

Office of Auditing and Performance Analysis
Interview Summary

Company: PEF
Area: CR3 Plant
Auditor(s): Coston/Carpenter/Vinson

Interview Number: 1
File Name: i:\...CR3-Interview one.doc

Name: Ed ****, Ivy Wong, Ted Williams, Terry Hobbs, Paul Ingerall***, Mike Anderson

Date of Interview: 3/15/10
Location: CR3 Admin Offices
Telephone Number: NA

(1) Purpose of Interview: Discuss the progress of the EPU uprate project

(2) Interview Summary:
Changes to Org:
Ernie Kapopolus is Director of Urates. Reports to VP Robert Duncan

R 16 went as planned (outside the delaminating issues—not related to EPU). Only impact the LPTs were pushed out to R17. Roughly on schedule and on general in budget.

Walked through each of the work schedules and reviewed the daily actual vs. planned. Each component was completed within the timeline (some minor work is delayed unit restart)

The company (Ivy) monitored daily, the schedule and costs during the outage delay. The head count on site is a big driver of spend rate. Head count monitored by vendor. Task updates every 12 hours (real-time).

The company updated its IPP in October after having more clarity with Phase III work scope, increase in cost was requested. [REDACTED]

LPT Issue
2008 the Siemens LPT is new technology—used at DC Cook with catastrophic failure. (9/08)
PEF had an unsatisfactory test results on its Siemens turbine. The PEF spin test was unrelated to the blade issue at DC Cook. The company determined that [REDACTED]
[REDACTED] Siemens is correcting the problem, however, not in time for R17. There is also an additional concern with insuring the part (more in J. Franke's interview). The company considered changing turbine option. PEF had a QA monitor at the Siemens site during the failed spin test.

R17 resulted in aprx 55% of the EPU work complete.

The IA Audit of EPU and SGR noted two EPU findings. Terry Hobbs stated that the findings were addressed and resolved.

Company reviewed the events of outages—Turn-around/turn over sheets. Welding issues. Paul states that of 5,000 +/- welds, only 10-20 rejects. Safety was number one priority during outage. Dropped items were issues, but no major injuries and no damage to equipment.

The company believes that its QA oversight has been effective at maintaining its schedule and costs. The company states all items were within the original contract amount and not additional costs or impacts.

(3) Conclusions:

DOCUMENT NUMBER-DATE
06025 JUL 22 09

EPSC-COMMISSION OFFICE

Office of Auditing and Performance Analysis
Interview Summary

Company: PEF Area: CR3 Plant Auditor(s): Coston/Carpenter/Vinson	Interview Number: 3 File Name: i:...CR3-Interview 3.doc
Name: Jon Franke—Vice President Crystal River 3	Date of Interview: 3/16/10 (noon) Location: CR3 Admin Offices Telephone Number: NA
(1) Purpose of Interview: Discuss the progress of the EPU uprate project	
(2) Interview Summary:	
<p>LPT Company invested [REDACTED] in turbine when DC Cook occurred. PEF is using a similar turbine to the DC Cook technology. The insurance group, NEIL, paid its largest claim ever on the Cook event, so the company is very concerned about insuring future Seiman turbines (of similar design -18²). [REDACTED]</p> <p>The company is considering other options, such as removing the end turbine blades (making the turbines 13') However, this would loose aprx 24 MgW. Company still considering its options.</p> <p>R17 The company has not made any decisions about the R17 schedule, although a shift is likely. Spring 2012 or Fall 2012 would be the likely option. All depends on the final duration of the current CR3 outage. The company determined that the delam was [REDACTED]. The company currently de-[REDACTED] Still on schedule for a mid-year re-start.</p> <p>LAR The expert panel was planed to ensure completeness of application. Does not believe that there was a major issue with the LAR preparation. The EXP pointed out areas of improvement and focus. The timeline in place by the company ensured ample time for prep and submittal. With an April 2010 submittal, the company has the 14 months necessary to receive approval. The EXP review should ensure all topics were completed to NRC expectations. With the anticipated shift in R17, the company has gained even more time for processing. However, the company will move forward with the R17 work even if the final approval has not been issued by the NRC. The company can do the work without the LAR, but it can not run at the higher output until the amendment is issued by the NRC.</p>	
(3) Conclusions:	
(4) Date Request(s) Generated:	
No. _____	
No. _____	
No. _____	
(5) Follow-up Required:	

Project Manager

REDACTED

PROGRESS ENERGY FLORIDA
In re: Nuclear Cost Recovery Clause
Docket 100009-EI

Sixteenth Request for Confidential Classification

Exhibit B

COM _____
APA _____
ECR I
GCL _____
RAD _____
SSC _____
ADM _____
OPC _____
CLK _____

DOCUMENT NUMBER-DATE

06025 JUL-22 9---

FPSC-COMMISSION GLEFRW

Office of Auditing and Performance Analysis
Interview Summary

Company: PEF Area: CR3 Plant Auditor(s): Coston/Carpenter/Vinson	Interview Number: 2 File Name: i:...CR3-Interview 3.doc
Name: Jon Franke—Vice President Crystal River 3	Date of Interview: 3/16/10 (noon) Location: CR3 Admin Offices Telephone Number: NA
(1) Purpose of Interview: Discuss the progress of the EPU uprate project	
(2) Interview Summary:	
<p>LPT Company invested [REDACTED] in turbine when DC Cook occurred. PEF is using a similar turbine to the DC Cook technology. The insurance group, NEIL, paid its largest claim ever on the Cook event, so the company is very concerned about insuring future Seiman turbines (of similar design -18²). [REDACTED]</p> <p>[REDACTED]</p> <p>The company is considering other options, such as removing the end turbine blades (making the turbines 13') However, this would loose aprx 24 MgW. Company still considering its options.</p> <p>R17 The company has not made any decisions about the R17 schedule, although a shift is likely. Spring 2012 or Fall 2012 would be the likely option. All depends on the final duration of the current CR3 outage. The company determined that the delam was [REDACTED]. The company currently [REDACTED] [REDACTED] Still on schedule for a mid-year re-start.</p> <p>LAR The expert panel was planed to ensure completeness of application. Does not believe that there was a major issue with the LAR preparation. The EXP pointed out areas of improvement and focus. The timeline in place by the company ensured ample time for prep and submittal. With an April 2010 submittal, the company has the 14 months necessary to receive approval. The EXP review should ensure all topics were completed to NRC expectations. With the anticipated shift in R17, the company has gained even more time for processing. However, the company will move forward with the R17 work even if the final approval has not been issued by the NRC. The company can do the work without the LAR, but it can not run at the higher output until the amendment is issued by the NRC.</p>	
(3) Conclusions:	
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(5) Follow-up Required:	

