BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 110009-EI
FLORIDA POWER & LIGHT COMPANY

MARCH 1, 2011

EXTENDED POWER UPRATES - 2009

TESTIMONY & EXHIBITS OF:

TERRY O. JONES

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DIRECT TESTIMONY OF TERRY O. JONES

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Q. Please state your name and business address.

A. My name is Terry O. Jones, 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 Vice President, Nuclear Power Uprate.

Q. Please describe your duties and responsibilities in that position.

A. In my current role, I report directly to the Chief Nuclear Officer. I am responsible for the management and execution of the Extended Power Uprate ("EPU" or "Uprate") Project.

Q. Please describe your educational background and professional experience.

A. I was appointed Vice President, Nuclear Power Uprate on August 1, 2009. In my current position I provide executive leadership, governance and oversight to ensure the safe and reliable implementation of the EPU Projects for the four FPL nuclear units.

I joined FPL in 1987 in the Nuclear Operations Department at Turkey Point. Since then, my positions at FPL have included Vice President, Operations, Midwest Region; Vice President, Nuclear Plant Support; Vice President, Special Projects; Vice

President, Turkey Point Nuclear Power Plant; Plant General Manager; Maintenance Manager; Operations Manager and Operations Supervisor. Prior to my employment at FPL, I worked for the Tennessee Valley Authority at the Browns Ferry Nuclear Plant and served in the US Nuclear Navy. I hold a Bachelors of Science degree and an MBA from the University of Miami.

Q. Are you sponsoring any exhibits in this proceeding?

A. Yes, I am sponsoring the following exhibits which are incorporated herein by reference:

- Exhibit TOJ-1, T-Schedules, 2009 EPU Construction Costs, containing schedules T-1 through T-7A. Page 2 of Exhibit TOJ-1 contains a table of contents listing the schedules that are sponsored and co-sponsored by FPL Witness Powers and myself.
- Exhibit TOJ-2, 2009 Extended Power Uprate Project Instructions (EPPI) Index as of December 31, 2009
- Exhibit TOJ-3, 2009 Extended Power Uprate Project Organization Chart
- Exhibit TOJ-4, Extended Power Uprate Project Reports - 2009
- Exhibit TOJ-5, St. Lucie Low Pressure (LP) Turbine Rotors
- Exhibit TOJ-6, St. Lucie Low Pressure (LP) Turbine Rotor Rings
- Exhibit TOJ-7, St. Lucie Low Pressure (LP) Turbine Rotor Ring Testing
- Exhibit TOJ-8, Plant Change Modification (PCM) Status as of December 31, 2009
- Exhibit TOJ-9, Extended Power Uprate Equipment List as of December 31, 2009
- Exhibit TOJ-10, Extended Power Uprate Project Schedule as of December 31, 2009
- Exhibit TOJ-11, Summary of 2009 Extended Power Uprate Construction Costs

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present and explain the EPU project, key management decisions and Uprate project activities that occurred in 2009, FPL's 2009 construction expenditures, and the procedures, processes and controls that ensure that those expenditures are reasonable and the result of prudent decision making. My testimony also explains the careful engineering-based process employed by FPL to ensure that it is including only nuclear uprate costs that are "separate and apart" from other costs, such as those for base rate nuclear operations and maintenance or capital projects that are unrelated to the nuclear Uprates.

Q. Please summarize your testimony.

A. The EPU project is a complex undertaking to safely increase the capacity of FPL's four existing nuclear units – St. Lucie (PSL) Units 1 & 2 and Turkey Point (PTN) Units 3 & 4 – which will provide significant and quantifiable benefits for customers without expanding the footprint of FPL's existing nuclear power plant sites. Upon completion, FPL estimates that approximately 450 megawatts electric power (MWe) of baseload, non-greenhouse gas emitting generation will be provided by the EPU project for FPL's customers, and that customers will realize significant fuel cost savings as a result.

The project team is in the process of performing design engineering, procuring long lead equipment and materials, obtaining regulatory approvals, and implementing plant modifications to support the uprate conditions in multiple refueling outages for each of the nuclear units. This process is supported by robust and overlapping project schedule and cost controls, along with rigorous risk management. Additionally, the EPU team

manages the Uprate work in a manner that ensures that only the costs necessary for the Uprates are expended and included in the Nuclear Cost Recovery process.

Significant progress was made in 2009, including continued engineering evaluation and analyses in support of EPU License Amendment Request (LAR) submittals to the Nuclear Regulatory Commission (NRC), the submittal of the PTN Alternative Source Term (AST) LAR to the NRC, activities and quality inspections related to the manufacture of long lead equipment, the management and implementation of the Engineering Procurement and Construction (EPC) contract, and detailed reviews of the modification installation planning and EPU outage schedules. Also, FPL made adjustments to the project organizational structure reflecting a shift of responsibilities to the individual sites, revised several project instructions, and continued with project staffing. Overall, FPL prudently incurred approximately $238 million in EPU costs during 2009, as compared to the May 1, 2009 actual/estimated amount of approximately $259 million.

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

A. My testimony includes the following sections:

1. 2009 Project Summary
2. Project Management Internal Controls
3. Procurement Processes and Controls
4. Internal/External Audits and Reviews
5. "Separate and Apart" Considerations
6. 2009 Project Activities

7. 2009 Construction Costs

8. Conclusion

2009 PROJECT SUMMARY

Q. What is the EPU Project?

A. The EPU project will increase FPL's nuclear generating capacity from its four existing nuclear units by fitting the units with higher capacity and more efficient turbines and other necessary equipment to accommodate increased steam flow that will result from loading fuel with increased reactivity into each reactor. This involves the modification or outright replacement of a large number of components and support structures within FPL's operating nuclear power plants. Each modification/replacement is considered a project in and of itself. In the case of some major modifications, some permanent plant equipment will have to be removed and then reinstalled as a part of the construction process.

Because the project will modify FPL's operating nuclear plants, it is a much different construction project than constructing a new combined cycle generating unit at a greenfield site. FPL plans to perform the modifications during the units' pre-planned refueling outages. Performing the Uprate work during the refueling outages minimizes the amount of time that these low fuel-cost generators are off line.

Upon completion, the Uprates will produce a minimum of 399 MWe and could produce a theoretical maximum of up to 463 MWe for FPL's customers. The minimum reflects FPL's need determination assumption (414 MWe), less the St. Lucie Unit 2 co-owners' share of the output. The maximum reflects the turbine vendor's estimate of the turbine generator's performance (approximately 500 MWe) if the "best case scenario" of plant parameters are achieved, less the co-owners' share of PSL Unit 2 and increased plant electrical requirements. Taking into account the current uncertainty of whether "best case" plant parameters will be achieved, FPL's current estimate is that a total of about 450 MWe will be produced by the uprated units for FPL's customers.

Q. How will customers benefit from the EPU project?

A. Among other benefits, this increase in nuclear power will: (i) enhance system reliability and integrity by diversifying FPL's fuel mix; (ii) provide energy and baseload capacity to FPL's customers with zero greenhouse gas emissions; and (iii) provide significant fuel cost and environmental compliance cost savings. Some of these benefits will be realized as early as 2011, when the replacement of a low pressure turbine generator at St. Lucie Unit 2 with a more efficient low pressure turbine generator will result in a projected total increased electrical power output of approximately 20 MWe and FPL's customers are projected to receive approximately 17 MWe of this increased output. Quantification of these types of benefits will be provided along with an updated project feasibility analysis in FPL's May 2011 testimony.

Q. Please describe the general approach to the EPU project.

A. In 2007, FPL prepared an initial conceptual engineering study for performing an EPU at St. Lucie and Turkey Point which included a conceptual cost estimate based on a preliminary scope. This study provided the basis for FPL's request for a determination of need. In 2008, Shaw Stone & Webster (Shaw) performed a scoping study which included an order-of-magnitude estimate for part of the preliminary scope. The 2008 Shaw order-of-magnitude estimate was confirmatory of the 2007 FPL conceptual estimate.

The EPU project is currently being implemented in four overlapping phases.

1. In the Engineering Analysis Phase, the analyses that support the LAR are performed. During this phase, the major modifications required to implement the EPU are identified and confirmed, the LARs are prepared and submitted to the NRC for review, the NRC approves a license amendment for each plant (or unit, as applicable), and the conceptual scope is better defined.
2. In the Long Lead Equipment Procurement Phase, the major long lead equipment is procured. During this phase, purchase specifications are developed, vendor quotes are requested, vendor proposals are received and evaluated, contracts are awarded, and the cost of long lead equipment is better defined.
3. In the Engineering Design Modification Phase, the detailed modification packages are prepared. During this phase, calculations are prepared, construction drawings are issued, some equipment and materials are procured, general installation instructions are provided, and high level testing requirements are identified. These

activities provide the basis for preparing detailed estimates of the implementation costs.

4. The final Implementation Phase consists of two major parts. The first is planning and scheduling. Planning is the process to convert the design packages into detailed work orders for implementation. During this part of the implementation, revisions to the design may be warranted based on constructability. Scheduling is the process that takes the detailed work orders and converts them into a detailed integrated implementation schedule which ultimately is the point at which the final outage durations are determined. The second part of the final implementation is actual execution of the physical work in the plant including extensive testing and systematic turnover to operations.

Q. Are some activities being performed in parallel?

A. Yes. FPL is performing many activities in parallel in order to bring the benefits of additional nuclear power generation to its customers as soon as practical. The current project schedule is approximately 5 years long, and all necessary work is being performed prior to a particular unit's outage. On the other hand, if FPL had worked through each phase of the project in sequence (i.e., by performing all LAR analyses for all units first, then procuring all equipment for all units next, etc.) the EPU project would have taken many more years. Additionally, by performing EPU work in this manner, Floridians will receive the benefit of approximately 20 additional electrical megawatts of nuclear power from St. Lucie Unit 2 in 2011 – prior to the unit operating at its final uprated level – by virtue of the installation of a more efficient low pressure

turbine generator. FPL's customers are projected to receive approximately 17 MWe of this increased output.

