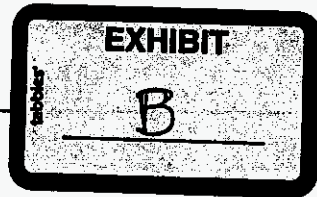


Performance Analysis Section
2011 Work Plan
Progress Energy-Florida's
LNP Construction / Crystal River Unit 3 Uprate

REDACTED

| Task | Subtask | Auditor Notes | Conclusions |
|--|--|--|-------------|
| NEW CONSTRUCTION | | | |
| 2.1 Project Planning | | | |
| What is the current status of the project? | <p>Update and describe project <i>planning</i> made since the last review for the project and its effect on the project schedule and costs.</p> <p>Obtain and document any external reviews performed relative to <i>planning</i> since the last review.</p> <p>Review any detailed internal feasibility studies completed relative to project/<i>planning</i> scope changes.</p> <p>Determine potential impact of Duke merger upon Levy 1&2 viability and approach by new management. Identify changes to planning approach of combined companies.</p> <p>Determine potential impacts of Fukushima accident on plans for Levy 1&2 in terms of strategy, timing, feasibility and other decisions under Duke's control.</p> | <p>The company has not made any significant changes to the schedule and costs estimates since the last NCRC hearing in 2010.</p> <p>Currently, management states that the impact of the Duke merger is unknown. The impact of the Fukushima event is also unknown at this time. The NRC continues to monitor this event.</p> | |
| What is the current project schedule? | <p>Review and update the status of project planning, engineering, equipment modification, and phasing of work schedules to complete the project, and identify any potential delays to the project.</p> <p>Review and update the tracking of the project's schedule and costs.</p> <p>Document the status of long-lead equip acquisition timeline and its impact on the project schedule.</p> | <p>The current schedule estimates are the same as during 2010. The current schedule shows a 2021/2022 in-service date.</p> <p>The long-lead equipment has been addressed, with the exception of the [REDACTED]</p> <p>The company anticipates this issue will be resolved</p> | |



DOCUMENT NUMBER-DATE
04541 JUL-1-

**Performance Analysis Section
2011 Work Plan
Progress Energy-Florida's
LNP Construction / Crystal River Unit 3 Uprate**

REDACTED

| Task | Subtask | Auditor Notes | Conclusions |
|--|---|--|-------------|
| | <p>Document current project management responsibilities for contractor oversight and performance on the uprate project.</p> <p>Document current contractor oversight and performance responsibilities of support services, such as purchasing and procurement, after the contractor completes work on the uprate.</p> <p>Document current QA/Audit responsibilities for contractor oversight and performance while on the uprate project.</p> <p>Obtain and review company procedures for verifying contractor work performed modifications, scope changes and work authorizations.</p> | <p>changes to its contractor policies during 2010 and 2011. The process described during the last NCRC hearing is still place.</p> <p>Audit staff obtained and reviewed all contract QA and review assessments performed in 2010 and 2011. There were limited issues identified with these vendors. On LLE vendor did have an issue identified through a [REDACTED]</p> <p>Audit staff reviewed the QA documents for each contractor and verified that the company followed its process for vendor performance. Audit staff did not note any significant issues.</p> | |
| <p>What are the current controls for managing contractor</p> | <p>Review and document contract structure and provisions to protect the company from substandard contractor performance.</p> | <p>The company maintained its process and</p> | |

**Performance Analysis Section
2011 Work Plan
Progress Energy-Florida's
LNP Construction / Crystal River Unit 3 Uprate**

REDACTED

| Task | Subtask | Auditor Notes | Conclusions |
|--|---|---|---|
| Determine whether current contractor cost management controls are effective | Perform a sample analysis of scope changes, work authorizations and related invoices to determine proper approvals have been obtained and that contractor is not being paid for corrective rework or work outside of approved scope. | The controls in place for contractor cost management have not changed since the last NCRC review. Audit staff sampled contractor and vendor invoices from 2010 to ensure compliance with company processes and procedures. Audit staff did not identify any issues with these invoices | |
| 2.6 Follow-up Issues to 10009-EI Docket | | | |
| Determine if poor project management oversight lead to additional LAR expenditures during 2009 and 2010. | Review the itemized payments for the Areva WA 84 to determine actual costs associated with the re-write activities Review the Project Management costs associated with the LAR to determine the additional resources allocated for the project | Audit staff conducted interviews with LAR staff and expert panel member to assess the management oversight during the LAR review process. Additionally, the company provided personnel performance records for the LAR team. After further analysis, Audit staff determined that the poor management oversight lead to deficiencies in the LAR preparation. These | The [REDACTED] for WA 84 co 23 was a result of rework created by poor management oversight. |

REDACTED

beginning of 2010.