Project Manager

Bureau of Performance Analysis

Interview Summary

Company: PEF Area: Levy Plant Auditor(s): Coston/Carpenter/Vinson	Interview Number: 4 File Name: i:...3-17 Trip1 Intvw Sum.doc
Name: Elznicky, Kitchen, Hardison, Stephenson (also: Spraggins, Borger, Foster, Angers)	Date of Interview: 3/17/10 Erin Go Bragh! Location: CR3 Admin Offices Telephone Number: NA
(1) Purpose of Interview: Recap of Levy EPC contract amendment, other topics listed on intvw schedule form	
(2) Interview Summary:	
<p>ORG STRUCTURE –</p> <ul style="list-style-type: none"> *Gary Miller is no VP Nuclear Eng over all PE fleet, focusing on CR3 Delam Issue. *John Elsnicky (JE) as VP Nuclear Development is now lead on Levy. JE reports to Jeff Lyash EVP Corp Devel. *Some of Miller's tasks picked up by Van Stephenson (engineering), some by Sue Hardison (financial). *Kitchen still lead on licensing. NOTE – later Joan Borger suggested we be given newer org chart [DR Item] <p>EPC RENEGOTIATION/AMENDMT TIMELINE UPDATE –</p> <ul style="list-style-type: none"> * JE spoke from timeline chart (to be provided) detailing events going back to late 08 and forward to [REDACTED] *Referenced 3 key BOD presentations of Feb-Mar 2010 (discussed at end of day and to be provided) * Key pts 1) [REDACTED] 	
<p>COLA STATUS</p> <ul style="list-style-type: none"> * NRC sent letters moving safety "side" completion from 5/11 to 7/11 and "environ side" 9/10 to 7/11 (latter was the big surprise) *COL Award date estimate is late 2012 or early 2013 *Geotech "positives": 3 NRC audits on geotech area done in 2009, Geotech removed from Risk Matrix (!) *TC Q: RAI response timeliness not issue per JE, the ones done in >30 days required extensive analytics, not just slow. PEF can provide % that took over 30 days [DR Item] <p>JVT PERFORMANCE</p> <ul style="list-style-type: none"> *TC Q: [REDACTED] *TC Q: Performance of JVT? Bob/JE/Van all agreed "very good" *TC Q: How assessed/tracked? Bob-wkly calls, qtrly face2face, any errors logged to Corrective Action Program, no rejects on RAIs, NRC's Anderson says Levy answers better than Vogtle and Summer. JE added JVT is under PEF's subchapter 10 part 50 QA 	

MISC EXTERNAL COLA STUFF

*TC Q: Ref COLA status? Bob: transition done, real wk at Vogtle JE: [REDACTED]

*TC Q: Is Vog COLA on schedule? Bob: day for day slip with DCD stuff

*TC Q: NuStart RAI work seen as deficient? Bob: satisfied w. NuStart & its contractor Enercon, most problematic RAIs are WEC related and not ref COLA stuff

*TC Q: APOG? Wking in this on std programs all users can employ – there are about 100- training is biggest I APOG stuff is mostly operational readiness oriented.

JOINT OWNERSHIP/ 3RD PARTY

*JE: PEF nursing as key element for Levy. [REDACTED]

*TC Q: What is target PEF ownership %? JE: [REDACTED]

*TC Q: [REDACTED]

*JE: we watch [REDACTED]

IPP

*JE: Current [REDACTED]

*Sue: IPP is approval to move fwd w certain level of spending, next one likely to cover 12 mos+-

*CV Q: Does IPP memorialize continued/renewed validation of feasibility? Sue: Not really, the earliest ones did ???

*TC Q: What was your role in rec to Board today? JE: 3 presents 2/15, 3/8 and 3/xx [DR Item] JE went over later on screen in detail

EPC SUSPENSION ACTIVITIES, DECISION, RATIONALE

*TC Q: [REDACTED]

*TC Q: # manhours verified? JE: Yes Sues group did, audited wk pkgs on site, compared exp vs authoriztn, followed decision steps Sue: Gary, David Varner and now I have pushed back on hours, asked if wk necess now, etc.

*TC Q: industry busy-ness? JE: Slow now but upon Vogtle COL approval orders could start happning. We still learn from Vogtle and were not on the bleeding edge, but are now “fast follower” – good position to be in.

CHINESE AP1000s

*IAEA thru United Nations paying for travel, on travel for Hiyang Co. agreement they pay

*TC Q: is there limited comparability? JE: Toshiba turbine is big diff and BOP is diff, but nuclear island is same. *Van – and we arent getting a look at Shaw since Chinese constructor Bob: risk elements are very diff in slowdown and today's conditions e.g. competit for welders not big deal right now

RISK MATRIX

*TC Q: Status of Worley Parsons new risk process work? Van: [REDACTED]

*TC Q: Status of monitoring Burns&Roe item fixes? Van: [REDACTED]

*TC Q: looking back was B&R on target? Bob: Mixed bag Van: [REDACTED]
JE: B&R was right some, it was right thing to do & added value

DCD ISSUES

*JE: Rev 18 and maybe even 19 are possible someday, but 18 would likely be housekeeping while Rev17 introduced new technology

OPERATIONAL READINESS DEPT

TC Q: why the timing of starting this now? JE: Saw need last May for operator training, selection. Dale Young was on this via APOG, with his retirement will still be moving but slowly.

*Training takes 18 mos also certain % of staff has to be >5 yrs experience. Need all to be ready in the testing phase, not just at COD.

* JE: Training bldg prob start 6 mos after COL granted, main need is to house simulators.

*NRC audit moved to April after confusion over when they meant, per JE normal 10CFR 50 stuff. Report issued May but lots known at April exit conference [Later DR Item?]

DOE LOAN GUARANTEES

* JE: We went thru 1st step and stopped because lack of clarity from DOE on 1st mortgage issue (both govt and debt holders want 1st lien position – Fed vs State clash). [REDACTED]

* Likely can/will get in on this, but not a 'make or break' issue for Levy. [REDACTED]

[NOTE: Foster sd there was some Interrog answer in last yrs dkt on DOE Loans???

LINC AND PROJECT MGT TEAM

*TC Q: LINC status? JE: Still exists, will become more of an active oversight tool. w/qtrly reviews.

SMC has more emphasis on _____, This began last May-June, PMT has wkly staff mtg keeps all (attys, fin, project people) engaged and acctble thru wkly status report and action item list.

*TC Q: are you shifting or changing project team with the partial suspension? JE: Yes, consolidating, chance to hone proj mgt and support processes, keep team developing instead of last minute rush. I am wking on it now. Lyash to be pitched on in April.

(3) Conclusions: PEF came out well in amendment/renegotiation of EPC. [REDACTED]

TC Q: impact of [REDACTED]

(4) Date Request(s) Generated:

- No. _____
- No. _____
- No. _____

(5) Follow-up Required: SEE BLUE FONT ABOVE FOR POSSIBLE NEW DR ITEMS

Project Manager

Office of Auditing and Performance Analysis
Interview Summary

Company: PEF Area: CR3 Plant Auditor(s): Coston/Carpenter/Vinson	Interview Number: 45 File Name: i:...CR3-Interview 4.doc
Name: Brian McCabe-Nuclear Regulatory Manager	Date of Interview: 3/26/10 (10-11:30) Location: Teleconference Telephone Number: NA
(1) Purpose of Interview: Discuss the progress of the EPU uprate project	
(2) Interview Summary:	
<p>Currently Regulatory Affairs manager for PE Nuclear. Prior experience with NRC.</p> <p>The company always intended to have a further review of its LAR application. McCabe put together a team of "experts" in Summer 2009 to review the current application. After the EXP review, the CR3 team asked McCabe to assess the results and recommend action. McCabe completed an Action Request on the LAR process.</p> <p>McCabe conducted interviews with key players/individuals on the application team. Took approximately 2-3 weeks for the review.</p> <p>This was a [REDACTED]. (Of the 1000s completed each year, [REDACTED])</p> <p>McCabe understood the current application organization and process going into the review.</p> <p>[REDACTED]</p>	
Opportunities for Improvement:	
[REDACTED]	
(3) Conclusions:	
(4) Date Request(s) Generated:	
No. _____	
No. _____	
No. _____	
(5) Follow-up Required:	

Project Manager

Office of Auditing and Performance Analysis
Interview Summary

Company: PEF Area: CR3 Plant Auditor(s): Coston/Carpenter/Vinson	Interview Number: 4 File Name: i:...CR3-Interview 4.doc
Name: Brian McCabe-Nuclear Regulatory Manager	Date of Interview: 3/26/10 (10-11:30) Location: Teleconference Telephone Number: NA
(1) Purpose of Interview: Discuss the progress of the EPU uprate project	
(2) Interview Summary:	
<p>Currently Regulatory Affairs manager for PE Nuclear. Prior experience with NRC.</p> <p>The company always intended to have a further review of its LAR application. McCabe put together a team of "experts" in Summer 2009 to review the current application. After the EXP review, the CR3 team asked McCabe to assess the results and recommend action. McCabe completed an Action Request on the LAR process.</p> <p>McCabe conducted interviews with key players/individuals on the application team. Took approximately 2-3 weeks for the review.</p> <p>This was a [REDACTED]. (Of the 1000s completed each year, [REDACTED] McCabe understood the current application organization and process going into the review.</p> <p>[REDACTED]</p>	
Opportunities for Improvement:	
[REDACTED]	
(3) Conclusions:	
(4) Date Request(s) Generated:	
No. _____	
No. _____	
No. _____	
(5) Follow-up Required:	

