-AA-01	NNP Regulatory Items & Commitments Database Control	0 1	To be determined

NNP Form Number	Title	Revision Number	Effective Date
NNP-PI-01-01	FPL NNP PTN 6&7 COLA RFI and RFI Response	0	01/29/2008
NNP-PI-02-01	Project Instruction Review and Approval Form	0	02/04/2008
NNP-PI-03	Not Used	NA	NA
NNP-PI-04	Not Used	NA	NA
NNP-PI-05	Not Used	NA	NA
NNP-PI-06-01	NNP Outgoing NRC Correspondence Review & Approval Sheet	0	02/22/2008
NNP-PI-07-01	NNP Training Attendance Form	0	03/19/2008
NNP-PI-07-02	NNP Training Exemption form	0	03/19/2008
NNP-PI-07-03	NNP Required Reading Form	1	04/17/2008
NNP-PI-08-01	Comment Resolution Acceptance Form	1	05/02/2008
NNP-PI-08-02	License Review Board (LRB) Meeting Summary Form	1	05/02/2008
NNP-PI-09-01	Certification Reference Form	0	10/03/2008
NNP-PI-010-01	NNP Document Review comment Form	0	03/11/2008
NNP-PI-010-02	NNP Project Management Brief Review and Approval Form	0	03/11/2008
NNP-PI-11-01	Screen and Evaluation of COL Applicant Changes to a Design Change Document (DCD)	1	06/10/2009
NNP-PI-11-02	Guidance and Instructions for Completing Screens and Evaluations of Changes to DCDs	1	06/10/2009
NNP-PI-11-03	10 CFR Part 52 Screener Training and Qualification Form	1	06/10/2009
NNP-PI-11-04	Departure Screening/Evaluation Review and Approval Form	1	06/10/2009

Table 1. 2009 Preconstruction Costs

Category	2009 Actual Costs
Licensing	$30,271,612
Permitting	$991,090
Engineering & Design	$6,445,161
Long Lead Procurement	$0
Power Block Engineering & Procurement	$23,662
Total Preconstruction Costs	**$37,731,525**
Transmission	$0
Total Preconstruction Costs & Transmission	**$37,731,525**

Table 2. 2009 Licensing Costs

Category	2009 Actual Costs
NNP Team Costs – NNP FPL payroll and expenses, FPL Project Team Facilities, FPL Engineering, FPL Licensing	$3,548,305
Application Production – COLA/SCA Contractor, Project A&E, NRC and DCWG fees;	$15,868,758
SCA Oversight	$1,576,206
SCA Subcontractors:	
• ECT – Transmission	$1,044,370
• Golder – Environmental	$1,408,663
• McNabb – Underground Injection	$176,362
SCA Total	$4,205,601
Environmental Services – FPL payroll and expenses, External support expenses	$2,940,930
Power Systems – FPL payroll and expenses, System studies, licensing and permitting support and design activities	$1,307,731
Licensing Legal – FPL payroll and expenses, External Legal Services, Expert Witnesses	$1,782,393
• Regulatory Affairs	$464,230
• Regulatory Accounting	$153,664
Total Regulatory Support	$617,894
Total Licensing	**$30,271,612**

Table 3. 2009 Permitting Costs

Category	2009 Actual Costs
Marketing and Communications – FPL payroll and expenses, External Media Support, Surveys, and Outreach Support, Graphics and Collateral materials	$251,071
Development – FPL payroll and expenses, various studies	$749,960
Legal – FPL payroll and expenses, external support for permitting legal specialists	($9,941)
Total Permitting	**$991,090**

Table 4. 2009 Engineering and Design Costs

Category	2009 Actual Costs
Engineering and Construction Team – FPL payroll and expenses, Preconstruction project management	$2,089,344
Pre-construction External Engineering – construction planning	$4,026,065
APOG Membership Participation	$52,022
EPRI Advanced Nuclear Technology	$277,730
Total Engineering and Design	**$6,445,161**

Table 5. 2009 Power Block Engineering & Procurement Costs

Category	2009 Actual Costs
Power Block Engineering & Procurement Costs	$23,662
Total Power Block Engineering & Procurement Costs	**$23,662**