- [REDACTED]
- (5) Joint Owners. While PEF needs the LNP baseload capacity for its customers, PEF understands and agrees that joint ownership can be beneficial to PEF's customers by spreading the risk and cost of the LNP and thus reducing the price impact of the LNP project to PEF's customers.
- [REDACTED]

- (6) Support for Nuclear Development. PEF continues to monitor the support for new nuclear development in Florida at the federal and state level. In December, 2010 Senator Mike Fasano, R-New Port Richey, filed Senate Bill 200 seeking to repeal Florida Statute 366.93. This is the fourth year in a row that Senator Fasano has tried to repeal the nuclear cost recovery statute. If the statute is repealed in 2011, and the company is not able to receive cost recovery for the LNP in future years, the Company would not be able to continue with the project. The Company is monitoring the bill's progression and will continue to do so throughout 2011.

- (7) Vendor negotiations to disposition all long-lead equipment have, to date, successfully resulted in acceptable terms for continuation or suspension with the exception of one select piece of equipment – [REDACTED]. At the time of this response, the Company is still pursuing [REDACTED].

- (8) As of the effective date of the Levy EPC contract, certain Design Change Packages (DCP's) have been included. Following the effective date of the contract, the Consortium has continued to develop DCPs; therefore, not all DCPs associated with the final DCD have been included in the contract pricing. Although the Company has attempted to estimate the costs impact of the DCPs referenced in the contract in its current project costs estimate, the cost estimate does not include estimates for unknown DCP scope. The Consortium has begun efforts to categorize and classify open DCPs. At this time, it is uncertain what impact to cost and schedule that resolution of these DCPs may have to the Levy Plant. The Project Team anticipates increased work with the Consortium during 2011 to assess the impact of these changes on the Levy project.

REDACTED

b) Mitigation of items 1-6 are included as part of DR1.7. [REDACTED]

Conclusions:

Data Request(s) Generated:

No. _____ Description:

No. _____ Description:

Follow-up Required:

Document #: DR1.9

Date Requested:

Date Received:

Comments: (i.e., Confidential)

NOT Confidential

Document Title and Purpose of Review:

- a) Provide any status updates of the AP1000 projects in China, since January 2010, based on the company's monitoring of those projects.
- b) Describe any potential construction or operational issues identified by the company's analysis and monitoring of the AP1000 projects in China which may impact the construction of the Levy project.
- c) Discuss any noteworthy events or lessons learned from the AP1000 projects in China applicable to the Levy project to date.

Summary of Contents:

Response:

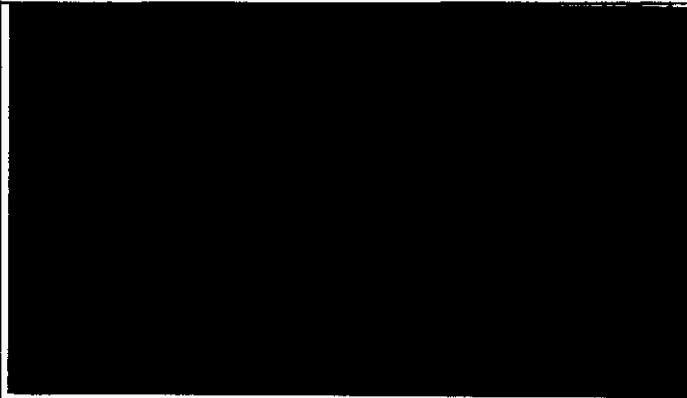
- a) Progress Energy was involved in two benchmarking trips to AP1000 projects in China in 2010. The Sanmen Nuclear Power Station was benchmarked in May, 2010 by INPO. A representative of Progress Energy participated as a team member during this benchmarking trip. Information obtained during the Sanmen trip was compiled in INPO 10-003 "INPO/Utility Benchmarking Sanmen Power Station Construction Project". At the time of the benchmarking trip, the first of four steel rings and four internal layers of concrete and five external layers of concrete outside the heads had been completed on the containment vessel of Unit 1. The concrete base mat for Unit 2 had been completed.