Project Manager

Bureau of Performance Analysis Interview Summary

Company: PEF Area: Levy Plant Auditor(s): Coston/Carpenter/Vinson	Interview Number: File Name: i:...
Name: Levy Project Management Team	Date of Interview: April Visit -2 nd Location: CR3 Admin Offices Telephone Number: NA

(1) Purpose of Interview: Recap of Levy Project

(2) Interview Summary:

EPC CONTRACT REVIEW

(See John Elnisky presentation on EPC)

Initially in 2006, the goal was to have [REDACTED]

Within one year of "first concrete", the goal should be to have [REDACTED]

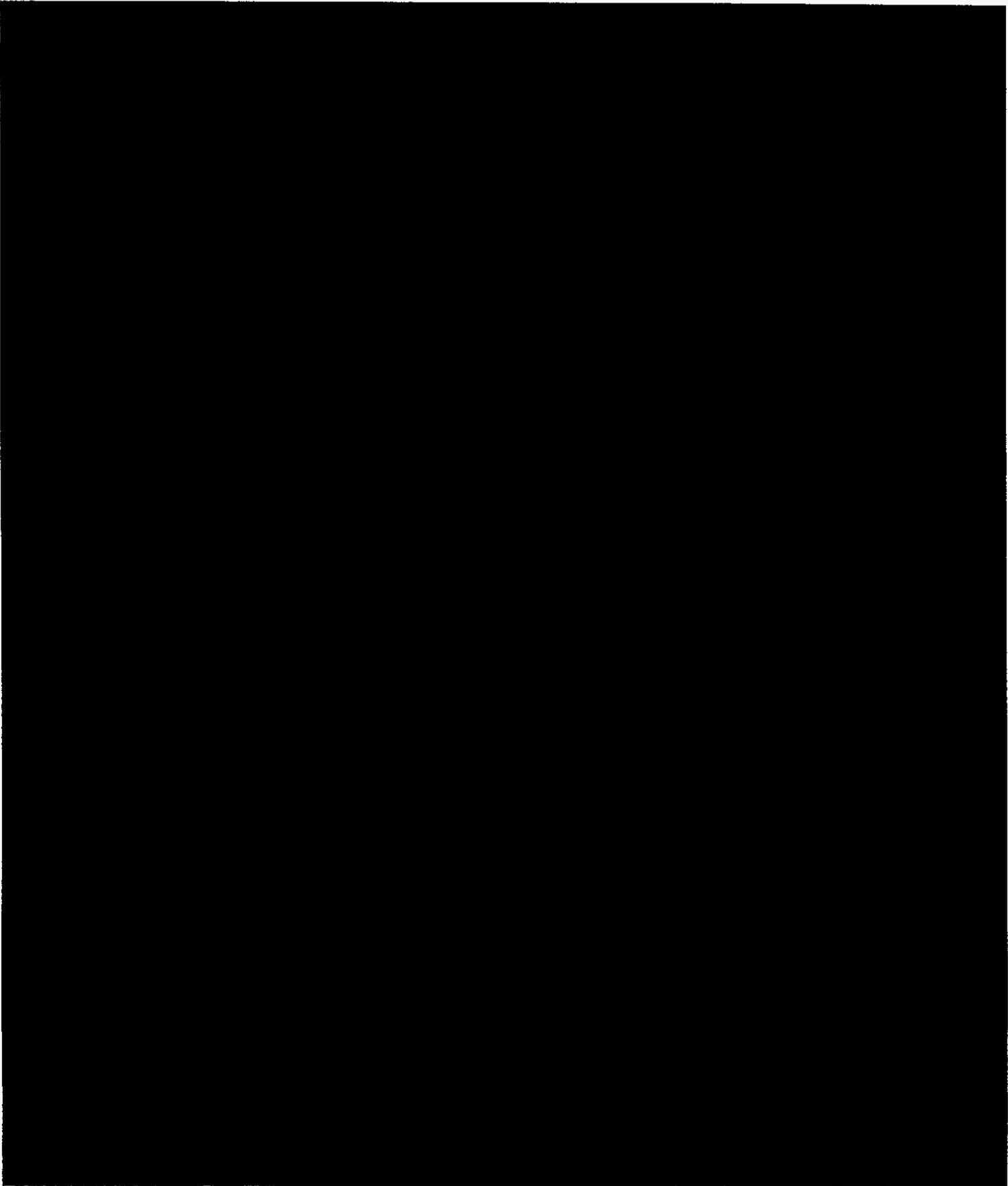
The total contract price is [REDACTED]

The [REDACTED]. This is favorable for PEF.

[REDACTED] discussed.

(end of presentation)

EPC Contract answers to staff questions:



LONG LEAD ITEMS

2006 negotiations – April 2008 letter of intent to save place in supply chain.

Disposition Methodology – [REDACTED]

Quantitative Analysis:

- Cancellation Costs
- Storage Costs
- Incremental Costs
- Sunk Costs

May 1 Filing Expectations:

- More refined cost estimate for 2021
- Progress on Purchase Orders
- How the project is moving forward

Project still feasible at \$17.2 to \$22.5 Billion dollar range of total cost.

Levy's environmental challenges:

- 1) Low-level waste storage
- 2) De-watering and Florida Aquifer impact

ITAACs at 180 days before fuel load.

AUDIT SERVICES DEPARTMENT

Periodic audits of WEC are done.

Programs have been consolidated down to seven.

CR3 EPU construction audit targeted for July or August, 2010.

LNP scheduled for fourth quarter 2010.

The audit standard is "no material defects". Rankings are either overall 1) Effective or 2) Needs improvement.

Financial and Compliance audits.

Items may be aggregated into one material deficiency.

Ratings of "Ineffective" are rare.

The Levy Baseload Transmission Audit had rating of [REDACTED]

[REDACTED] Project Execution Plan and Project Requirements are examples of these.

Revised deadlines to mid-year 2010.

Land acquisition program completed during the audit.

Switchyards interface agreement is now closed.

AI 3.2 May 2010 Central Florida South substation to be complete in July 1, 2010. Engineering and execution follow-ups completed.

Cost Recovery Rule Compliance Audit was a financial audit of the T documents to trace costs and verify.

A913 – Engineering Procurement Contract.

LEVY QUALITY ASSURANCE

A 'Quick Hit Self-Assessment Report' is done six months after Policy and Procedure implementation.

Part 52 S.A. – Employee's right to inform NRC.

February 2010 – Before NRC's QA inspection, PEF simulated the audit internally. The NRC reported [REDACTED]

Joint Venture Team adjustment – a QA notation was not completed.

The Nuclear Oversight Audit of CH2MHILL found four deficiencies that were not material. There was a problem with 'padding' of credentials.

Vendor Oversight Equipment Group: NUPIC audits where 5 or more utilities use a particular vendor. Their audit of WEC was made with approximately 15 staff members and resulted in nine findings.

The audit of Shaw, Stone and Webster resulted in seven findings, all of which have been closed.

NuStart application process schedule shift – anticipated versus completed. Vogtle is the reference point. The schedule shift is due to the DCD review and responses back to the NRC.

TRANSMISSION

General Manager Ken Karp has 12-13 years of experience as a consulting engineer and has been with Progress Energy since 1994.

He is in charge of Transmission Engineering and Design, Project Management and Execution, Construction, Land Acquisition and Outreach.

2009 activities:

Site certification; application / COLA support; routes and wetlands.

IPP development, costs estimates, risks, LIDAR/GIS, land governance.