Q. Does FPL include industry best practices into the work being performed for the EPU project?

A. Yes. For example, the FPL project team members participate in nuclear industry working groups organized by the Institute of Nuclear Plant Operations (INPO) and the Nuclear Energy Institute (NEI) and benefit from lessons learned. This is supplemented with direct engagement with our industry peers through benchmarking trips to other nuclear sites which have performed similar scopes of work to incorporate best practices. These sources help ensure project decisions are supported by the best information currently available.

Q. Please briefly describe the status of the project in 2009.

A. Through 2009, the EPU project was well into the Engineering Analysis Phase and about half-way through the Long Lead Procurement phase, and only in the early stages of Engineering Design Modification and Implementation. The project scope was not (and is not at the date of this testimony) fully defined and thus definitive cost estimates were not completed – nor were they expected to be completed.

Q. Will project scope continue to evolve as the project moves forward?

A. Yes. Even after completion of the engineering analyses required for the LAR submittal, the potential exists that additional scope will be required by the NRC. After the NRC approves the LARs, the project scope will be further defined and, commensurate with engineering design modification progress, the cost estimate range will be further adjusted. Once the modification packages are final and the work order

planning is complete, the implementation scope will be fully defined allowing the final refinement of the detailed implementation cost estimates and schedule durations. These activities lead to increased cost certainty with the achievement of each milestone.

Q. Please provide a brief overview of 2009 activities and costs.

A. Several key activities occurred in 2009, including: (i) continued forward-looking project management which included modification of the EPU project management organization and adjustments to project procedures; (ii) submittal of the AST LAR to the NRC in support of the Turkey Point Units 3 and 4 uprate and continued engineering analyses in support of submitting the EPU LARs; (iii) the execution of vendor contracts for long lead equipment and quality inspections of long lead equipment; (iv) modification engineering for the St. Lucie and Turkey Point units; (v) rigorous management of the EPC vendor and consideration of EPC alternatives; and (vi) detailed reviews of the modification installation planning and EPU outage modification assignments. In total, FPL spent approximately $238 million in 2009 (as compared to the $259 million that was previously estimated) to carry out these key activities and proceed with the development of the Uprate projects, all of which work was subject to the robust project planning, management, and cost control processes that FPL has in place and continuously works to improve.

FPL's EPU activities and expenditures, as well as its internal processes and controls, are described in more detail below.

PROJECT MANAGEMENT INTERNAL CONTROLS

Q. Please describe the EPU project management organization during 2009.

A. As described below, FPL has robust project planning, management, and execution processes in place. These efforts are spearheaded by personnel with significant experience in project management within the nuclear industry. Additionally, the EPU project uses guidelines and Project Instructions to assist project personnel in the performance of their assigned duties. Exhibit TOJ-2, Extended Power Uprate Project Instructions (EPPI) Index as of December 31, 2009 is provided to illustrate the types of instructions that were used.

FPL has a dedicated Nuclear Power Uprate team within the NextEra Energy, Inc. Nuclear Division that is responsible for monitoring and managing the uprate project, schedule, and costs. During the earliest stages of the project through mid-2009, the organization was largely centralized, with support from smaller EPU Project groups at the respective St. Lucie and Turkey Point Sites. This organizational structure was appropriate – and indeed effective – for the solicitation and execution of major contracts and preliminary project-planning activities.

As would be expected for a continuously evolving project, in June 2009, it was appropriate to transition from an organization that was centralized to a decentralized organization as the project progressed into the Implementation Phase. The move would allow for better alignment and integration of EPU activities with operating plant

processes. This organizational change was implemented in conjunction with a broader Nuclear Division reorganization. As implemented in 2009, and continuing today, there is an EPU Site Director and an EPU organization at each site responsible for the efficient and effective engineering and implementation of the EPU project modifications. Exhibit TOJ-3, Extended Power Uprate Project Organization Chart, illustrates the organizational structure after it was modified effective August 2009, as the project entered a new stage of execution.

There is also a separate Nuclear Business Operations (NBO) group that provides accounting and regulatory oversight for the EPU Project. This organization is independent of the EPU Project team and reports to the Nuclear Division Controller.

Q. Please describe the role of the NBO group in more detail.

A. As described in EPPI-150, NBO provides accounting and regulatory oversight for the EPU Project. It is independent of the EPU Project team and reports to the Nuclear Division Controller. NBO's primary responsibilities include:

- Review, approval, and recording of monthly accruals prepared by the Site Cost Engineers;
- Conducting monthly detail transaction reviews to ensure that labor costs recorded to the EPU Project are only for those FPL personnel authorized to charge time to the EPU Project;
- Conducting on-going analysis to evaluate project costs to ensure they are "separate and apart";

- Creating monthly variance reports that include cost figures used in the EPU Monthly Operating Performance Report;
- Performing analyses of the costs being incurred by the project to ensure that those costs are appropriately allocated to the correct Capital Expenditure Requisitions established for each nuclear unit's outages;
- Assisting in the classification of Property Retirement Units;
- Setting up and maintaining the EPU Project account coding structure;
- Providing accounting guidance and training to the EPU Team;
- Working closely with FPL's Accounting and Regulatory Accounting Departments to determine which costs related to the EPU Project are capital and which are O&M;
- Managing internal and external financial audit requests and ensuring that findings and recommendations are dispositioned, as appropriate; and
- Providing oversight and guidance to the EPU Project Team in developing and maintaining accounting-related project instructions to ensure compliance with corporate policies and procedures and Sarbanes Oxley processes.

Q. What other schedule and cost monitoring controls were in place during 2009?

A. FPL utilizes a variety of mutually reinforcing schedule and cost controls and draws upon the expertise provided by employees within the project team, employees within the separate NBO group, and executive management. Within the organization of the Vice President, Nuclear Power Uprate is a Controls Group. The Controls Director provides functional leadership, governance and oversight. Each site has a dedicated EPU Project Controls group lead by a Project Controls Supervisor. The site Project Controls organization provides cost and schedule analysis and associated performance

indicators on a routine and forward-looking basis thus allowing Project Management to make informed decisions. Exhibit TOJ-4 lists many of the reports that are a direct result of the information the Controls organization provides, analyzes and produces.

FPL's efforts to meet the desired completion date of each uprate is tracked through the use of Primavera P-6 scheduling software, enabling FPL to track the schedule daily and update the schedule weekly. This allows project management to monitor and report schedule status on a periodic basis. Updates to the schedule and scope of project are made as such changes are approved by management. FPL's use of this scheduling software system allows management to examine the project status at any time as well as request the development and generation of specialized reports to facilitate informed decision making. When FPL identifies a scheduled milestone date that may have a high probability of missing its schedule date, a mitigation plan is prepared, reviewed, approved, and implemented with increased management attention to restore the scheduled milestone date or mitigate any impact of missing the scheduled date.

As part of the site Project Controls Group there are several highly experienced Cost Engineers assigned to monitor, analyze, and report project costs associated with the Uprate Projects. Governed by well established procedures and work instructions, the Cost Engineer receives contractor invoices and forwards them to technical representatives to ensure the scope of work has been completed and the deliverables have been accepted. For fixed-price contracts, the Cost Engineer matches the invoice amount to the correct amount and the deliverable work received from the subject

matter expert, which is then sent to the appropriate personnel for approval and payment. The Cost Engineer also prepares accruals and reviews variance reports monthly for each of the sites, to monitor and document expenditures and commitments to the approved budget. The Project Controls organization operates in a transparent manner and its accountability is clear in providing sound analysis based on all available information at their disposal.

Q. What periodic reviews were conducted in 2009 to ensure that the project and key decisions were appropriately analyzed and vetted?

A. Regularly scheduled meetings are held to help effectively manage the uprate project and communicate the performance of the project in terms of quality, schedule and costs. In 2009, these included the following:

- Daily meetings to mutually share lessons learned information from each of the projects and to coordinate project activities;
- Weekly project management, project controls, and risk meetings to review the status of the schedules and project costs, and to identify areas needing attention;
- Biweekly meetings with the Chief Nuclear Officer; Vice President, Power Uprate; Implementation Owner South; and other project leaders to review project progress and work through any identified risks to schedules or costs;
- Routine, usually monthly, FPL Executive Steering Committee meetings where project management presents the status of the project. Strategy discussions take place to help improve management of risk areas;
- Monthly Project Meetings involving FPL and individual major vendors during which the project schedules and challenges are discussed; and

- Quarterly Project Meetings involving FPL and its major vendors during which strategy discussions take place to help improve management of risk areas.

The EPU Project also produces several reports. Exhibit TOJ-4, Extended Power Uprate Project Reports, is a listing of reports generated by the project during 2009 with a brief description, the periodicity, and the intended audience of each report. Generally, the project reports provide a status of the project, scope changes, schedule and cost adherence/variance, safety, quality, risks, risk mitigation, and a path forward as appropriate. The information provided by these reports assists in the overall management of the EPU Project.

Finally, the project is annually reviewed to assess its continued economic feasibility. This analysis is conducted in a similar manner to the analysis that supported the affirmative need determination by the Commission, but it is updated to reflect engineering progress and what is currently known regarding project scope and project cost, project schedule, and the cost and viability of alternative generation technologies. The analyses submitted by FPL Witness Sim in 2008 and 2009 demonstrated that the EPU project continued to present a significant economic advantage in a majority of fuel and environmental compliance cost scenarios. An updated feasibility analysis will be provided on May 1, 2011.

Q. Please describe the risk management process for the EPU project.

A. FPL's risk management process is governed by EPPI-340 and EPPI-345. FPL's risk management process is used to identify and manage potential risks associated with the

Uprates. A Project Risk Committee, consisting of site project directors and subject matter experts reviews and evaluates initial cost and schedule projections and any potential significant variances. This committee enables senior managers to critically assess and discuss risks faced by the EPU projects from different departmental perspectives. The committee also ensures that actions are taken to mitigate or eliminate identified risks. When an identified risk is evaluated as high, a risk mitigation action plan is prepared, approved, and executed. The high risk item is monitored through this process until it is reduced or eliminated. Additionally, an EPU Project Risk Management report is presented at meetings with senior management, identifying potential risks by site, unit, priority, probability, cost impact, and the unit or persons responsible for mitigating or eliminating the risk. These steps ensure continuous, vigilant identification of and response to potential project risks that could pose an adverse impact on cost or schedule performance of the project.