In July, 2010, Progress Energy along with Southern Nuclear Corp. participated in the International Atomic Energy Agency's information exchange program at the Haiyang, China Nuclear Power Plant. The information exchange focused on Operating training, Commissioning and Start-up Testing (Reference documents: Informal Benchmarking Report_Haiyang 2010.pdf and the presentations mentioned on page 3 of the informal benchmarking report).

In addition, Westinghouse also provides limited China project video and photo updates on their AP1000 website that is monitored by PEF

| | |
|--|--|
| <p>Date Received: Comments: (i.e., Confidential)</p> <p>CONFIDENTIAL</p> <p style="text-align: center; font-size: 2em; opacity: 0.5;">REDACTED</p> | <p>Summary of Contents:</p> <p>Response:</p> <p>PEF remains interested in potential joint owners and financial partners and the potential for joint ownership, PEF believes, (it) is still likely because there is continued interest by potential joint owners and financial partners in participation in the LNP. As we indicated previously, however, potential joint owners and financial partners were not immune to the effects of the economic recession and as a result, they remain reluctant to enter into firm commitments for near term capital investment until economic conditions improve and there is greater certainty with respect to many of the same enterprise risks that PEF is monitoring including federal and state energy and environmental policy.</p> <p>[REDACTED]</p> <p>Conclusions:</p> <p>Data Request(s) Generated:</p> <p>No. _____ Description:</p> <p>No. _____ Description:</p> <p>Follow-up Required:</p> |
| <p>Document #: DR1.23 Date Requested: Date Received: Comments: (i.e., Confidential)</p> <p>CONFIDENTIAL</p> | <p>Document Title and Purpose of Review: Provide a current status and description of any changes in the purchase and provision of long-lead and other equipment</p> <p>Summary of Contents:</p> <p>Response:</p> <p>At the start of the Partial Suspension period, April 2009, PEF suspended all new work on the long-lead equipment (LLE) for the Levy Plant. Since that time, PEF has been working with the Consortium to ensure the proper handling of the LLE material that had been placed on order prior to the Partial Suspension. In June 2010, PEF completed its LLE disposition evaluation and provided Notice of LLE disposition to the Consortium. This Notice directed the Consortium to place certain LLE into a long term suspension, with the remaining LLE on a path towards completion and storage needs consistent with our current in-service date of mid-2021 for Unit 1.</p> <p>The following is a list of LLE and the current disposition based on the LLE evaluation and negotiations conducted thus far:</p> <p>[REDACTED]</p> |

REDACTED



Please see confidential documents produced in BATES range 11PMA-DR1Levy-23-000001 through 11PMA-DR1Levy-23-000003 subject to the Notice of Intent filed contemporaneously with this response.

Conclusions:

Data Request(s) Generated:

No. _____ Description:
No. _____ Description:

Follow-up Required:

Document #: DR1.24
Date Requested:
Date Received:
Comments: (i.e., Confidential)

CONFIDENTIAL

Document Title and Purpose of Review: Provide a description and status of any service and/or materials contracts or contract addenda in excess of \$100,000 for the Levy project executed in 2010, and/or planned for 2011

Summary of Contents:

Response:

Reference attached document "New Generation Programs and Projects (NGPP) LNP Contracts Executed in 2010". EPC contract amendments will be made available for review at a mutually convenient time.

Please see confidential documents produced in BATES range 11PMA-DR1Levy-24-000001 through 11PMA-DR1Levy-24-000002 subject to the Notice of Intent filed contemporaneously with this response.

Conclusions:

Data Request(s) Generated:

No. _____ Description:
No. _____ Description:

CONFIDENTIAL

continue work on the Levy project

Summary of Contents:

REDACTED

Response:

a) There is one contractor commercial disciplinary action being taken in 2010 by PEF since the last response we provided in 2010. Two EPC contract invoices for Long Lead Material components were not paid until quality assurance issues with Westinghouse supplier [REDACTED] were resolved. PEF released payment on these invoices in January 2011 following a review of objective evidence.

b) Westinghouse vendor audits conducted in late June and early July 2010 identified problems with the quality assurance programs and their implementation by [REDACTED].