Phase I of CR3 involved 3 switches and the 500 KV switchyard. [REDACTED] spent for 2 miles of transmission. Tied into 500KV bus during downtime at CR3.

Open houses and meetings with Home Owners Associations; follow-ups. Launched website with interactive mapping for users to determine how transmission lines could impact their property.

NRC, FERC, NERC, FRCC requirements for 500KV specifications and standards.

Completed 30% of Pinellas to Polk Commonwealth Buildouts. Completed 70-80% of the two Levy substations.

Completed maps as part of route selection studies and wetlands delineation.

CREC execution scheduled for 1/09 to 4/09. Supported SCA/COLA activities.

Evaluated whether to procure a turn-key land acquisition program or to self-manage.

[REDACTED]
Decision to self-manage land acquisition.

2010 activities:

Defer, review impact of schedule shift. Continue minimal strategic land acquisition on the Levy to Citrus substation. Environmental permitting. Partnered with Sunshine Grove road widening project.

CREC parallel with planned refuel outages.

Karp's transmission organization has shrunk. Subsequent to COLA, his organization will staff up.

CREC:

Phase I: three switches tied to 500 KV bus to provide stability for the Grid.

Phase II: Move toward ultimate buildout. Will be implemented in 2010. The labor for Phase I consisted of 15 – 20 persons. They had no significant safety issues. Their method for buildout by Commonwealth utilizes CR3 outages.

Ken worked with Gail Simpson on Outreach programs.

[REDACTED] total Transmission cost is estimated. No change in schedule.

Working with Army Corps of Engineers and FDEP on plant and transmission impacts.

Basin-specific plans are desired by the Army CoEs. Budget [REDACTED] in 2011 & 2012.

Central FL South involves 500KV to 230KV step down. TOPD need and Levy need (each bank). TOPS organization is evaluating.

New Generation Programs and Projects:

- 1) Program and Project Development
- 2) Project Execution
- 3) Smart Grid Project Execution
- 4) Program and Project Support

(3) Conclusions:

(4) Date Request(s) Generated:

No. _____

No. _____

No. _____

Bureau of Performance Analysis

Interview Summary

Company: PEF Area: Auditor(s): Coston/Carpenter/Vinson	Interview Number: File Name:
Name: CR3 Staff interviews	Date of Interview: April Visit (2 nd visit) Location: CR3 Admin Offices Telephone Number: NA

(1) Purpose of Interview: Discuss the CR3 Uprate project

(2) Interview Summary:

CONTRACT OVERSIGHT/CHANGES TO EXISTING CONTRACTS:

1a) A meeting was held on June 3, 2009 regarding the deferment of the LP Turbine. This resulted in AREVA Change Order #31 for WA #93 [REDACTED] this change order had a cost of [REDACTED] (Disk 12). Since the bunker spin testing failure was [REDACTED]

Yes, [REDACTED]

1b) Does PEF view Siemens and/or NEIL as responsible for covering the cost of this (and not PEF and its ratepayers)?

This is to be determined. A settlement is being negotiated with Siemens and NEIL (insurance carrier).

2a) Please walk us through Schedule T-7, Section (8)(c) of Exhibit WG-2 from Will Garrett's testimony.

Amendment Estimated Final Contract Amounts should be "rolled up" into Work Authorization. Amendment original costs should not be "rolled up"; i.e. the Original Amount of the Work Authorization is inclusive of everything known at that point.

2b) On line 1 of Schedule T-7, the Areva contract No. 101659 Work Authorization 84 shows an original amount of [REDACTED] and an Estimate of Final Contract Amount of [REDACTED]. Once the Amendments on lines 12 and 13 are combined the Estimated Final Contract Amount is [REDACTED]. Is this correct? Cause?

Yes. These amendments were not part of the original scope. Change Order 18 consisted of [REDACTED]

[REDACTED] Change Order 31 consisted on [REDACTED]

[REDACTED] during
Change Order

[REDACTED] 26 was [REDACTED]

[REDACTED] Change Order 23 was [REDACTED]

2c) On line 3 of Schedule T-7, the Areva contract No. 101659 Work Authorization 93 shows an original amount of [REDACTED] and an Estimate of Final Contract Amount of [REDACTED]. Once the Amendments on lines 9 and 14 are combined the Estimated Final Contract Amount is [REDACTED]. Is this correct? Cause?

Yes. This was R17 work for the Feedwater Heating System. Change Order 28 was for the [REDACTED]
[REDACTED] Change Order 32 was for the [REDACTED]

2d) On line 8 of Schedule T-7, the Mesa Associates contract No. 221186-24 for the POD Cooling Tower shows an original amount of [REDACTED] and an Estimate of Final Contract Amount of [REDACTED]. Is this correct? Cause?

Yes. This was work related to the [REDACTED]

2e) On line 10 of Schedule T-7, the Atlantic Group contract No. 3714, Amd 72 & 74 (PEF) for the R16 EPU implementation labor and support shows an original amount of [REDACTED] and an Estimate of Final Contract Amount of [REDACTED]. Is this correct? Cause?

Yes. This was for the actual labor that was needed.

2f) On line 15 of Schedule T-7, Bartlett Nuclear contract No. 3707, Amd 43 for the EPU portion of HP/Decon for R16 shows an original amount of [REDACTED] and an Estimate of Final Contract Amount of [REDACTED]. Is this correct? Cause?

Yes. This was for additional [REDACTED]. This is now a lessons learned for future projects.

LAR APPLICATION PREPARATION TEAM:

3) Please describe the LAR process from the initial beginning of the project up until the Expert Panel review.

Ken Wilson is the licensing lead for the project. He has three licensing and one environmental staffers, all with limited experience. The NRC has 15 months to complete their review. The Ginna template was used as the starting point for the CR3 LAR. The NRC requirements were constantly changing/evolving. When the Monticello LAR was rejected, the attention turned to making sure that the CR3 LAR would be adequate and not be rejected.

4) Describe the LAR process changes implemented following the Expert Panel review.

Two experienced staff members were added via contract. The new guidance document for completing the LAR was implemented in late August, 2009. The LAR work is now complete, and PEF believes the LAR to be of high quality. We were told that PEF expects to submit the LAR in May, 2010. NOTE: Despite being told this on April 28, 2010, this April 30, 2010 press release states that the LAR will be submitted later this year: <http://analysis.nuclearenergyinsider.com/pr/nuclear-power-uprate-crystal-river-nuclear-plant-assessment-progress-energy-and-areva>.

5) Describe the working relationship between AREVA and PEF personnel on this project.

They have a great relationship; open and honest.

6) From NRC website:

Crystal River Unit 3 Extended Power Uprate (EPU) Pre-Application Meeting

On April 1, 2009, the staff held a public meeting with Progress Energy and its contractor, AREVA, to discuss the submittal

I:\PERFORMANCE ANALYSIS SECTION\00 PERFORMANCE ANALYSIS AUDITS\Nuclear Controls Review 2010\PEF\Interviews\Interview Summaries\EPU trip 2.doc

of an EPU application for Crystal River Unit 3 that is currently planned for the third quarter of 2009. During the meeting, Progress Energy / AREVA and the staff discussed EPU amendment format, environmental report, technical details, linked / related amendments, and schedule. Progress Energy is planning to implement EPU during the Crystal River Unit 3, 2011 refueling outage, which would raise its rated thermal power from 2609 MWt to 3014 MWt (~15.5%).

Describe your feel for where you were in the process following this meeting.

Positive.

7) Brian McCabe's Adverse Condition Investigation Form states that [REDACTED]

[REDACTED] Explain how the LAR quality and content has been improved from that point on.

The lack of experience was supplanted by Excel staff that were hired. They now have better control over the process.

8) According to Brian McCabe, [REDACTED] The LAR was not [REDACTED]

[REDACTED] Explain how the level of detail was lacking and how this was resolved.

The template was revised, and supporting schedules integrated into the final 2,000 page LAR.