Q. Please describe the risk management process as it applies to Operational risk.

A. EPU Project work will be performed during normal plant operations and during planned refueling outages. The amount of work that can be safely performed during these plant conditions is dependent upon the minimum required systems or components needed to support the plant operating condition. Extreme care in the planning, scheduling, and execution of the work activities is required to ensure the plant is operated in accordance with applicable NRC regulatory and plant technical specification requirements. This requires proper sequencing of work activities that can be safely performed during normal plant operations or those that must be performed during planned refueling outages, including work activities that can be safely

performed in parallel and those that must be performed in series. This operational risk management accomplishes two major objectives: first is to ensure the equipment is in a state that makes it safe for workers to perform the work, and secondly that the plant systems and components are properly maintained to ensure public safety. This operational risk management through the careful planning, scheduling and execution of work activities, adds to the complexity of the implementation phase of the EPU project.

PROCUREMENT PROCESSES AND CONTROLS

Q. Please describe the contractor selection and contractor management procedures that applied to the EPU projects in 2009.

A. The contractor selection procedures applicable to the uprate project are found in General Operating Procedure 705 and Nuclear Fleet Policy NP-1100, Procurement Control. As explained in those policies, the standard approach for the procurement of materials or services with a value in excess of $25,000 is to use competitive bidding. During 2009, the majority of the equipment and work contracted out for the EPU project was competitively bid. However, the use of single source, sole source, and Original Equipment Manufacturer (OEM) providers is also necessary in certain situations. FPL's policies require proper documentation of justifications and senior-level management approval of single or sole source procurements.

Over the course of 2009, and in response to considerations raised by the Commission in the 2008 NCRC proceedings, FPL identified opportunities to improve the documentation of its procurement practices and began implementing enhanced measures late in 2008. FPL has maintained its focus on the process of documenting and approving single and sole source procurements, to ensure compliance with NP-1100 and to facilitate review by third parties who are not directly involved in the nuclear procurement process. Training is provided to personnel responsible for having Single and Sole Source Justifications (SSJs) prepared, the SSJ expectations are included in appropriate project instructions, and all new applicable personnel assigned to the EPU Project are required to review and understand the SSJ expectations.

With respect to vendor management, the EPU Project Directors at each site assure vendor oversight is provided by the Site Senior Project Managers, Project Managers, the site Technical Representative, and Contract Coordinators. Together, these representatives provide management direction and coordinate vendor performance reviews while the vendors are on site. The Site Technical Representative verifies that the vendor has met all obligations and determines whether any outstanding deliverable issues exist using a Contract Compliance Matrix. In addition to assisting with the development and administration of contracts, Nuclear Sourcing and Integrated Supply Chain (ISC) groups complete updates as necessary to a Project Contract Log and report the status of contracts to project management. EPU management also holds quarterly vendor integration meetings as mentioned above.

Q. What is FPL's approach to contracting for the EPU project?

A. FPL structures its contracts and purchase orders to include specific scope, deliverables, completion dates, terms of payment, commercial terms and conditions, reports from the vendor, and work quality specifications. Project Management has several types of contracts available depending on how well the scope of work and the risk associated with the work scope can be defined. Fixed price or lump sum contracts are used where practical. An example would be where project work scope is well-defined and risk is limited. Project Management will use a time and material contract where project work scope is not well-defined and where there is greater risk to completing the work scope. These and other contract provisions help ensure the contractors perform the right work at the right time for the right price, which benefits FPL's customers.

INTERNAL/EXTERNAL AUDITS AND REVIEWS

Q. Are FPL's financial controls and management controls audited?

A. Yes. Several audits have been conducted to ensure compliance with applicable project controls.

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

A. In 2010, Jefferson Wells on behalf of the FPL Internal Audit Department conducted an internal audit of the 2009 expenses charged to the EPU project. Specifically, the audits focused on whether costs charged to the project are actually for the EPU project and are recorded in accordance with FPSC Rule 25-6.0423. Independent testing of expenses charged to the EPU project for the period January 1, 2009 to December 31,

2009 was conducted. The overall opinion was that the controls over the EPU project are adequate and Jefferson Wells identified no significant issues.

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

A. FPSC staff completed two audits in 2009 – a financial audit and an internal controls audit. FPL also engaged Concentric Energy Advisors to conduct a review of project management in 2009. Witness Reed discusses Concentric's review of the EPU Project in his testimony.

"SEPARATE AND APART" CONSIDERATIONS

Q. Would any of the EPU costs included in FPL's filing have been incurred if the FPL nuclear generating units were not being uprated?

A. No. The construction costs and associated carrying charges and recoverable Operations & Maintenance (O&M) expenses for which FPL is requesting recovery through the NCRC process were caused only by activities necessary for the Uprate projects, and would not have been incurred otherwise. I note that as explained in FPL Witness Powers' testimony and schedules, only carrying costs and recoverable O&M expenses are requested for recovery for the EPU Projects, consistent with the Commission's NCRC rule.

Q. Please explain the processes utilized by FPL to ensure that only those costs necessary for the implementation of the Uprates are included for NCRC purposes.

A. FPL conducted engineering analyses to identify major components that must be modified or replaced in order to enable the units to function safely and reliably in the uprated condition. However, as inspections, LAR engineering analyses, and design engineering modifications are performed, the need for additional modifications or replacements necessary for the Uprate may be identified. Likewise, it may be determined that certain modifications previously identified as necessary to the Uprate project are determined not to be necessary for the Uprate and can be removed from the scope.

Further, FPL considered whether any of the major component modifications or replacements required for the Uprates were already required as a condition of receiving its NRC license renewals. FPL reviewed the "License Renewal Action Items" issued by the NRC and compiled by FPL in conjunction with the approval of FPL's requested license renewals. In doing so, it verified that none of the major component modifications or replacements identified by FPL as necessary for the EPU project were duplicative of the activities required by the NRC for license renewals. FPL also confirmed that none of the EPU activities were previously planned as regular O&M or capital improvement. Additionally, when a scope change is required, a review of the NRC License Renewal Action Items and the seven year capital expenditure plan is conducted to ensure the proposed scope change is separate and apart. FPL's 2009 EPU activities, and their associated costs, were "separate and apart" as required by the NCRC process.

2009 PROJECT ACTIVITIES

Q. What key activities occurred in 2009 in execution of the uprate projects?

A. Several key activities occurred in 2009, including: (i) submittal of the AST LAR to the NRC in support of the Turkey Point Units 3 and 4 uprate and continued engineering analyses in support of submitting the EPU LARs; (ii) the execution of vendor contracts for long lead equipment and quality inspections of long lead equipment; (iii) modification engineering for the St. Lucie and Turkey Point units; (iv) rigorous management of the EPC vendor; and (v) detailed reviews of the modification installation planning and EPU outage modification assignments.

Q. Please describe the Project Management structure for the EPU Project.

A. The management structure that was in place from project inception through the first half of 2009 was appropriate for the earliest stages of the project. The management structure that was in place for the last half of 2009 was appropriate as the EPU Project moved into the implementation phases at each of the sites. These changes permit EPU project personnel to more efficiently integrate with the site unit staff for planning and scheduling the installation of EPU modifications. These activities include, but are not limited, to the following:

- arrival and safe storage of EPU components and equipment;
- any baseline inspections or testing needed in support of the EPU project;
- direct management and oversight of the EPC contractor and other vendors used in preparing engineering modifications or specification development;
- FPL engineering reviews and acceptance of vendor prepared documents;

- work order planning of the modifications;
- implementation of the modifications;
- accurate accounting for the EPU costs being incurred; and
- development of scope changes necessary for the success of the EPU Project.

Q. Did FPL incur any imprudent costs in the reorganization of the EPU project team or the broader Nuclear Division reorganization discussed previously?

A. No. FPL did not incur any imprudent costs as a result of the project reorganization. To the contrary, reorganizing project management by shifting more responsibilities to the sites was the prudent course of action as the project enters its implementation stage. With respect to the Nuclear Division reorganization, this change did not affect the types or amounts of costs incurred for the EPU project.

Q. Please describe the license amendment preparation and submittal activities in 2009.

A. FPL submitted to the NRC the AST LAR for Turkey Point Units 3 and 4 on June 25, 2009. The NRC accepted the AST LAR for review on September 25, 2009, and the review and approval process was expected to take approximately 12 months. As of the time of this filing, the NRC had not completed its review. The AST LAR includes uprate conditions information and is required by the NRC prior to submitting the EPU LAR. The potential exists that additional EPU project scope may be required as a result of the NRC's AST LAR review process.

FPL also continued to manage the engineering analyses and preparations of the EPU LARs to the NRC and respond to NRC Requests for Additional Information (RAIs) in

a timely manner. There is one EPU LAR submittal for Turkey Point and two EPU LARs for St. Lucie (one for each unit). One EPU LAR for each St. Lucie unit is required due to the differences in the plant design bases and the nuclear fuel used in each of the units. Work was conducted in 2009 to support the planned submittal of the three EPU LARs in 2010.

Q. Please describe the engineering analyses in support of License Amendment Requests in more detail.

A. The EPU LARs contain nuclear fuels, mechanical, electrical, chemical and material engineering evaluations required for NRC review and approval of the uprated condition. For example, the engineering analyses conducted in 2009 included a review of the Nuclear Steam Supply System (NSSS) design bases using the power uprate parameters to ensure the original design safety margins could be maintained, or are not challenged, when a plant is operated in the uprate condition.

Q. Who is performing these analyses?

A. Engineering analyses for the St. Lucie and Turkey Point EPU LARs are being performed by the following major organizations: Westinghouse, which is an OEM for the NSSS and is one of the fuel suppliers (PTN 3 and 4 and PSL 1); Shaw Stone & Webster, which is performing the secondary or Balance of Plant (BOP) analyses; Areva, which is an OEM for portions of the NSSS and is one of the fuel suppliers (PSL 2); and FPL, which reviews engineering materials prepared by the contracted companies.

Q. Were any state regulatory approvals sought or obtained in 2009?

A. Yes. Agreement on the Conditions of Certification for the Turkey Point Site Certification Amendment was reached with the South Florida Water Management District on October 14, 2009, favorably closing out this issue.