On December 28, 2010, Westinghouse determined that [REDACTED] had made satisfactory progress on the short term corrective actions, and as a result, [REDACTED]. PEF continues to monitor this concern with Westinghouse.

All other Consortium work continues per approved change orders and EPC terms and conditions per the partial suspension period.

Please see confidential documents produced in BATES range 11PMA-DR1Levy-30A-000001 through 11PMA-DR1Levy-30A-000002 subject to the Notice of Intent filed contemporaneously with this response.

Conclusions:

Data Request(s) Generated:

No. _____ Description:

No. _____ Description:

Follow-up Required:

Document #: DR1.31
Date Requested:
Date Received:
Comments: (i.e., Confidential)

Document Title and Purpose of Review: Provide a current listing of all internal and external audits completed for the Levy project since January 2010, and any planned for 2011. Also provide a copy of all completed audit reports--including all recommendations, management responses, and actions taken as a result of these audits

Summary of Contents:

Response:

CONFIDENTIAL

REDACTED

The Consortium has recently received a revised suspension proposal from its subcontractor [REDACTED] for the [REDACTED]. PEF will review and analyze the proposal using a similar methodology as used on the other long-lead equipment. Once a determination is made, PEF will work with the Consortium to properly disposition the equipment.

Conclusions:

Data Request(s) Generated:

No. _____ Description:

No. _____ Description:

Follow-up Required:

Document #: 3
Date Requested:
Date Received:
Comments: (i.e., Confidential)

Document Title and Purpose of Review: Based on the May 20, 2011 announcement by NRC Chairman Jaczko concerning the AP1000 design certification review, please provide the following:

- a. Describe PEF's understanding of the NRC's concerns
- b. Describe any communication between Westinghouse and PEF concerning how Westinghouse will address these concerns.
- c. Describe any communications between the NRC and PEF concerning this announcement and the AP1000 review schedule.
- d. Describe the potential impact this decision will have on PEF's COLA schedule.
- e. Describe any communications between the APOG membership, the membership and Westinghouse, or the membership and the NRC concerning this announcement and its impact on the members' projects.

Summary of Contents:

Response:

The issues involve the final submittal of confirmatory calculation in three areas. All three issues have undergone preliminary analyses which have been seen by the NRC for familiarity and clarity. None of the three issues is anticipated to lead to any design change in the plant as submitted by Westinghouse in December 2010 (DCD-18).

The NRC has not communicated any updated schedule information to the utilities regarding the AP1000 DCD delay. In an industry conference call with NRC on May 27, 2011, the NRC stated that the Vogtle and VC Summer FSER would be delayed. However, the NRC does not plan to issue a schedule update until after DCD revision 19 is received.

| | |
|---|---|
| REDACTED | <p>The majority of remaining long lead ites for ph 3 were procured during the first half of 2010. Contracts were secured for long lead items including bu not limited to the following: Main feedwater pump Feedwater booster pumgs Condensation pump and moter Atmospheric dump valves Feed water heat exchangers.</p> <p>The Inadequate Core Cooling Instrumentation project is still out. The seelcted contractor will be required to provided the oversight and personnel for umplementation of design package. This is currently in the rfp state and anticipated to be complete in 2011.</p> |
| | Conclusions: |
| | Data Request(s) Generated: No. ____ Description: No. ____ Description: |
| | Follow-up Required: |
| | Document #: 19 Date Requested: Date Received: Comments: (i.e., Confidential) |
| Document #: 20 Date Requested: Date Received: Comments: (i.e., Confidential) | Document Title and Purpose of Review: Please provide all documentation to show that the company was adequately compensated for the costs associated with the low pressure turbine manufacturing issue Summary of Contents: the company states no additional associated with the LPT manufacturing issues. Siemens agreed to correct this at no extrac costs (contract 145569 am 7) Conclusions: Data Request(s) Generated: No. ____ Description: No. ____ Description: Follow-up Required: |