9) Was there a response to McCabe's review prepared by CR3 management?

Yes, this is found in the Adverse Condition document.

10) McCabe: [REDACTED]

[REDACTED] Explain what he meant by this and how you were able to improve in this area.

There was an expectation that engineering would have been further advanced than it was. A more formal process was created and implemented.

11) When were you first aware that an Expert Panel would be reviewing the mid-2009 LAR?

In 2006 or 2007. Always part of the plan.

12) After the Expert Panel review, Gregg Ellis (who had served on expert review panel) and Dan Williamson from Excel Services were placed within the LAR organization. If they were placed within the LAR project organization from the beginning, do you think that the LAR may have been ready for submittal on the original deadline of June 30, 2009 (per the IPP)? If not, the September 30, 2009 deadline? Why or why not? What value did Greg and Dan bring to the LAR group? What if Brian McCabe had been part of the LAR group?

Unknown. The need for greater engineering completion that was needed for the LAR may have been known earlier. Gregg and Dan are highly experienced licensing experts. Excel Services is nuclear licensing specific. It is unknown if McCabe's presence would have helped.

13) The LAR Resources Chart (10PMA-DR3-1B-000001) shows that between [REDACTED]

Would the number of hours be less if the guidance document and appropriate staffing had been implemented from the beginning? What were the original budgeted man-hours for the LAR preparation?

Unknown. The curve that was shown was normal per Ed Avella. They claim that the "re-write" was not redundant; just re-formatting and including additional data.

14) Review of other charts and documentation.

Done.

MAY 1ST TESTIMONY:

15) What items will be covered by the May 1st testimony?

Usual stuff.

16) Will there be any items covered during the testimony that may be termed a surprise?

No.

CR3 QUALITY ASSURANCE

Cost Recovery Review

Logistics Support – Includes more than just uprate. Offsite busing, accommodations, emergency preparedness.

EPU and SGR project review was combined for logistics. Risks were identified. Environment Permitting was reviewed. Contractor monitoring and timing of shift starts were scheduled to minimize traffic, etc.

EPU related items:

- 1) Database issues: 1.1 and 1.2 implemented.
- 2) Communications – Earned Value Analysis combining cost and schedule. PMCoE/Penbock. MS Excel issues. 2.1,2.2 and 2.3 implemented.
- 3) Change Control – Tracking the form. Recommended reference changes to allow better tracking. All action items completed.

(3) Conclusions:

(4) Date Request(s) Generated:

- No. _____
- No. _____
- No. _____

(5) Follow-up Required:

were presented to senior management on a regular basis.

- Support staff provided oversight and coordination for other Nuclear Cost Recovery Clause regulatory filing needs, including Data Requests, Interrogatories, Document Production and Testimony preparation.
- The initial Burns and Roe "Review and Validation of the AP-1000 Cost and Schedule" report for risk assessment was issued in March. A detailed review of each of the findings in the report was completed. Based on the review of each finding with EPC members Shaw and Westinghouse, the current status was documented and a high level mitigation strategy was determined for each finding. An action was assigned for each mitigation strategy and is being formally tracked. Note that due dates have been extended on certain schedule related action items until new commercial operation dates are determined from the schedule scenario analysis.

Began efforts to evaluate estimate revisions needed under continued partial suspension, including work with EPC Consortium on various scenarios for schedule shift impacts on EPC contract.

Completed IPP in December to approve spending request for the first quarter of 2010 as EPC negotiations and impacts of Levy limited work are assessed. The IPP was approved on December 31, 2009.

Work Planned for 2010

- Finalize sales tax submittal to the Florida Department of Revenue.
- Complete negotiations to amend the EPC contract for the revised Levy project schedule
- Revise Level 1 schedule for new in-service date; develop detail schedule segments for near-term work
- Revise Level 4 estimate for Levy project based on amended EPC contract, new construction schedules for generation and transmission activities and risk

Conclusions:

Data Request(s) Generated:

No. _____ Description:

No. _____ Description:

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Item Description:

2) Question:

Provide a description of pending NRC and other regulatory applications, approvals and certifications required for the Levy units project and provide a current timeline for completing each.

Response:

The NRC Combined Operating License Application (COLA) was filed on July 30, 2008 and docketed by the NRC on October 6, 2008. The current NRC review schedule for the LNP COLA is:

Safety Review

Phase A - Requests for Additional Information (RAIs) and Supplemental RAIs 05/05/10

	<input type="checkbox"/> Weekly NPD Program Reports <input type="checkbox"/> Monthly Executive Program Reviews <input type="checkbox"/> Monthly Project Debriefs <input type="checkbox"/> Senior Management Committee (SMC) Board of Directors (BOD) Reviews <input type="checkbox"/> NPD Performance Report <input type="checkbox"/> Vendor Project Status Reports Conclusions: Data Request(s) Generated: No. _____ Description: No. _____ Description: Follow-up Required:
<p>Document #: NEW DR1.8 Date Requested: Date Received: Comments: (i.e., Confidential)</p> <p>CONFIDENTIAL</p>	<p>Document Title and Purpose of Review: Please describe:</p> <p>a) Any changes made to company planning since January 2009 to date due to potential project risks, and the impact of those changes on the Levy project schedule and costs.</p> <p>b) All risk mitigation strategies developed or considered and indicate which strategies the company is deploying on the Levy units project.</p> <p>Summary of Contents: The Company had identified the risk of not receiving Limited Work Authorization (LWA) and this risk was triggered early in the second quarter of 2009. As a result, changes made to company planning since January 2009 include Progress Energy's Management decision in April 2009 to shift the Levy schedule by at least 20 months, and formally withdraw the Levy Limited Work Authorization (LWA) request. This decision was based on the results of continuing discussions with the NRC regarding a reduced scope LWA for Levy, and the associated advantages/disadvantages. The trigger of this risk resulted in a number of mitigating actions by the Company. As a result of the Levy schedule shift, Progress Energy issued a "partial suspension" to the EPC Consortium on April 30, 2009, that served to limit further work activities until the schedule shift is determined and results are incorporated into an amended EPC Agreement</p> <p>[REDACTED]</p> <p>The schedule shift also resulted in significant near term impacts to the Levy Transmission Program schedule, costs, and</p>

	<p>determine whether the weld defects were pre-existing or were due to the applied stresses during the load test. Investigation showed that the UT defects were due to welding fabrication at the factory. Major welding repair work has to be done to the lifting beam and a new lifting connector needs to be made.</p> <p>Informed Decision making: A Non-Conformance Report (NCR) on rebar for CA20 was issued and the material dispositioned as "Scrap" by the site engineering organization at Sanmen based on the fact that requirements of ACI-349-01 were not met for the actual yield strength and the ratio of ultimate yield strength to actual yield strength. The issue is that only one heat of material was included in the NCR. In total there were approximately 13 lots of material used on CA20 rebar. Actions to eliminate this situation are to look at the situation as a whole by referencing all of the Certified Material Test Report (CMTR) to disposition the problem, rather than a single CMTR. In this case - approximately 13 lots of material were used and the Code calls for re-testing of the material to judge if it is acceptable per Code requirements. By gaining all information such as CMTR's and retest data, it allows for Engineering to see the overall problem and make a final judgment/disposition on the NCR.</p> <p>Conclusions:</p> <p>Data Request(s) Generated: No. _____ Description: No. _____ Description:</p> <p>Follow-up Required:</p>
<p>Document #: NEW DR1.11 Date Requested: Date Received: Comments: (i.e., Confidential)</p>	<p>Document Title and Purpose of Review: Provide the most recent copy of the IPP for Levy project.</p> <p>Summary of Contents: Revised IPP -5 pages-- The IPP is asking for additional funds to [REDACTED]</p> <p>Conclusions:</p> <p>Data Request(s) Generated: No. _____ Description: No. _____ Description:</p> <p>Follow-up Required:</p>
<p>Document #: NEW DR1.12 Date Requested: Date Received: Comments: (i.e., Confidential)</p>	<p>Document Title and Purpose of Review:</p> <ul style="list-style-type: none"> a) Please provide copies of all Levy Project Management policies and procedures revised during 2009. b) Identify all newly created policies, procedures, and controls, and describe any planned future policies, procedures, and control changes related to completing the Levy project since March 2009. <p>Summary of Contents: The following policies and procedures were revised during 2009 and are provided for your review: REVISIONS</p>