FPL

PTN 6&7 Project Memorandum

Memo No. 2009 - 01 Date: 11/10/2009

From: Steven Scroggs

Subject: Decision to Withdraw Limited Work Authorization Request

Background

As a part of its June 30, 2009 Combined Operating and Construction License Application (COLA) to the Nuclear Regulatory Commission (NRC), FPL requested a Limited Work Authorization (LWA). It was expected that, if granted by the NRC, the LWA would provide FPL with approvals required to perform NRC jurisdictional construction activities at the Turkey Point 6 and 7 site in advance of issuance of the Combined License. For example, work such as certain foundation preparation activities in the vicinity of the nuclear reactor island are conducted under NRC jurisdiction and therefore would require advanced explicit approval in the form of an LWA.

During the early stages of the project in late 2007 and early 2008, FPL developed a preliminary project schedule including an assumed license review schedule, preliminary construction activities and other engineering activities. The preliminary project schedule recognized that start dates and durations of the many activities involved were estimated, and could reasonably vary depending on many factors.

FPL's preliminary project schedule work suggested that applying for and obtaining an LWA offered potential value to FPL customers by providing an opportunity to accomplish certain NRC jurisdictional activities in advance of the issuance of a Combined License. This would increase the likelihood of meeting the projected 2018 commercial operating date for Unit 6 or, in the event that the COLA is delayed the LWA could allow the opportunity for interim progress to be made reducing the impact of any delay in the NRC COLA review process. As demonstrated in the analysis for the Need Determination, and subsequently in annual feasibility analyses, all other things being equal, FPL customers benefit more from earlier delivery of the new nuclear capacity by beginning to realize fuel cost and emission compliance cost savings sooner.

It was therefore determined that an LWA request should be included in the COLA to provide FPL the option to pursue certain construction activities as early as possible.

Situational Analysis

Over the past 18 to 24 months, following the creation of the preliminary project schedule used in the development of the COLA, further refinement of the preliminary schedule has affected FPL's assessment of the value offered by an LWA. The information was developed as a result of further FPL work regarding the sequence of construction, an increased understanding of the magnitude and duration of the specific activities involved, and monitoring of ongoing regulatory processes.

Construction planning analysis of increasing detail provided a more complete picture of the specific undertakings required. The analyses indicated that new activities should be added and the durations of certain previously-recognized activities increased. While these more recent analyses support that the targeted date of 2018 for Unit 6 is still attainable, the site preparation activities (i.e., those activities needing to take place before NRC jurisdictional activities can commence) occupy a greater period of time than previously considered. The results of the refined analysis showed a greatly reduced potential window of time to accomplish LWA activities, defined as the time between completion of site preparation activities and issuance of a Combined License. Therefore the potential value of the LWA for the project is greatly diminished.

In FPL's assessments it is also mindful of the evolving regulatory environment. Based upon available information, FPL's current assessment is that continuing with the request for a LWA could have a material adverse impact to the schedule and sequence of review of the COLA. Accordingly, in addition to the diminished potential value of the LWA noted above, the risk of increasing the review time of the overall license must also now be considered.

Finally, the economic situation in Florida and the country has changed significantly since early 2008. As always, FPL must consider the dynamic economic situation as it plans its overall project schedule. Our deliberate stepwise process favors collecting as much information as possible, therefore reducing uncertainty prior to committing to significant project expenditures. Given the current economic situation, it is possible that FPL would not choose to undertake significant site preparation and LWA activities prior to Combined License issuance. This possibility must also be considered in FPL's decision making.

Cost and Schedule Impacts

FPL has two options with respect to its LWA request from this point forward. FPL could maintain its LWA request, and ask the NRC to review and adjudicate the request, or FPL could withdraw the LWA request.

If FPL were to maintain the LWA request, the result could be a longer than previously expected COLA review schedule resulting in an LWA that is now estimated to offer little value.

If FPL were to withdraw the LWA request, it would forego any minor value that might be available from an approved LWA but it would increase the likelihood of a more expeditious COLA review schedule. It should also be noted that the incremental cost necessary to develop the LWA was very small (under $15,000), as the LWA request itself simply consists of several COLA sections that were already being developed for the main application.

Determination

FPL has determined, given due consideration of all factors described above, that the better course of action is to withdraw the LWA request. The withdrawal will be made by submitting written notification of the withdrawal in correspondence to the NRC.