| | |
|---|---|
| <p>Document #: 4 Date Requested: Date Received: Comments: (i.e., Confidential)</p> <p style="text-align: center; font-size: 2em; opacity: 0.5;">REDACTED</p> | <p>Follow-up Required:</p> <p>Document Title and Purpose of Review: Please provide an itemized description of the “additional that was outside the scope of the original contract and provides additional benefits to the company and its customers.” (bates 11-PMA-DR1CR3-RESPONSE-000027, second paragraph). For each addition, provide the justification for the additional scope and management’s assessment on whether the work is/is not a direct or indirect result of the September 2008 and April 2009 events. In addition, please detail any concessions made by the vendor for these costs.</p> <p>Summary of Contents: The company provided the breakdown of additional benefits to the company and customers, including concession amounts made by Siemens:</p> <p>There was some specific cost breakdown and cost benefit/analysis performed for each new LPT work scope item PEF received as a result of PEF’s negotiations with Siemens to resolve the dispute between them regarding the contract for the manufacture and installation of the CR3 LPTs. Generally, however, the entire work scope, and any resulting benefits and costs, were negotiated holistically and reflected in the settlement in the Letter of Intent (previously produced at 11PMA-DR1CR3-19-000001—000004) that resolved this dispute. The settlement resolved the outstanding dispute between PEF and Siemens associated with the incident at the DC Cook Nuclear Plant with a Siemens 18M2 LPT in September 2008, and the subsequent failed bunker spin test in April 2009 of the 18M2 LPTs being manufactured for PEF. The dispute was, generally, related to (1) PEF’s position that the installation of the LPTs at CR3 needed to be delayed until PEF had sufficient time to conduct any necessary due diligence and until such time as PEF received adequate assurances from Siemens to move forward with the installation of the CR3 LPTs and could adequately obtain insurance coverage for the LPTs, and (2) [REDACTED]</p> |
|---|---|

REDACTED

The additional scope is defined in Attachment H and Attachment I of the restated contract previously produced in Bates range 11PMA-DR1CR3-24-000233-- 000296. The additional scope is a direct result of the September 2008 event. There were no PE direct or indirect scope changes due to the April 2009 event. Siemens made numerous concessions during the negotiations. First, Siemens agreed to pay

Conclusions:

Data Request(s) Generated:

No. _____ Description:
No. _____ Description:

Follow-up Required:

| | |
|---|---|
| <p>Document #: 5 Date Requested: Date Received: Comments: (i.e., Confidential)</p> <p style="text-align: center; font-size: 2em; opacity: 0.5;">REDACTED</p> | <p>Document Title and Purpose of Review: For any additional contract costs not included in response to question 4, please an itemized description and justification for the additional scope and management's assessment on whether the work is/is not a direct or indirect result of the September 2008 and April 2009 events. In addition, please detail any concessions made by the vendor for these costs</p> |
| | <p>Summary of Contents: PEF states: As stated in the restated contract, PEF will store the removed LP Turbine components for a minimum of two fuel cycles. This is an indirect result of the September 2008 event. The costs for storing the removed LP turbine components are not stated in the contract. The storage plan is in development and the Company's has not completed a detailed estimate to date, but has budgeted roughly [REDACTED]. This cost is reasonable and necessary to mitigate the impact should a major in service failure of the new LP turbines occur. While a major in service failure is not predicted, prudent measures will limit the necessary time to restore the plant, reducing lost nuclear generation for PEF customers. PEF will incur a cost (approximately [REDACTED]) to support the installation of new LP turbine monitoring systems provided by Siemens and to install a generator fault recorder. This cost is an indirect result of the September 2008 event. This cost is reasonable and necessary to ensure complete monitoring of all turbine generator operating parameters that affect L-0 blade stress.</p> <p>[REDACTED]</p> |
| | <p>Conclusions:</p> |
| | <p>Data Request(s) Generated: No. ____ Description: No. ____ Description:</p> |
| | <p>Follow-up Required:</p> |
| <p>Document #: 6 Date Requested: Date Received: Comments: (i.e., Confidential)</p> | <p>Document Title and Purpose of Review: Please provide documentation verifying that PEC did not benefit from the Levy contract settlement in its final Robinson settlement for the similarly-contracted LPTs</p> <p>Summary of Contents: The contract amendments with Siemens for LP Turbines at CR3 and Robinson Nuclear Plant (RNP) are separate and distinct, with each settlement standing on its own merit. There was no benefit to PEC for any agreed PEF work or payment. Likewise, there was no reverse benefit to PEF for any agreed PEC work or payment. Additionally, there was no cost or charge to the Florida Utility or PEF ratepayers for any costs associated with the PEC settlement. Both the settlement for PEF and the settlement for PEC were agreed to by separate Letters of Intent (LOI) with different corresponding conditions specific to each jurisdiction as summarized below. See documents previously produced in Bates range 11PMA-DR1CR3-19-000001--0000004. For PEF, the settlement was agreed to relative to the full scope of work PEF has contracted with</p> |

Co-owner/third-party interests

REDACTED

What is the status of the co-ownership / third party negotiations project?