<p>Comments: (i.e., Confidential)</p>	<p>Summary of Contents: Please see the responses to 2010 DR1 Q21A, Q21B, and Q21C, accordingly, as of the time of this response, the Company has not yet determined a revised COD for the Levy Units, and as such is unable to complete the corresponding estimate at this time.</p> <p>Conclusions:</p> <p>Data Request(s) Generated: No. _____ Description: No. _____ Description:</p> <p>Follow-up Required:</p>
<p>Document #: NEW DR1.21 Date Requested: Date Received: Comments: (i.e., Confidential) CONFIDENTIAL</p>	<p>Document Title and Purpose of Review:</p> <ul style="list-style-type: none"> a) Has the company finalized the amendment to its AP1000 EPC contract? If so, please provide a copy of the original contract and all current amendments. b) Please detail the changes incorporated into the EPC contract in response to the schedule shift—including financial and schedule implications. c) If the company has not finalized the EPC amendment, when does the company anticipate completing the negotiation process? What factors has caused the delay in finalizing the amendment? <p>Summary of Contents: No. The Company executed [REDACTED]</p> <p>Conclusions:</p> <p>Data Request(s) Generated: No. _____ Description: No. _____ Description:</p> <p>Follow-up Required:</p>
<p>Document #: NEW DR1.22 Date Requested: Date Received: Comments: (i.e., Confidential) 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, other than those included in the Levy units EPC contract, which may impact the Levy units project.</p> <p>Summary of Contents: Other than equipment included in the Levy units EPC contract, a purchase order #407759 was issued on 11/11/08 to Southern States for the purchase of 3 switches for a total of [REDACTED]. These switches were received on 8/24/09 and were installed into the Crystal River Switchyard, which is a part of the Levy Transmission Crystal River Plant Sub-Station Phase 1 Project.</p> <p>Conclusions:</p> <p>Data Request(s) Generated:</p>

IPP Review Meeting Presentation – PowerPoint

Conclusions:

Data Request(s) Generated:

No. _____ Description:

No. _____ Description:

Follow-up Required:

Is Follow-up required on the following from Disk 11 ?:

Multiple Cost Management Reports include redactions (redactions related to other nuke plants?).

11) April 2009 through December 2009 Major Projects Cost Management Report

12) EPU Expert Panel Management Debrief Presentation regarding the License Amendment Request

13) October 2009 IPP Revision Presentation

14) PNSC meeting minutes

Disk 13 contains non-confidential Turnover Sheets which document progress for each shift on critical activities, emergent issues/concerns and focus areas

Disk 13 also contains a 509 page matrix of work package schedules of activity (begins with 14-00838)

Disk 23 contains the following:

1) July 14, 2009 Management Debrief by the CR3 EPU Expert Panel

2) Action Request 345243 – Review of EPU Licensing Amendment Report Inputs Identified and Improvement Needs

#14-000569 – 000591: [Redacted]

#14-000720: NCR 293080 - [Redacted]

#14-000728-000736: [Redacted]

#14-000744: NCR 316543 - [Redacted]

#14-000749: [Redacted]

#14-000758: [Redacted]

#14-000769: [Redacted]

#14-000773: [Redacted]

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Overlap of different committees reviewing the same reports.

3) Action Request 364744 – Inappropriate Additions to EPU LAR Drafts During Review

#14-000791:

4) Presentation on PEF Vendor Oversight Program

#14-000797:

5) 7/14/2009 Presentation on the Extended Power Uprate including Pre Outage Status, Project Schedule, Staffing Plan, Major Open Issues, and Budget

#14-000808:

#14-000815:

6) 10/28/2009 Presentation on the Extended Power Uprate including Organization Structure, Outage Scope, Schedule Performance Indicator, Ramp-Down Plan, Vendor Oversight/Quality Control, and Facilities

#14-000831: 1) Multiple Main Steam Safety Valve test failures. 2) Replacement Once Through Steam Generator Cold Leg piping fire. The fire event and the subsequent deposition of debris on the ROTSG surfaces pose a significant nuclear safety challenge to a fission product barrier by jeopardizing the ROTSG with stress corrosion cracking, as well as impact from chloride, lead, antimony, and other contaminants.

Is Follow-up required on the following from Disk 13 ?:

#14-001357: There was an incident with

7) 7/15/2009 Presentation on the Extended Power Uprate including Progress to Date, Challenges, Personnel Plan, Personnel Qualification Plan, and Parking and Busing

#14-001358:

Is Follow-up required on the following from Disk 23 ?:

8) 6/12/2009 Presentation on Tool Management

#14-002041: July 14, 2009 Management Debrief by the CR3 EPU Expert Panel concludes that:

- The current EPU LR will not pass NRC acceptance review
- Extensive technical work is necessary to complete the LR for submittal
- Submittal in 2009 is unlikely absent significant effort

9) 8/7/2009 CR3 EPU July 2009 Budget Variance Explanations

#14-002048:

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10) 7/7/2009 CR3 EPU June 2009 Budget Variance Explanations

11) 6/4/2009 CR3 EPU May 2009 Budget Variance Explanations

12) Findings from review of February 2009 contract payment transactions

13) Findings from review of April 2009 contract payment transactions

14) Findings from review of June 2009 contract payment transactions

15) Findings from review of July 2009 contract payment transactions

16) Findings from review of August 2009 contract payment transactions

17) Findings from review of September 2009 contract payment transactions

18) January 22, 2009 PLU Risk Status Report

19) Project Review Group Meeting Minutes

Based on what is currently known, sufficient margin (in submittal date) will remain to allow for adequate NRC Review Time. AREVA has generated a parallel webcap (their Appendix B Corrective Action Program) to track their aspects of the feedback. Both PEF and AREVA are preparing appropriate recovery plans. The following trends were documented:

- Management follow-up or monitoring did not identify problems. Inadequate performance monitoring by EPU supervision led to LAR content problems not being identified during the development and review processes.
- There was inconsistent, and in some cases, insufficient, understanding among the CR3 EPU team regarding the level of detail and content needed in the LAR to pass NRC acceptance review and receive NRC approval.
- Numerous organizational and management changes, and lack of clarity regarding roles and responsibilities adversely impacted organizational effectiveness and contributed to insufficient alignment between EPU engineering and LAR activities.

No processes, procedures, commitments, or plant equipment are impacted by the extension request.

A Corrective Action Plan was developed.

AREVA will establish single point accountability to review all EPU LAR sections to ensure high quality and consistency.

The oversight team was established and implemented on July 31, 2009 and is currently meeting weekly. The team is chaired by the SVP and team members are the Director of Major Projects, CR3 Engineering Manager, EPU Project Manager, EPU Recovery Lead, and CR3 Site Support Manager.

A section template was developed to provide consistent guidance and standards for LAR sections developers and reviewers. This template was transmitted to AREVA personnel and discussed during an August 26, 2009 conference call with CR-3 personnel.