Q. Please describe activities related to the Long Lead Procurement phase in 2009.

A. The engineering analysis was completed for major equipment and components in 2009. Several increased capacity heat exchangers, pumps, and motors were specified and contracted. Adjustments to the milestone payments for some of the long lead equipment items resulted in fewer payments being made in 2009 and orders for equipment were rescheduled as a result of the adjusted outage modification assignments.

Significant progress was made in 2009 on the manufacturing of items previously contracted, including the turbine closed cooling heat exchangers, high pressure (HP) feedwater heat exchangers, moisture separator reheaters, main feedwater pumps, feedwater heat exchangers, main condensers, turbine plant cooling water heat exchangers, feedwater isolation valves, and other components. The St. Lucie main turbine low pressure (LP) rotors were forged and machined in 2009. Exhibits TOJ-5 through TOJ-7 are pictures of the manufacturing process for the St. Lucie LP Rotor and illustrate the size and nature of these major forgings. Exhibit TOJ-5 is a picture of the machined St. Lucie LP turbine rotors. Exhibit TOJ-6 is a picture of the St. Lucie LP turbine rotor rings that will hold the turbine blades.

Q. Please describe the quality inspections related to the manufacture of long lead equipment for the EPU Project.

A. FPL Quality Assurance (QA) personnel witnessed various portions of the manufacturing process and performed vendor audits of the manufacturer's processes to ensure vendor quality control processes were adhered to and specifications were being met. For example, Exhibit TOJ-7 is a picture of a vendor technician performing ultrasonic testing to evaluate the integrity of one of the St. Lucie LP turbine rotor rings. This process was witnessed by FPL QA personnel. QA verified that the individual performing the testing was qualified to operate the equipment and perform the testing and that the instrumentation was properly calibrated. QA prepares reports of their inspections/audits.

Q. Please describe the management of the major EPU project vendors in 2009.

A. At all times EPU management exercises vigilant oversight of its vendors, including routine visits to its vendors' headquarters, and adherence to the internal management controls and vendor oversight controls discussed above. Throughout 2009, FPL particularly focused on the staffing projections being provided by its EPC vendor to begin the engineering for the Plant Change Modifications (PCM). A PCM will include as necessary the mechanical, electrical, civil, instrumentation and control requirements, requirements for removing interferences, and requirements for installing and pre-operational or operational testing of the equipment as appropriate. When a PCM nears completion, a more definitive cost for that modification can be estimated for use in project management and budgeting. Early in 2009, the EPC vendor proposed

mobilization staffing and personnel ramp-up that would have resulted in costs that were greater than originally estimated.

Q. How did FPL respond to the EPC vendor's proposals?

A. The EPU site organizations challenged these projections by requiring the EPC vendor to justify each position for mobilization. The site organizations then approved mobilization of only those positions that were appropriate for that stage of the project, including EPC management and engineering staff. Additionally, the corporate EPU organization entered into blanket contracts with three specialty vendors that perform nuclear project estimating with the intent of using their estimating expertise on portions of the EPU project if needed.

During the second quarter of 2009, the EPU project team determined there was a need to more aggressively explore and implement ways to test, validate, and report cost projection information such as that which the Company had begun to receive from its EPC vendor, especially for the out-years of the Uprate project. Also, executive management directed the EPU team to continue challenging the EPC vendor's estimates, to consider alternative EPC vendors for at least a portion of the work, and to engage third party estimating support to assist in advancing the project cost estimate and to use as a tool in challenging vendor estimates. Following several iterations of vendor negotiations and challenges by the site EPU project organizations and EPU management, the EPC vendor's projected staffing levels were adjusted downward, and continue to be adjusted from time to time as appropriate.

Q. What was the effect on the total EPU project cost forecast?

A. The fluctuating vendor proposals were reflected in the standard project cost reports and varied the total project cost forecast at completion from month to month. The project cost forecasts represent a snapshot of current trends but do not necessarily represent everything known about the project. For example, while a particular month's forecast may have incorporated a recent EPC vendor staffing estimate, it would not have reflected the fact that EPU management was considering EPC vendor alternatives with the potential to reduce costs. Due to the extensive project management activity in mid- to late-2009, and considerations that put both upward and downward pressure on potential total project costs, FPL had an insufficient basis upon which to revise its non-binding cost estimate for the EPU project. This topic is also discussed by FPL Witness Art Stall.

Q. Was there any effect on the 2009 EPU project costs?

A. No. The cost uncertainty discussed above concerned future year projections, not current or near-term expenditures. No imprudent costs were incurred in 2009.

Q. What was the status of the Plant Change Modification packages as of December 31, 2009?

A. Exhibit TOJ-8, Plant Change Modification (PCM) Status as of December 31, 2009, is a chart that illustrates the number of identified engineering modifications as of December 31, 2009, the number of PCMs that were initiated, and those that reached 30%, 90%, and final completion. As can be seen in this exhibit, there were 185 PCMs identified of which only 4 were finalized and approved for issuance. This exhibit

demonstrates that the Project was in the very early stages of the implementation engineering.

Q. Does FPL have a list of the equipment modifications planned for the EPU project?

A. Yes. Exhibit TOJ-9, Extended Power Uprate Equipment List, provides a listing of the equipment modifications or replacements, a description as to why it is needed for the uprate conditions, current vendors and contract Purchase Orders (PO) where available, and the source document identifying the equipment modification or replacement, as of December 31, 2009.

Q. Please describe the modification installation planning and EPU outage modification assignments performed by project personnel.

A. In 2009 the project team analyzed which modifications should be performed in which outages based on the long lead equipment schedule for delivery, the sequencing of the outages, vendor capabilities, and the amount of EPU modification work that was proposed for each outage. Discussions took place with executive management, each of the site's outage and operations management, FPL's nuclear fuels department, the major equipment suppliers, and the EPC vendor to determine the impact of changing the implementation sequence of EPU modifications, and an adjustment to the outage assignments was made.

There are some risks associated with adjusting outage modification assignments, including the need to accommodate any additional modifications that result from the NRC's LAR reviews and the ability of the project vendors to integrate outage

sequencing with their other work commitments. But there are several potential benefits to the adjusted outage modification assignments as well. The outage modification assignments will permit an earlier increase in the electrical generation from one of the units, and may also reduce total off-line time which would benefit customers through additional cost savings. Also, because the initial EPU outages will now have more limited scope, the site implementation teams will be able to use initial outage experience to enhance second outage performance, when there will be more scope. Finally, the reassignment provides for more time to develop more of the EPU engineering modifications and installation packages now that they will be implemented during the second outage for each unit. It should be expected, however, that as the LAR reviews, design engineering, and implementation planning progresses, additional changes to outage modification assignments may occur.

Q. As of December 31, 2009, what was the overall EPU project schedule?

A. Exhibit TOJ-10, Extended Power Uprate Project Schedule as of December 31, 2009, illustrates the LAR, long lead material, engineering design, and implementation schedule for the EPU Project. Underlying this high-level schedule are tens of thousands of individually-scheduled activities. These scheduled activities provide a roadmap for the project. Activities are logically-tied to ensure a sequence of activities needed to support a future activity are completed prior to the future activity being started or completed, as required. FPL's overall project schedule in 2009 included the following:

- The LAR analyses were scheduled to be completed and submitted to the NRC with sufficient time for an extended NRC review before the license amendment

approval is needed by FPL to increase the power output at the completion of the second EPU outage for each of the units.

- Long lead material items were scheduled to arrive on site prior to the outage during which the equipment will be installed.
- PCM engineering design for each of the 185 identified modifications was scheduled to be approved for implementation prior to the unit outage when each modification will be implemented.
- Implementation of the EPU modifications was scheduled to be completed during the scheduled refueling outages for each of the units.

Q. Did FPL conduct a "feasibility analysis" of the EPU project in 2009?

A. Yes. FPL Witness Steve Sim conducted a feasibility analysis in 2009, which demonstrated that in all nine combinations of projected fuel cost and environmental compliance cost scenarios the EPU project was the cost-effective choice for FPL's customers. Dr. Sim's analysis and results were discussed in detail in the testimony provided in Docket No. 090009-EI and approved by the Commission.

2009 CONSTRUCTION COSTS

Q. What type of costs did FPL incur for the uprate project in 2009?

A. As demonstrated in Exhibit TOJ-1, Schedule T-6 and T-4, and summarized on Exhibit TOJ-11, Tables 1 through 9, costs were incurred in the following categories: License Application; Engineering and Design; Permitting; Project Management; Power Block Engineering, Procurement, Etc.; Non Power Block Engineering, Procurement, Etc.;

and Recoverable O&M. These costs were the direct result of the prudent project management, decision making, and actions described in detail above. Each category reflects some variance against what was originally estimated and budgeted, which is to be expected, particularly given the relatively early stage of the project. The overall variance in 2009 is driven primarily by the reduced payments for long lead equipment items, downward adjustments to engineering and EPC contractor resources due to the vendor oversight efforts described above, and downward adjustments to staff resources due to the adjusted EPU outage modification assignments. Staffing levels will be increased later in the project to provide appropriate staffing for the EPU long duration outages. Exhibit TOJ-11, 2009 Extended Power Uprate Construction Costs contains summaries of the EPU expenditures in 2009 for each of the NFR schedule categories. Table 1 to Exhibit TOJ-11 is a summary of each of the categories showing the actual expenditure amounts prior to any adjustments.

Q. Please describe the costs incurred in the License Application category and the variance, if any, from the 2009 actual/estimated costs in this category.

A. Licensing Costs consist primarily of charges for consulting and contractor services rendered in support of preparing the LARs. The primary contractors that provide services in this category are Westinghouse, Areva, and Shaw Stone & Webster. FPL incurred $66.9 million in this category in 2009, which was $7.9 million more than the actual/estimated amount. This was primarily attributable to the preparation of more analyses than expected and a longer period of contractor mobilization in performing the NSSS/Fuel Engineering work. The longer period of mobilization and the increased

quantity of analyses are due to additional scope identified during the initial phases of these evaluations.

Q. Please describe the costs incurred in the Engineering and Design category and the variance, if any, from the actual/estimated costs in this category.