[REDACTED]

Does the company have a "hard stop" on when joint-owners would no longer be advantageous?

[REDACTED]

What efforts has the company taken to secure a financial partner?

[REDACTED]

REDACTIONS:

EPC

Have there been any changes regarding the EPC?

Currently negotiating the Full Notice to Proceed. Will continue to push for more Fixed & Firm versus Time & Materials prices.

Partial suspension of work

EPC Scheduled Shift

What is the updated status of long-lead items and disposition? (See DR1.23 response)

(Mr. Elnitsky launched a presentation titled "IPP Review for: Levy Nuclear Project, date March 29, 2011)

The presentation included an update on long lead equipment purchase order disposition.

Has there been a decision on the continuation or suspension of the Reactor Coolant Pumps? (See DR1.8 response)

Project Manager expects [REDACTED] within the next few weeks.

DR1.6 Risk Matrix

(Reviewed during presentation on IPP above)

DR1.11 COLA preparation

Has Revision 3 of the Levy COLA been submitted? When?

October, 2011

Has NCR 425609 been resolved? (See DR1.34 and DR1.32 responses)

The resolution to this NCR is in place and is closed or is about to be closed.

REDACTED

Notes on other discussion/questions:

QA oversight:

PEF involved with APOG and NuStart with regards to QA.

FNTP (Full Notice to Proceed)

Timelines, Staffing Plan, Project Controls and Benchmarking, Monthly updates.

R-COLA (Vogtle)

Continued involvement on AP1000 Working Group / APOG.

Policies and Procedures, Controls

PMCoE leads to NGG Project Management Improvements.

(Geoff to provide new Organization Chart; Action Items were reviewed)

-END-

(3) Conclusions:

The Levy Nuclear Plant continues to be in a suspense mode while negotiation with Consortium on Full Notice to Proceed continues.

(4) Date Request(s) Generated:

No. _____

No. _____

No. _____

**Bureau of Performance Analysis
Interview Summary**

| | |
|--|---|
| Company: Progress Energy FL Area: CR3 EPU Auditor(s): Coston and Carpenter | Interview Number: 1 File Name:EPU Interview 1.doc |
| Name: Paul Ingersoll, Ted Williams, Kenneth Wilson, Dave Porter | Date of Interview: April 6, 2011 Location: CR Complex Telephone Number: |

(1) Purpose of Interview: Discuss the status of the Crystal River 3 Extended Power Uprate

(2) Interview Summary:

Reviewed a PowerPoint presentation on the additional scope of the Phase III portion of the uprate. Company will provide a copy of this presentation.

Project is within policies and procedures and remains in compliance.
Phase III is the biggest project to obtain the required uprate.
In 2010, looked at detailed engineering to development and purchase/construction. Phase III is bigger and more complex than previous phases. Completed in radioactive areas and in specialized areas within plant.
Engineering has ramped-up in this phase to finalize the development of scope. EC packages and specifications on the LLE and procurement. Such as:
Feed Water heaters A/B (coming in July)
High Pressure Turbine
Condensation Motors (NOV)
LPT (FEB)
Feed Water Booster Pump (Aug)
Condensation Pumps (Oct)

The deamination work continued in 2010 from R16 which limited the team from testing the R16 installations.

Current Schedule (with a April 2013 R-17 outage):
In Oct 2011 start T18 Readiness Review to identify gags in plan. Plans in place at T-19 to ensure each component has a project plan with project manager oversight.

Construction Contract by mid-summer. [REDACTED]

Engineering plans are due Dec 2010. As the ECs are developed, we start workorders.

The second delam is unknown, until the company identifies the new schedule path, the EPU should not work overtime, limit all expenditures and services, limit contract issuance.

Did sign the contract fro fast cooldown system. Required for LAR support and submittal.