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<p>Document #: EPU DR1.15 Date Requested: Date Received: Comments: (i.e., Confidential) CONFIDENTIAL</p> <p>See Disk 11 containing:</p> <ol style="list-style-type: none"> 1) Monthly Task Authorization Plans and Task EVA Summaries for the Replacement of the Generator Exciter 2) Monthly Task Authorization Plans and Task EVA Summaries for the Installation of the Turbine Building Fiber Optic Communications Backbone 3) Monthly Task Authorization Plans and Task EVA Summaries for the Replacement of the Turbine Generator 4) Monthly Task Authorization Plans and Task EVA Summaries for the Removal and Replacement of HTR Drain Valves 5) Monthly Task Authorization Plans and Task EVA Summaries for the Removal and Replacement of the Isophase Bus Duct Cooler 	<p>Document Title and Purpose of Review: Please provide a copy of the Key Performance Indicators uses by management to monitor the status of the project. Please provide the monthly result for each indicator for the period January 2009 to date.</p>
	<p>Summary of Contents: Documents provided in response to Request EPU DR1.15 are as follows:</p> <p><input type="checkbox"/> Monthly Task Authorization Plans</p> <p><input type="checkbox"/> EPU Daily Outage Report</p> <p>The reports submitted for the Key Performance Indicators include both the monthly and the daily reports. The indicators were reviewed at least monthly starting in January 2009. The reviews increased in frequency the closer we got to the Outage, and during the R16 refueling Outage they were reviewed daily. This started in October 2009 though the time field work was completed in December 2009.</p>
	<p>Conclusions:</p>
	<p>Data Request(s) Generated:</p> <p>No. _____ Description:</p> <p>No. _____ Description:</p>
	<p>Follow-up Required:</p> <p>Is Follow-up required on the following?:</p> <p>#15-001692: [REDACTED]</p> <p>#15-001722: [REDACTED]</p> <p>#15-001739: [REDACTED]</p> <p>#15-001766: [REDACTED]</p>

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- 6) Monthly Task Authorization Plans and Task EVA Summaries for two MSR Shell Drain Heat Exchangers
- 7) Monthly Task Authorization Plans and Task EVA Summaries for Replacement of Existing MSRs with Four New Vessels (with two-stage reheat)
- 8) Monthly Task Authorization Plans and Task EVA Summaries for Replacement of Existing Secondary Services Closed Cycle Cooling System Heat Exchangers
- 9) Monthly Task Authorization Plans and Task EVA Summaries for Replacement of the Existing SC Pump & Motor
- 10) Monthly Task Authorization Plans and Task EVA Summaries for Replacement of the Existing Turbine Bypass Valves and Muffler
- 11) Monthly Task Authorization Plans and Task EVA Summaries for Replacement of the Existing Turbine Lube Oil Cooler

#15-001799:

#15-001831:

#15-001862:

#15-001894:

#15-001925:

#15-001956:

#15-001987:

#15-002017:

Authorization #84,
 Amendment #7 for
 a) Design and Installation of
 the Low Pressure Injection
 (LPI) Cross-Tie and Hot Leg
 Injection Line for Boron
 Precipitation Mitigation
 b) Size and Modify the
 current Non-Safety
 Atmospheric Dump Valves
 (ADV) and Upgrade
 Components, Power and
 Controls to Safety Related
 and
 c) Modifying Emergency
 Feed Pump 2 (EFP-2) and
 associated systems and
 controls to ensure it can
 produce the required flow at
 Extended Power Uprate
 (EPU) conditions

2) AREVA contract Work
 Authorization #84,
 Amendment #8 for
 a) Re-analyzing the Spent
 Fuel Pool (SFP) for decay
 heat and gamma spectra
 b) Additional Feed and
 Bleed Cases; Reanalysis of
 Initial Containment Pressure
 c) Laser Scanning Data
 Collection on the ADVs,
 isolation valves and
 discharge piping to create a
 3D surface model
 d) Provide the specification
 for procurement of the safety

Conclusions:

Data Request(s) Generated:

No. _____ Description:

No. _____ Description:

Follow-up Required:

Is Follow-up required on the following?:

#22-000001:

#22-000043:

**** Amount of previous change orders are those that are approved. There is at least one other outstanding change order. The new contract price will depend on which change orders are approved and how much of this and previously approved T&M budgets are utilized.**

#22-000101:

#22-000104:

#22-000147:

#22-000149:

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10PMA-2010-AUDITOR WORKSHEETS-000092

related motor operated valves for the LPI Cross Tie Modification and the Feedwater Booster Pump Modification

e) Determine the limiting temperature during the heatup process for EFT-2 and validate the strategy of switching suction sources for the EFPs

f) Prepare License Report rewrite for revised template: revision to 10CFR50 Appendix A: revised Regulatory Evaluation and CR-3 Current Licensing Basis guidance

g) Provide services in accordance with the Action Item activities list identified in Attachment 1 to Change Order 25

h) Provide an analysis to justify the elimination of large transient testing

- 3) AREVA contract Work Authorization #84, Amendment #8 for
 - a) Revisions to include the MSR Shell Drain Heat Exchanger
 - b) Develop design of the Isolated Phase Bus Duct Cooling System Fan Control Circuit and Control Panel
 - c) Support services for the

#22-000153:

#22-000158:

#22-000163:

#22-000170:

#22-000177:

evaluation of the Turbine Bypass Valve System "Plan C"

d) Develop a revision to EC 68888 to implement a Flashing Prevention Scheme

e) Perform additional CFD analysis of the CR3 Condensor

f) Scope reduction of the Circulating Water Pumps/Motors and the Condenser Baffle Plates

g) Building a resource loaded schedule, to include the Deaerator installation EC, and an EC to rerate or replace the #5 Feedwater Heater and piping/components between the heater and pump EC

4) Exhibits supporting each of the change orders in 3) above

5) Siemens contract Work Authorization #50.

Amendment #5 for

i) LP Turbine Gland Seals

ii) LP Turbine Bolting

iii) Generator Bearing Babbitt

iv) LP Turbine Rupture Diaphragms

v) LP Rotor Manufacturing

vi) Blower Blades

vii) Scope Changes

#22-000179:

#22-000191:

#22-000193:

PDN#	Description	Cost
006-01		
006-02		
006-03		
006-04		
006-05		
006-06		
007-01		
007-02		

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10PMA-2010-AUDITOR WORKSHEETS-000094

viii) EWAs incorporated by reference	007-03			
	007-04			
	007-05			
	6) Townsend Contract Number 147496, Work Authorization #105 for routine building and site maintenance	007-06		
		007-07		
		009-01		
		009-02		
		010-01		
		010-02		
	7) Townsend Contract Number 147496, Work Authorization #107 for removal of approximately 400 Tons of scrap steel and piping from the Turbine Building to a transport staged outside	Total		
8) Townsend Contract Number 147496, Work Authorization #108 for transport waste material from the outside of the Turbine Building to a satellite staging area for final disposal	#22-000212:	[Redacted]		
9) Townsend Contract Number 147496, Work Authorization #114 for labor to support the EPU Turbine Generator work	#22-000214:	[Redacted]		
10) Townsend Contract Number 147496, Work Authorization #82 for fences, modification of temporary trailers, light towers, food services and accessories, sanitation facilities and decon tents	#22-000216:	[Redacted]		
	#22-000219:	[Redacted]		
	#22-000393:	[Redacted]		

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11) Townsend Contract Number 147496, Work Authorization #82, Amendment 1 for construction of Temporary EPU cool down buildings. Turbine Deck Rad Monitor room, car ports, trailer #24 modifications and EPU Sealands and cross walks

#22-000395:

12) Townsend Contract Number 147496, Work Authorization #94 for work necessary to complete the Cooling Tower Surecharge Installation and Removal Sequence

#22-000441:

13) Townsend Contract Number 147496, Work Authorization #63, Amendments 1-11

#22-000461:

14) Mesa Contract Number 221186, Work Authorization #24, Amendment 4

15) WEC Carolina Energy Solutions, LLC Contract Number 3382, WA 167, Amendment 1

#22-000470:

16) Barnhart Crane & Rigging Co., Inc. Contract Number 384426, Amendment 4

17) Modular Space Corporation Contract Number 418171, Amendment 8

#22-000492:

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18) EvapTech ME Contract
Number 433059

#22-000530: [Redacted]
[Redacted]

19) Florida Trails, Inc. DBA
Annett Bus Lines Contract
Number 434744,
Amendment 1

#22-000546: [Redacted]
[Redacted]