A. Engineering & Design Costs consist primarily of costs for FPL personnel and contractor personnel in the FPL engineering organizations at both sites and in the central organization. Some of these personnel provide management, oversight and review of the LAR activities, while others are oriented towards management, oversight and review of the detail design activities being performed by the EPC contractor. FPL incurred $12.6 million in this category in 2009, which is $1.9 million more than the actual/estimated amount. This was primarily attributable to LAR scope growth and actual costs required to manage the EPC contractor engineering effort.

Q. Please describe the costs incurred in the Permitting category and the variance, if any, from the actual/estimated costs in this category.

A. Permitting Costs are primarily attributable to the State of Florida Site Certification Application for the St. Lucie and Turkey Point sites. This consists of consulting services related to environmental work for the Site Certification Application (SCA) and Compliance of Certification (CoC), and FPL employee support. FPL incurred $512,725 in this category in 2009, which was $410,295 more than the actual/estimated amount. This was primarily due to more than expected costs to reach closure on the manner in which FPL would comply with the CoC for the Turkey Point SCA. Specifically, resources were required to develop the scope of the Turkey Point Cooling Canal monitoring program required by the CoC.

Q. Please describe the costs incurred in the Project Management category and the variance, if any, from the actual/estimated costs in this category.

A. Project Management Costs relate to overall project oversight including project and construction management, project controls and non-NRC regulatory compliance. These oversight activities are performed by personnel located at both sites; and by the EPU central organization and by non-EPU organizations such as NBO, New Nuclear Accounting, and Regulatory Affairs. FPL incurred $15.5 million in this category in 2009 which was $4.7 million less than the actual/estimated amount. This was primarily attributable to the movement of more field management responsibilities to the EPC vendor. In addition, the ramp up of EPU project staff was revised to support the adjusted outage modification assignments.

Q. Please describe the costs incurred in the Power Block Engineering, Procurement, Etc. category and the variance, if any, from the actual/estimated costs in this category.

A. The majority of these costs continue to be for milestone payments for long lead equipment items. This includes payments to Siemens for turbines and generator rotors, and payments to TEI for feedwater heaters and moisture separator reheaters, main condensers, and increased capacity heat exchangers and pumps required to support the uprate conditions. These costs also include the EPC vendor contract for the engineering and design of modifications of currently identified project scope. In addition, FPL completed the modifications to the St. Lucie Unit 2 Turbine Gantry Crane in 2009 and incurred most of the expected project costs. On December 4, 2009,

FPL filed a petition to include costs associated with the St. Lucie Unit 2 Turbine Gantry Crane in base rates.

FPL incurred $141.2 million in this category in 2009 which is $26.6 million less than the actual/estimated amount. The majority of the variance is attributable to less than expected utilization of the EPC contractor and deferral of some milestone payments to vendors for the long lead procurement equipment. A contributing factor was the adjusted outage modification assignments which moved some plant modifications between the outages. In 2009, this resulted in a less intensive EPC engineering effort and a less pronounced EPC organization ramp up, and later delivery requirements for certain major equipment.

Q. Please describe the costs incurred in the Power Block Engineering, Procurement, Etc. category for the completed modifications to the St. Lucie Unit 2 Turbine Gantry Crane.

A. The St. Lucie Unit 2 Turbine Gantry Crane upgrade field implementation started in August 2009. Performance testing was completed and the PSL Unit 2 Turbine Gantry Crane was placed in service on December 22, 2009.

The St. Lucie Plant has two Turbine Gantry Cranes, one for each unit. During the initial evaluations of the proposed schedule for implementation of the EPU modifications, the Turbine Gantry Crane activities became the critical path during implementation of the EPU modifications. An engineering evaluation of each Turbine Gantry Crane was performed resulting in proposed modifications to each crane for increased efficiency and precision in removing and installing the many pieces of

heavy equipment. The modifications to each Turbine Gantry Crane can be performed during normal plant operation, saving plant outage time. The modifications were performed on the PSL Unit 2 Turbine Gantry Crane in 2009. Some of the modifications performed included installing bridge and trolley motors and hoists capable of infinitely variable speed control from the operator's cab or from a pendant control that can be used by the crane operator outside of the cab on the turbine deck at the same level as the load being moved.

The cost of the PSL 2 Turbine Gantry Crane upgrades was $2,856,822, as of the fourth quarter of 2009, as reflected in Appendix A of Exhibit TOJ-1. On December 4, 2009, FPL filed a petition with the Commission to include the St. Lucie Unit 2 Turbine Gantry Crane modification costs associated with the EPU Project in Base Rates (Docket No. 090529-EI). That request was granted on March 16, 2010.

Q. Please describe the costs incurred in the Non-Power Block Engineering, Procurement, Etc. category and the variance, if any, from the actual/estimated costs in this category.

A. Non-Power Block Engineering Costs consist primarily of costs for facilities for engineering and project staff at site locations and the simulator upgrades required to reflect the uprate conditions. FPL incurred $535,251 in this category in 2009. This represents $445,101 more than the actual/estimated amount. The variance is primarily attributable to costs for the simulator modifications being incurred earlier than planned.

Q. Please describe the costs incurred as Recoverable O&M.

A. FPL incurred $498,077 in recoverable O&M. This represents a variance of $69,923 less than the actual/estimated amount. Consistent with FPL's capitalization policy, the commodities that make up these expenditures consist primarily of non-capitalizable computer hardware and software, and office furniture and fixtures needed for new project-bound hires – all of which are segregated for EPU Project personnel use only – incremental staff, and augmented contract staff. In addition, with the completion of the St. Lucie Unit 2 Turbine Gantry Crane modification in late 2009, Recoverable O&M also includes the write-off of inventory rendered obsolete because of EPU modifications. Through 2009, $18,864 in inventory has been written off.

Q. Please describe the costs incurred in the Transmission category.

A. The expenditures in Transmission include line engineering, substation engineering, and line construction and totaled $368,559. The cost is $659,565 less than the actual/estimated amount. The variance is the result of revising the schedule for substation and transmission construction activities. FPL moved some of the substation construction activities originally scheduled for 2010 to outages scheduled in 2011 and 2012. This shift resulted in reduced 2009 substation engineering costs. Additionally, due to restrictions in removing certain transmission lines from service in 2009, part of the transmission line engineering and construction costs scheduled during the PSL Unit 2 spring 2009 outage were deferred to the PSL Unit 1 spring 2010 outage.

CONCLUSION

Q. Were FPL's 2009 EPU expenditures prudently incurred?

A. Yes. FPL incurred costs of approximately $238 million in 2009. FPL's actual costs were less than its estimate for the reasons described above. All of FPL's expenditures were necessary so that the uprate work can be performed during the planned outages. Through experienced personnel's application of the robust internal schedule and cost controls, careful vendor oversight, and the ability to continuously adjust based on lessons learned and the project's evolving needs, FPL is confident that its EPU management decisions are well-founded and prudent. All costs incurred in 2009 were the product of such decisions, were reasonable and prudently incurred, and should be approved.