Based on current April 2013 outage schedule (which requires a mid-2011 start-up)—not feasible at this point—

In January 2012 (T-15)

In Feb-mobilize construction contractor, put in place in summer and set-up contract parameters.

T-13 (March 2012) all EC complete, all plans have outage schedule requirements
 T-12 Readiness Review #2
 T-10 Workorder review
 T-6 Readiness Review

Contractors will work with pre-established work stages.

In of 2012, work order packages will be reviewed with the construction team for constructability review. Also, validate resource requirements (impact to schedule and costs)

Outage in 2013:
 January 2013-all material is due.
 Critical path will be the high pressure and low pressure turbines.
 Outage schedule for 50 days

IPP—
 2nd delam has delayed the official IPP

In phase III, a general contractor will be responsible for all scope of work and all sub-contractors.

Management:

Terry Hobbs moved to NOS manager of PEC plant, Gene Flavors moves into project controls role.

Delam # 2

Event took place March 14th. at 110 of 112 retention. Acoustic monitors did not detect issue, as anticipated. When the alarm sounded, the event already occurred. This was in a separate area from the original delam. The company hired Bechtel to assess the event. Senior management will make recommendation. Until then, the EPU project will stay on its current Corse.

Cost Estimates:

At the original budget formation, design for phase III was conceptual to 5 %, as of April @ 50-60% for this, the contingency is 10-20%

Current contingency is 12% with the 50-60%. 2008 feasibility study.
 Review PMC-0005 for the Association of advancement cost engineering for reference.
 New IPP draft reflects the most recent numbers

LPT update:

Technical requirements make up build of difference in budget. Company looked at a root cause strategy to mitigate and determine course of action. New scope is aprx [REDACTED], and the company received [REDACTED]. Final additional amount is [REDACTED]

[REDACTED] Contract accepted on August 3, 2010.

The LAR:

The revised LAR contained more detail on engineering, not just a summary

Increased design and additional technical details 30-50 conceptual designed.
Included additional NRC expectations on content.
Larger focus on the Balance of Plant piping
New format required a new template

REDACTED

Current new timeline will be June 2011—depending on the fall-out from the recent delamination.
Expenses thus far: \$17,520,137 non-lic engineering , \$67,970 travel, training, etc., \$455,525 PE company labor

Point of discharge towers

Put construction of cooling tower on hold, due to emerging environmental regulation—316A/B
The resolution should come in August of this year and company will evaluate the options. Company is reviewing its overall corporate strategies. If necessary, construction will still continue on time.
Contract in place and fabrications are in. Permits are in place and the initial grading is complete. [REDACTED] is spent, with [REDACTED] committed.

Phase III scope of work will be performed by a general contractor.

(3) Conclusions:

(4) Date Request(s) Generated:

No. _____
No. _____
No. _____

(5) Follow-up Required:

Project Manager

**Bureau of Performance Analysis
Interview Summary**

| | |
|--|--|
| Company: Progress Energy FL Area: CR3 EPU Auditor(s): Coston and Carpenter | Interview Number: 3 File Name: EPU Interview 3.doc |
| Name: Dan Westcott | Date of Interview: April 18, 2011 Location: Carton Fields Tallahassee Office Telephone Number: |

(1) Purpose of Interview: Discuss the status of the Crystal River 3 Extended Power Uprate LAR application

(2) Interview Summary:

30years experience with NSSSW vendors and Westinghouse. In June 2008, hired as the LIC supervisor for CR3. handled LIC issues at the station.

In spring 2009 Nuclear Oversight section had some concerns about EPU schedule and audit highlighted problems with schedule.

Temp re-assigned as the Superintendent of LIC of major projects. This included Steam Gen/EPU/Spent fuel Early on in project Brian McCabe and Kenneth Wilson were involved in project. The Expert Panel was put in place to assess the draft. Felt still had time to do a through assessment in March and still met the, then, September 2009 schedule.

Determined the EPU would be made of folks with strong LIC experience. Two PEC employees with a lot of engineering analysis and experience.

McCabe reviewed the LAR in March, does not recall major concerns over content.

All members of the panel had concerns about the NRC rising expectations with Monticello and Point Beach.

Adverse Conditions:

Mr. McCabe was through and spot-on. Embraced recommendations.

After report the establishment of a good Project Management Organization. Also established discipline set of meeting for monitor progress: Schedule Meeting (Mondays) Engineering Meetings (Thursdays) and Contract Details (Fridays)

Able to grab a larger cross-section of the company and reach-out for support.

Original LAR staff was relatively inexperienced. Ken Wilson tried to hire experienced people, but limited options. Spent most of time reviewing AREVA section.

Ken Wilson is very knowledgeable and has large LIC experience. Not always easy to encourage Ken to "don't be reactive. Ken is overly optimistic at times.

[REDACTED]

(3) Conclusions:

(4) Date Request(s) Generated:

No. _____

No. _____

No. _____

(5) Follow-up Required:

**Bureau of Performance Analysis
Interview Summary**

| | |
|--|--|
| Company: Progress Energy FL Area: CR3 EPU Auditor(s): Coston and Carpenter | Interview Number: 4 File Name: EPU Interview 4.doc |
| Name: Paul Ingersoll Ted Williams Contract Staff | Date of Interview: June 1, 2011 Location: Teleconference Telephone Number: |
| (1) Purpose of Interview: Discuss the status of the Crystal River 3 Extended Power Uprate LAR application | |
| <p>(2) Interview Summary:</p> <p>Siemens Contract</p> <p>Company determined the insurance based on initial discussions with the potential Insurance provider. Initially, the amount to provide the additional warranty was [REDACTED] PEF was not involved with the final negotiations (this was between Siemens and the two insurance providers), but based on the initial discussion, PEF felt comfortable that the value of this coverage was between [REDACTED]</p> <p>The additional warranty figure was developed using the cost of 8 months of coverage for the 13m². This is the most comparable option to evaluate. The company took the cost for the 8 month coverage and calculated the cost for the requested 8 year coverage period.</p> <p>The Engineering enhancements were calculated using industry knowledge and previous contract experience.</p> <p>Estimate Vs Actual</p> <p>Due to the R16 extended outage, the company has spent R16 money in FQ 2011 that was not estimated in original budget. This was not a large amount and the company does not anticipate additional expenditures in these areas. These costs are a result of delays in the restart.</p> <p>The company also shifted some LPT costs from 2010 to 2011; this will show an increase over estimates for this item at year end. IF the 2nd Delam impact schedule, the estimates may be adjusted depending on the status on the Phase III work.</p> <p>The Schedule Performance Indicators for FQ 2011 show a lag in engineering schedule. Engineering scope baseline schedules are difficult to estimate. It is difficult to determine the engineering man hours for these projects. Corporate is working to develop new procedures to assist with better benchmarking baseline estimates.</p> <p>PM uses the SPI for gross estimates. The level two schedules are used to monitor the overall progress of the project.</p> <p>Two major projects drove the drop in overall SPI—the Emergency Feedwater Pump and the Main Feedwater Pump.</p> <p>A NCR assessment was completed in April 2011 to assess the delays. Project Team states that it has confidence that the schedule is being monitored and addressing any issues that may place the schedule in jeopardy.</p> | |
| (3) Conclusions: | |
| (4) Date Request(s) Generated: No. _____ No. _____ | |

**Bureau of Performance Analysis
Finding Summary**

Company: Progress Energy Florida
Area: Crystal River 3 - EPU
Auditor(s): Coston/Carpenter

Item No: CR3-3
File Name: CR3 Issue 2.doc
WLC#:

(1) Issue (Is there a point of discussion, debate or dispute?)

The company's original LAR application did not meet its standards for completeness

(2) Condition (What is happening?)

A review by an expert panel and an internal root cause assessment determined that the original LAR did not meet the expectations of the NRC. Audit staff interviewed members of the panel and determined that technical detail was omitted from the original LAR application.

(3) Standard/Criteria (How is it supposed to work?)

The company used the Ginna application as its standard and consulted with the NRC on its expectation. However, the initial application did not incorporate know technical standards that the NRC expects in an application

(4) Cause (What has happened or could happen due to variance between 2 & 3?)

Poor management and lack of oversight was a leading cause. Additionally, the Expert Panel member stated that the company allowed AREVA to produce a less technical version than the Ginna counterpart.

(5) Effect (What has happened or could happen due to variance between 2&3?)

The company initiated a new WA to the AREVA contract to incorporate the additional technical detail. This contract was for [REDACTED]

(6) Recommendation (What action steps will correct this problem?)