Q. Does this conclude your direct testimony?

A. Yes.

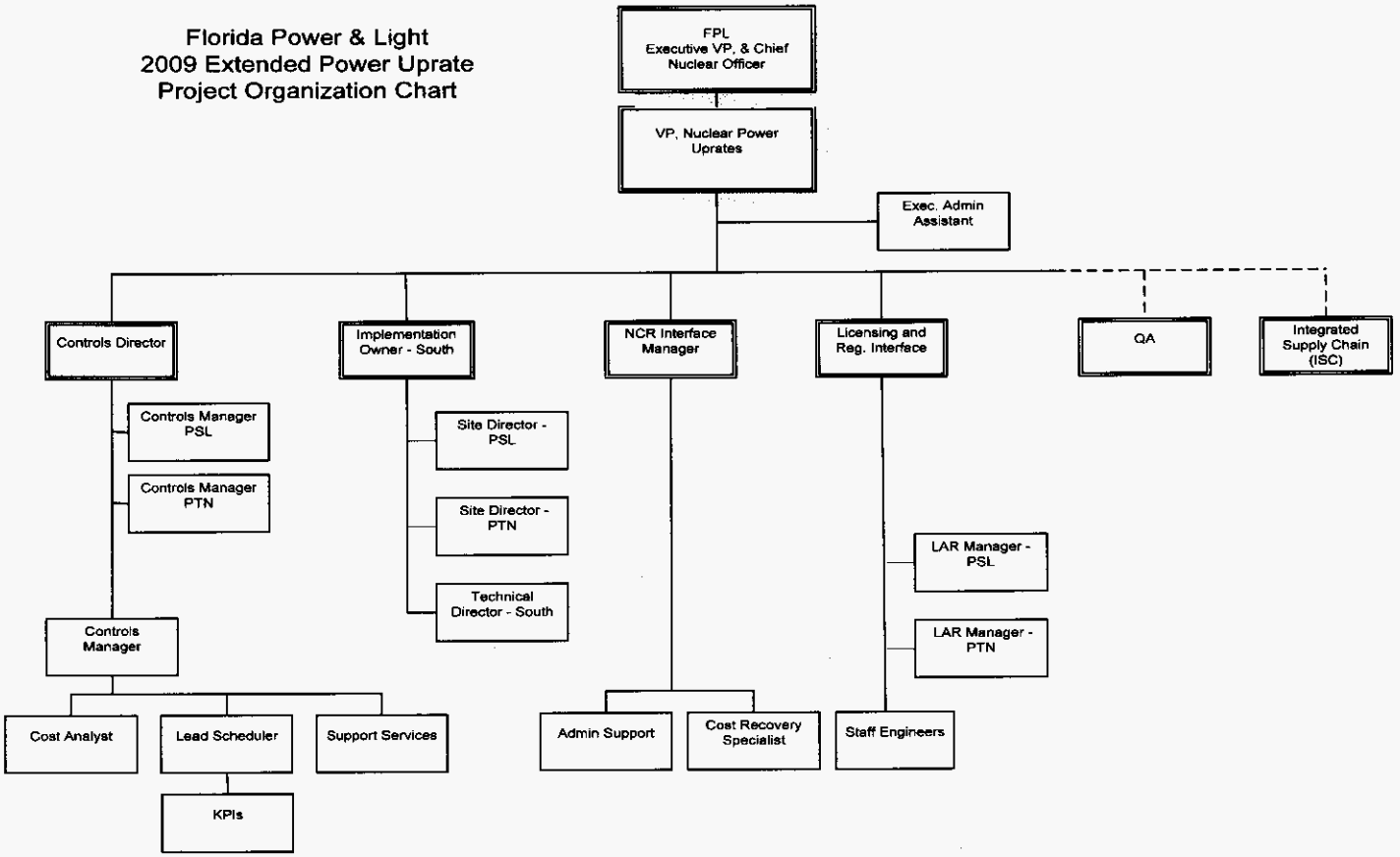
TOJ-2

Extended Power Uprate Project Instructions (EPPI) Index
As of December 31, 2009

Title	EPPI #	Revs	Issued
Project Administration	**100**		
Project Instruction Preparation, Revision, Cancellation	100	R3	8/27/2009
EPU Project Expectations & Conduct of Business	110	R15	8/28/2009
EPU Project Contractor Staffing	130	R3	6/16/2009
Roles & Responsibilities	140	R9	11/17/2009
EPU Project-Nuclear Business Ops Interface	150	R0	7/9/2008
EPU Project Formal Correspondence	160	R2	9/18/2009
Time and Expense Reporting to FPLE Support	170	R0	9/22/2008
EPU Nuclear Cost Recovery	180	R0	12/7/2009
Procurement	**200**		
Project Requisition and Purchase Order Process	220	R1	4/1/2009
Project Invoice Process Instructions	230	R2	4/6/2009
EPU Contract Compliance Program	240	R2	11/20/2008
Preparation of Installation Services Specifications	250	R1	7/7/2008
Project Controls	**300**		
Project Scope Control Process	300	R4	12/28/2009
Development, Maintenance, and Update of Schedules	310	R4	3/10/2009
Cost Estimating	320	R1	6/24/2009
EPU Project Risk Management Program	340	R2	9/18/2009
EPU LAR Engineering Risk Management	345	R0	4/28/2009
FPL Accrual Process	370	R2	3/17/2009
Project Self Assessment	380	R1	10/13/2009
Dormant Material Expense (DME)	390	R0	9/11/2008
Project Management	**400**		
EPU Testing Guidelines	445	R0	4/23/2009
Project Training	**500**		
EPU Project Personnel Training Requirements	520	R1	12/19/2008
EPU Project Qualification Guidelines	560	R1	12/22/2008
Quality, Engineering & Licensing	**600**		
EPU Uprate License Amendment Request	610	R2	5/26/2009
Saint Lucie Specific	**800**		
St. Lucie EPU Project Severe Weather Preparation	810	R1	5/27/2009
EPU Project Environmental Control Program PSL	820	R0	11/12/2009
Turkey Point Specific	**900**		
Turkey Point EPU Project Severe Weather Preparations	910	R0	7/15/2008
EPU Project Environmental Control Program PTN	920	R0	11/12/2009

TOJ-3

Florida Power & Light
2009 Extended Power Uprate
Project Organization Chart



Docket No. 110009-EI
2009 Extended Power Uprate
Project Organization Chart
Exhibit TOJ-3, Page 1 of 1

TOJ-4

Extended Power Uprate Project Reports - 2009

REPORT	REPORT DESCRIPTION	PERIODICITY	AUDIENCE
PSL, PTN Daily Report	Activities scheduled within the next six weeks	Daily	All project staff personnel, project management and project controls
Executive VP & Chief Nuclear Officer Presentation	Project Indicators, Timeline, Risk Summary, Status, LAR Challenge List, Priorities, Open Action Items	Approx. Weekly	Executive Vice President & Chief Nuclear Officer and other invited guests
PSL, PTN, Accrual Report	Document accruals for each EPU Site, Vendor, Amount, Purchase Order, Remarks, References	Monthly	Nuclear Business Operations, Corporate Accounting, EPU Project Management
PSL, PTN Variance Report	Cost Actuals, Budgets and Forecasts for Operations and Maintenance and Capital Expenditures	Monthly	Nuclear Business Operations, Corporate Accounting, EPU Project Management
PSL, PTN, Monthly Operating Performance Report (MOPR)	Dashboard of EPU Project, Scope Definition, Execution Plan, Resources, Cost, Schedule, Quality, Safety, Environmental, Licensing, Regulatory	Monthly	Executive Management, EPU Project Management

Extended Power Uprate Project Reports - 2009

REPORT	REPORT DESCRIPTION	PERIODICITY	AUDIENCE
PSL, PTN Risk Matrix	Quantified Risks, Potential Cost Impact, Weighted Cost Impact, Probability of Occurrence, and Risks identified but not quantified	Every Three Weeks	Project Management, Input to Presentations
PSL, PTN LAR Schedules	Schedule for completing LAR	Weekly	Project Management, Input to Presentations
PSL, PTN Modification Schedules	Schedule for Completing Modifications	Weekly	Project Management, Input to Presentations
PSL, PTN, Monthly Cash Flow Charts	Project Annual Budget, Actuals to Date and Forecast	Monthly	Project Management
Executive Steering Committee Meeting Presentations	Project Status, Indicators, Forecast, Issues, Next Steps	Monthly	Executive Management
Bechtel Status Report	Dashboard, Progress Indicators, Resources, Schedule, Costs	Monthly	Project Management
Vendor Integration Meeting Presentations	Vendors prepare status report	Quarterly	Executive and Project Management

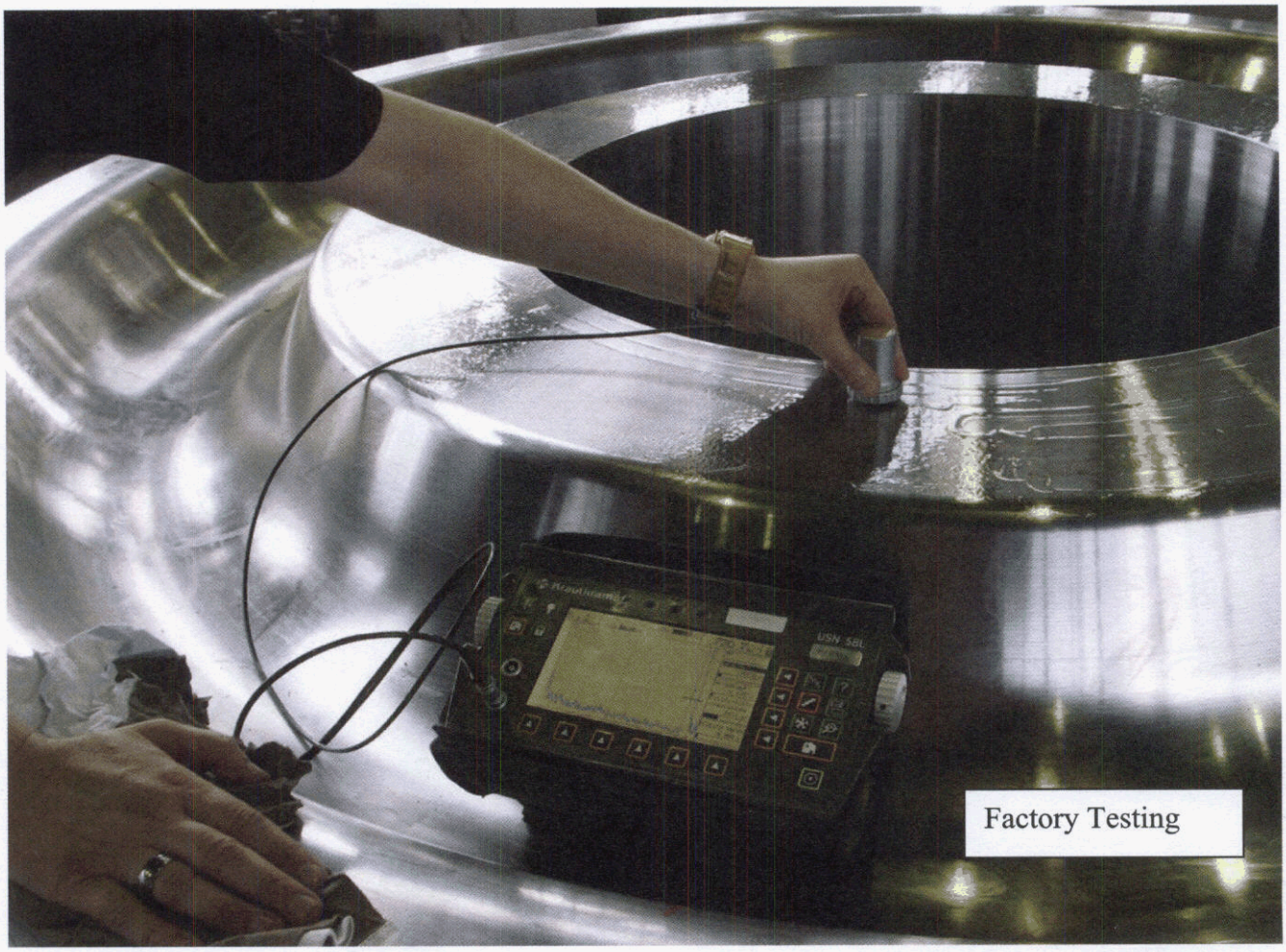
TOJ-5

St. Lucie Low Pressure Turbine Rotors

TOJ-6


Low Pressure (LP)
Turbine Rings

TOJ-7


Factory Testing

TOJ-8

Plant Change Modification (PCM) Status as of December 31, 2009

Site	Currently Identified	Initiated	30%	90%	Final
St. Lucie	75	17	17	4	2
Turkey Point	110	61	9	4	2
Total	185	78	26	8	4
Percent Complete		42%	14%	4%	2%

- Initiated - Scope document issued
- 30% - Conceptual Design Package
- 90% - Implementation Review Package
- Final - Reviews completed and approved by Plant General Manager for issuance

TOJ-9

Extended Power Uprate Equipment List as of December 31, 2009			
St. Lucie Components	**Description**	**Contract**	**Scoping Document**
Main Steam Isolation Valve (MSIV) Upgrade	Larger operators on the MSIVs are required to operate against higher steam pressure	To Be Determined (TBD)	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Turbine Performance Test Points Installation and Monitoring	Installation and monitoring of test points in main steam system to acquire baseline data before and after the power uprate conditions.	Shelby Jones Co. PO-119443 Florida Fluid PO-122350	Siemens turbine engineering requirement
High Pressure (HP) Turbine	Larger HP rotor and inlet valves are required for increased steam flows in the uprate conditions	Siemens PO-116088	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Moisture Separator Reheater (MSR) Replacement	Larger capacity MSRs are required to heat and dry the steam flow in the uprate conditions.	TEI PO-118205	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Low Pressure (LP) Turbine Rotor	Larger LP turbine rotors are required for the increased steam flow in the uprate conditions	Siemens PO-116088	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Moisture Separator Drain Control Valves Replacement	Larger valves are needed for the increased condensed water flow in the uprate conditions	TBD	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008

Extended Power Uprate Equipment List as of December 31, 2009			
St. Lucie Components	**Description**	**Contract**	**Scoping Document**
1Condenser Material Upgrade	Strengthening of the Main Condenser is needed with higher steam and condensate flows in the uprate conditions.	TBD	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Condensate Pump Replacement	Larger condensate pumps are needed to pump the increased condensate flows in the uprate conditions.	TBD	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Feedwater Heater Replacement (#5)	Larger feedwater heaters are needed to process the steam and feedwater flows in the uprate conditions.	TEI PO-118224	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Heater Drain Control Valves	Larger valves are needed to control the condensate flow in the uprate conditions	TBD	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Feedwater Digital Modifications	Instrumentation to provide control the feedwater heater control and dump valves in the uprate conditions.	TBD	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Heater Drain Pump and Motor Replacements	Larger pumps and motors are required to pump the increased heater drain flows in the uprate conditions.	Flowserve Corp. PO- 125454	St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008

Extended Power Uprate Equipment List as of December 31, 2009			
St. Lucie Components	**Description**	**Contract**	**Scoping Document**
Main Feedwater Pump Replacement	Larger pumps are required to pump the increased feedwater flow required in the uprate conditions.	Flowserve PO-121985	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Leading Edge Flow Meter (LEFM) Measurement Uncertainty Recapture (MUR)	Precision flow measurement instrument and instrumentation provides for increased certainty of operating parameters supporting uprate conditions.	Cameron PO-116107	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Feedwater Regulating Valves Upgrade	Larger operating mechanisms are required to operate the feedwater regulating valves in the increased uprate conditions.	TBD	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Control Element Drive Mechanism (CEDM) System Upgrades	Upgrade the CEDM system to recover operational and safety margins in the uprate conditions.	Westinghouse PO-118271	OEM Recommendation
Main Generator Rotor Replacement and Stator Rewind	Larger generator is needed to increase electrical output in the uprate conditions.	Siemens PO-116088	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Main Generator Hydrogen Coolers	Increased main generator cooling is required in the uprate conditions.	Siemens PO-116088	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008

Extended Power Uprate Equipment List as of December 31, 2009			
St. Lucie Components	**Description**	**Contract**	**Scoping Document**
Main Generator Hydrogen Seal Oil Pressure Increase	Increased hydrogen pressure for main generator cooling is required in the uprate conditions.	Siemens PO-116088	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Main Generator Exciter Coolers/Blower	Increased cooling of the main generator exciter is required in the power uprate conditions.	Siemens PO-116088	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Main Transformer Replacement	Larger main transformers are needed to handle the increase in the main generator electrical output.	Siemens PO-4500467077	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Main Transformer Cooler Upgrade	Increased cooling is needed to handle the increase in the main generator electrical output.	ABB PO-112255, 126248	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008, ABB Engineering Thermal Loading Design Study, FPL St. Lucie, ABB Project Number, FP13469-1, Rev.1, August 25, 2008
Turbine Cooling Water (TCW) Heat Exchanger Replacement	Larger heat exchangers are needed for increased cooling in the uprate conditions.	TEI PO-118278	St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008

Extended Power Uprate Equipment List as of December 31, 2009			
St. Lucie Components	**Description**	**Contract**	**Scoping Document**
Iso-Phase Bus Duct Cooling	Increased cooling is needed for the electrical connections from the main generator to the main transformer in the uprate conditions.	AZZ Calvert PO-120769	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Turbine Gantry Cranes Upgrade	Upgrades needed to more efficiently and precisely move heavy EPU equipment loads.	ACECO PO-117272 Sargent & Lundy PO-79551	Identified during scheduling and planning for EPU heavy equipment moves
Training Simulator Modifications	Upgrades needed to replicate the plant in the power uprate conditions.	Western Services Corp. PO-118627	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Digital Electro-Hydraulic (DEH) Computer System Upgrade	Upgrades needed for increased certainty of turbine operating parameters supporting uprate conditions.	TBD	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Main Generator Current Transformers (CT) and Bushing Replacement	Upgrades required due to the modifications to the generator rotor and stator for uprate conditions.	Siemens PO-116088	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Installation of Power System Stabilizer	Upgrades required due to the modifications to the generator rotor and stator for uprate conditions.	TBD	Facilities Study, FPL Extended Power Uprate project, St. Lucie 1&2, Q114 & Q115, March 2009

Extended Power Uprate Equipment List as of December 31, 2009			
St. Lucie Components	**Description**	**Contract**	**Scoping Document**
Electrical Bus Margin Upgrades	Required to restore margin on electrical busses as a result of uprate.	Bechtel PO-117820	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Secondary Plant Instrumentation	Setpoint and scaling of plant instrumentation for uprate conditions	Bechtel PO-117820	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Steam Bypass Upgrades	Upgrades required due to increased bypass flow to condenser from main steam, feed water and heater drains	Bechtel PO-117820	PSL License Amendment Request (LAR) Engineering
Containment Mini-Purge	Reduction of maximum allowed Containment pressure per NRC Plant Technical Specifications	Bechtel PO-117820	PSL LAR Engineering
Control Room Upgrades	Additional cooling and Alternate Source Term margin required for power uprate conditions.	Bechtel PO-117820	FPL Feasibility Study 2007, St. Lucie Nuclear Plant, Balance of Plant, Extended Power Uprate, Scoping Study, February 2008
Hot Leg Injection Flow Improvements	Increasing required flow under EPU and eliminating SPV with cross train power on in-series valves	Bechtel PO-117820	PSL LAR Engineering

Extended Power Uprate Equipment List as of December 31, 2009			
St. Lucie Components	**Description**	**Contract**	**Scoping Document**
Safety Injection Tank (SIT) Pressure Increase	Upgrade required to operate at higher pressure based on EPU conditions for small break Loss of Coolant Accident (LOCA) analysis	Bechtel PO-117820	PSL LAR Engineering

Extended Power Uprate Equipment List as of December 31, 2009			
Turkey Point Components	**Description**	**Contract**	**Scoping Document**
Sump PH Control	Alternate Source Term method requires pH greater than 7.0. The current pH control system is not sufficient at uprate conditions.	S&L PO-79551	Alternate Source Term (AST) License Amendment Request (LAR) Engineering
Containment Cooling Modifications	Increased power production from the primary system requires additional cooling of the containment in the uprate conditions.	AAF McQuay PO-121869	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008
Main Steam Safety Valve / Piping Upgrades	Increased temperature and pressure require set point changes in the uprate conditions	Bechtel PO-117809	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008
Main Steam Pipe Supports Replacement	Uprate conditions require additional piping supports and restraints.	Bechtel PO-117809	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008
Turbine Performance Test Points Installation and Monitoring	Installation and monitoring of test points in main steam system to acquire baseline data before and after the power uprate conditions.	Proto Power PO-115488	Siemens turbine engineering requirement

Extended Power Uprate Equipment List as of December 31, 2009			
Turkey Point Components	**Description**	**Contract**	**Scoping Document**
Flow Accelerated Corrosion (FAC) Identified Piping Replacement	Increased flows require replacement of piping affected by the flow accelerated corrosion in the uprate conditions.	Bechtel PO-117809	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008
High Pressure (HP) Turbine Upgrade	Larger inlet throttle valves and Turbine redesign are required for increased steam flows in the uprate conditions	Siemens PO-116090	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008
Turbine Electro-Hydraulic Controls (EHC)	Enhanced controls for the new turbines. Current design is not sufficient for the new turbine configuration in the uprate conditions.	Siemens PO-116090	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008
Moisture Separator Reheater (MSR) Replacement	Larger capacity MSRs are required to heat and dry the steam flow in the uprate conditions.	TEI PO-118206	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008
Main Condenser replacement	Increased turbine exhaust steam to the main condenser requires replacement of the main condenser to support uprate conditions.	TEI PO-118328	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008

Extended Power Uprate Equipment List as of December 31, 2009			
Turkey Point Components	**Description**	**Contract**	**Scoping Document**
Condenser Amertap Cleaning System Replacement	Replacement of the main condenser requires replacement of the condenser tube cleaning system to support the uprate conditions.	PO- 118328	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008
Condensate Pump and Motor Replacement	Larger condensate pumps are needed to pump the increased condensate flows in the uprate conditions.	TBD	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008
Feedwater Heaters (5,6)	Larger feedwater heaters are needed to process the steam and feedwater flows in the uprate conditions.	TEI PO-118241	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008
Heater Drain Valves	Larger valves are needed to control the condensate flow in the uprate conditions	Bechtel PO-117809	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008
Feedwater Heater Drains Digital Upgrades	Instrumentation to provide control the feedwater heater control and dump valves in the uprate conditions.	PO -126227	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008
Feedwater Heater #5 Drain Piping Upgrade	Higher drain water flows require larger piping in the uprate conditions.	Bechtel PO-117809	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008

Extended Power Uprate Equipment List as of December 31, 2009			
Turkey Point Components	**Description**	**Contract**	**Scoping Document**
Main Feed Pump Replacement	Rotating assemblies need redesign to pump the increased feedwater flow required in the uprate conditions.	TBD	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008
Measurement Uncertainty recapture (MUR) LEFM	Precision flow measurement instrument and instrumentation provides for increased certainty of operating parameters supporting uprate conditions.	Cameron PO-116796	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008
Feedwater Regulating Valves Upgrade	Larger actuators and valve internals are required to operate the feedwater regulating valves in the increased uprate conditions.	SPX PO-115351	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008
Feedwater Isolation Valves Addition	Increased feedwater flow and pressure requires modifications to support uprate conditions.	Flowserve PO-123137	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008
Auxiliary Feedwater (AFW) Modifications	Increased feedwater flows and pressure requires modifications to valve stops including rotating assemblies overhauls to support uprate conditions	Bechtel PO-117809	LAR Engineering

Extended Power Uprate Equipment List as of December 31, 2009			
Turkey Point Components	**Description**	**Contract**	**Scoping Document**
Main Generator Rotor Replacement	Larger generator and stator are needed to increase electrical output in the uprate conditions.	Siemens PO-116090	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008
Main Generator Hydrogen Coolers	Increased main generator cooling is required in the uprate conditions.	Siemens PO-116090	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008
Iso-Phase Bus Duct Modifications	Increased bus size is needed for the electrical connections from the main generator to the main transformer in the uprate conditions.	AZZ / Calvert PO-124436	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008
1A Main Transformer Cooler Upgrade	Increased cooling is needed to handle the increase in the main generator electrical output.	Siemens PO-122154	T&D
Switchyard Upgrades	Increased electrical output requires modification to switchyard equipment to support the uprate conditions.	T & D	Generation Interconnection Service and Network Resource Interconnection Service System Impact Study. 11/25/08
ICW Turbine Plant Cooling Water (TPCW) Cooling Upgrade	Increased temperatures of components require additional cooling in the uprate conditions.	Joseph Oat Corp. PO-126453	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008

Extended Power Uprate Equipment List as of December 31, 2009			
Turkey Point Components	**Description**	**Contract**	**Scoping Document**
Plant Instrumentation Modifications	Increased pressures and flows require modifications and adjustments to process instrumentation in the uprate conditions.	Bechtel PO-117809	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008
ECF Removal	Abandon containment filters from the containment to support the safety margin in the uprate conditions.	Bechtel PO-117809	FPL PTN Feasibility Study 2007
Control Room Habitability	Upgrade control room HVAC system to properly limit radiological exposure to the control room operators at uprate conditions.	Bechtel PO-117809	AST LAR Engineering
Turbine Gantry Crane Upgrades	Upgrades needed to more efficiently and precisely move heavy EPU equipment loads.	Bechtel PO-117809	Identified during scheduling and planning of moving EPU heavy equipment loads.
Alternate Spent Fuel Pool Cooling	Increased power from the fuel requires additional cooling of the fuel when it is placed into the spent fuel pool.	TBD	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008
Training Simulator Modifications	Upgrades needed to replicate the plant in the power uprate conditions.	Western Services PO-118844	FPL PTN Feasibility Study 2007, Turkey Point Nuclear Plant Balance of Plant Extended Power Uprate Scoping Study, March 2008

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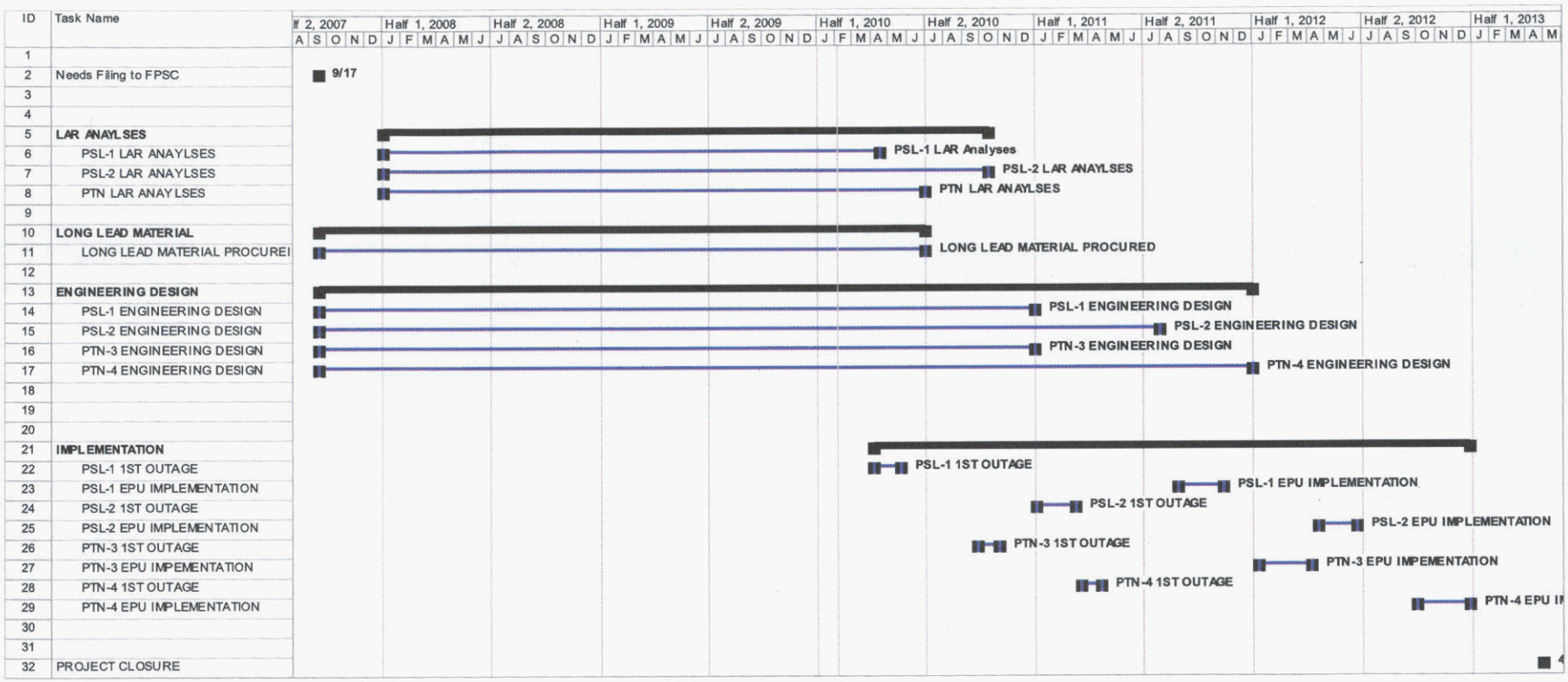
Extended Power Uprate (EPU) Project Schedule as of December 31, 2009



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EPU Project Schedule
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Table 1. Summary of 2009 Extended Power Uprate Construction Costs

Category	Detail Table No.	2009 Actual Costs
Licensing	2	$ 66,925,376
Engineering & Design	3	$ 12,568,941
Permitting	4	$ 512,725
Project Management	5	$ 15,544,538
Power Block Engineering, Procurement, etc.	6	$141,222,239
Non-Power Block Engineering, Procurement, etc.	7	$ 535,251
Total EPU Construction Costs	**NA**	**$237,309,070**
EPU Recoverable O&M	8	$ 498,077
Transmission	9	$ 368,559
Total Construction Costs & Transmission	**NA**	**$238,175,706**

Table 2. 2009 Licensing Costs

Category	2009 Actual Costs
St. Lucie (PSL) License Amendment Request (LAR)	
Fuel Related Analyses	$6,296,047
NSSS Component Analyses	$413,700
Balance of Plant (BOP) Engineering	$9,203,703
Nuclear Steam Supply System (NSSS) and Fuel Analyses	$17,763,919
NRC Fees and Other Engineering	$2,135,566
Turkey Point (PTN) License Amendment Request (LAR)	
NSSS Component Analyses	$1,711,476
Balance of Plant (BOP) Engineering	$9,185,796
Nuclear Steam Supply System (NSSS) and Fuel Analyses	$19,354,523
NRC Fees and Other Engineering	$860,646
Total Licensing	**$66,925,376**

Table 3. 2009 Engineering and Design Costs

Category	2009 Actual Costs
St. Lucie (PSL)	
FPL and staff augmentation engineering	$5,065,135
Turkey Point (PTN)	
FPL and staff augmentation engineering	$7,503,806
Total Engineering and Design	**$12,568,941**

Table 4. 2009 Permitting Costs

Category	2009 Actual Costs
St. Lucie (PSL)	
Environmental engineering, vendors and FPL support	$54,228
Turkey Point (PTN)	
PTN engineering and Certification of Compliance, vendors and FPL support	$458,498
Total Permitting	**$512,725**

Table 5. 2009 Project Management Costs

Category	2009 Actual Costs
St. Lucie (PSL)	
FPL, staff augmentation, and regulatory accounting	$6,906,753
Turkey Point (PTN)	
FPL, staff augmentation, and regulatory accounting	$8,637,785
Total Project Management	**$15,544,538**

Table 6. 2009 Power Block Engineering, Procurement, Etc. Costs

Category	2009 Actual Costs
St. Lucie (PSL)	
Engineering, Procurement, and Construction (EPC)	$16,889,707
Turbine and Generator Labor	$14,286
Turbine and Generator Materials	$27,888,297
Long Materials and Equipment	$11,800,671
Turbine Gantry Crane Upgrades	$5,754,551
Outage Extension Costs	$0
Other Miscellaneous Indirect Costs	$5,092,275
Turkey Point (PTN)	
Engineering, Procurement, and Construction (EPC)	$27,034,489
Turbine and Generator Labor	$11,225
Turbine and Generator Materials	$7,601,964
Long Materials and Equipment	$36,515,332
Outage Extension Costs	$0
Other Miscellaneous Indirect Costs	$2,619,441
Total Power Block Engineering, Procurement, Etc.	**$141,222,239**

Table 7. 2009 Non-Power Block Engineering, Procurement, etc. Costs

Category	2009 Actual Costs
St. Lucie (PSL)	
Simulator modification support	$323,981
Turkey Point (PTN)	
Simulator modification support	$211,270
Total Non-Power Block Engineering, Procurement, etc.	**$535,251**

Table 8. 2009 Recoverable O&M Costs

Category	2009 Actual Costs
St. Lucie (PSL) and Turkey Point (PTN)	
Non capitalizable computer hardware and software, office furniture and fixtures for new project-bound hires, incremental staff and augmented contract staff.	$498,077
Total Recoverable O&M	**$498,077**

Table 9. 2009 Transmission Costs

Category	2009 Actual Costs
Line Engineering	$13,004
Substation Engineering	$120,481
Line Construction	$228,155
Substation Construction	$6,919
Total Transmission	**$368,559**