20) AREVA Contract Number
101659, Work Authorization
#93, Amendment 9

a) [Redacted]

21) Townsend Contract Number
147496, Work Authorization
#104

b) [Redacted]

22) Bartlett Nuclear, Inc.
Contract Number 3707,
Amendment 43

c) [Redacted]

d) [Redacted]

23) National Inspections &
Consultants, Inc. Contract
Number 58097, Work
Authorization 31

e) [Redacted]

f) [Redacted]

24) Moretrench Environmental
Services Contract Number
153771, Work Authorization
91

#22-000583: [Redacted]
[Redacted]

25) Holtec International Contract
Number 471405, Work
Authorization 1

#22-000589: [Redacted]
[Redacted]

26) AREVA Contract Number
101659, Work Authorization
84, Amendment 6

[Redacted]

51-9102134-000	Rev 0 (Mar-2009)	CR3 EPU HVAC Systems Evaluation Report (AREVA Proprietary Document)
51-9104091-000	Rev 0 (Feb-2009)	CR3 EPU Post-LOCA Boric Acid Precipitation Control Feasibility Study (AREVA Proprietary Document)
51-9121794-000	Rev 0 (Nov-2009)	EFW Requirements for CR3 EPU (I97-0017) (AREVA Proprietary Document)
51-9124800-000	Rev 0 (Nov-2009)	CR3 LPI X-Tie Piping Stress Analysis AIS (AREVA Proprietary Document)

Due to being in design phase, CR3 Uprate has no feasibility studies planned in 2010.

Conclusions:

Data Request(s) Generated:

No. _____ Description:

No. _____ Description:

Follow-up Required:

Is follow-up required on the following?:

Hayes Number	Document Title	Follow-up Notes
23-000001	CR3 Extended Power Uprate PEPSE Analysis (AREVA Proprietary Document)	
23-000211	Summary of CR3 Main Feedwater	

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10PMA-2010-AUDITOR WORKSHEETS-000099

		Modification (AREVA Proprietary Document)	
	23-000225	Reactor Coolant System for CR3 Functional Specification (AREVA Proprietary Document)	
	23-000797	CR3 EPU Integrated SW-RW-DC Gothic Model Development (AREVA Proprietary Document)	{Nothing of particular interest}
	23-000975	CR3 Spent Fuel Pool Temperature Rise From Fuel in the Pool after EPU (AREVA Proprietary Document)	{Nothing of particular interest}
	23-001005	Evaluation of CR3 EPU on Core Barrel Assembly Functionality Analysis (AREVA Proprietary Document)	
	23-001114	Maximum Mass Flow Rate through the CR3 Turbine Bypass System (AREVA Proprietary Document)	{Nothing of particular interest}
	23-001125	CR3 EPU LPI Cross-Tie Conceptual Design (AREVA Proprietary Document)	

	23-001175	AIS (AREVA Proprietary Document) CR3 EPU HVAC Systems Evaluation Report (AREVA Proprietary Document)	MISSING Identifies that:

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10PMA-2010-AUDITOR-WORKSHEETS-000101

Division of Regulatory Compliance
Bureau of Performance Analysis

(AREVA Proprietary Document)

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

See Disk 12 containing:

- 1) ITT Water & Wastewater, Flygt Pewaukee Operations Contract Number 450795
- 2) WorleyParsons Group, Inc. Contract Number 114016, Work Authorization Number 55
- 3) Central Maintenance and Welding, Inc. Contract Number 145433, Work Authorization 163
- 4) Townsend Constructors, Inc. Contract Number 147496, Work Authorization 104
- 5) Townsend Constructors, Inc. Contract Number 147496, Work Authorization 94
- 6) Siemens Water Technologies Corp. Contract Number

Document Title and Purpose of Review: Provide all RFPs issued and bid evaluations (both financial and technical) supporting any CR3 contracts in excess of \$100,000 bid since last provided in 2009 DR5 Q10. Also provide a summary listing all documents provided in the same format as used in 2009 DR1 Q18S.

Summary of Contents:

All RFPs and bid evaluations in excess of \$100,000 since last provided in 2009 are included in this response.

Conclusions:

Data Request(s) Generated:

No. _____ Description:
 No. _____ Description:

Follow-up Required:

TOPMA-2010-AUDITOR WORKSHEETS-000103

Redacted

the 4.16KV and 13.2 KV
Switchgear and Breakers

123) Summary Matrix of
RFPs with Titles and Bates
Label

Disk 17 contains a non-confidential
Affidavit of Exemption and a
Pollution Control Equipment
Affidavit

Document #: EPU DR1.25
Date Requested:
Date Received:
Comments: (i.e., Confidential)
CONFIDENTIAL

Document Title and Purpose of Review: Please provide all work authorizations, change orders, impact evaluations, etc. issued on all contracts previously disclosed during the 2008 and 2009 reviews. For each, please describe the reason for the changes and the financial impact on the contract. (\$50,000)

Summary of Contents:

CONFIDENTIAL

Summary of Change Orders over \$50K:

Areva WA-93

- CO-31 - Increase WA value by [REDACTED] on a T&M basis to support revision of the PEPSE and FATHOM models and review the R16 EC packages for impact due to deferral of LP turbine .
- CO-33 - Engineering support for R16. T&M Increase of [REDACTED]
- CO-34 - Revision to EC 71757. T&M increase of [REDACTED]

ESI

Initial Amendment #2 adding [REDACTED] for lead abatement inside the CR3 turbine building. Additional scope was authorized on a T&M basis. See attached description of additional lead abatement work authorized by PEF.

Siemens

Un-numbered EWA (Progress Energy transmittal CR3-EPU-2009-00035) - Replacement of end shield materials. Fixed Price increase of [REDACTED]

TOPMA-2010-AUDITOR-WORKSHEETS-000116

Division of Regulatory Compliance
Bureau of Performance Analysis

I:\PERFORMANCE ANALYSIS SECTION\00 PERFORMANCE ANALYSIS AUDITS\Nuclear Controls Review 2010\PEF\Documents\DR Summary logs-EPU CR3\DR1 Summary-EPU.doc

Siemens installation of existing Lp-Gen Jackshaft on replacement generator rotor and line bore coupling bolt holes. Effort includes the final machining of replacement coupling bolt sleeves provided by Progress Energy. Fixed Price increase of [REDACTED]

Townsend WA-94

CO#2 to WA-94 - Progress Energy authorized [REDACTED] of the change order costs [REDACTED] after verification of truck tickets for additional fill material required at clarifier pond #2.

Various Change Orders and Amendments greater than \$100K have been provided under Request EPU DR1.22

Conclusions:

Data Request(s) Generated:

No. _____ Description:

No. _____ Description:

Follow-up Required:

Document #: EPU DR1.26

Date Requested:

Date Received:

Comments: (i.e., Confidential)

CONFIDENTIAL

Disk 17 contains the three non-confidential procedures indicated in the PEF response

Document Title and Purpose of Review:

Provide a copy of the company's current Contractor Selection and Management Policies and Procedures applicable to the CR3 uprate project.

Summary of Contents:

Procedures provided in response to Request EPU DR1.26 are as follows:

Procedure Number	Procedure Revision Number/Date	Procedure Title
CNT-SUBS-0001	Rev 19 (Jan-2010)	Corporate Contracting Process
MCP-NGGC-0001	Rev 14 (Mar-2009)	NGG Contract Initiation, Development and Administration
SAF-SUBS-00041	Rev 10 (Jun-2009)	Contractor Safety

Conclusions:

Data Request(s) Generated:

No. _____ Description:

No. _____ Description:

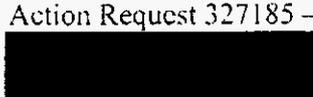
Follow-up Required:

Document #: EPU DR1.27

Date Requested:

Document Title and Purpose of Review: Provide an updated copy of the company's oversight and management plan for contractors working on the CR3 uprate project.

TOP/MA-2010/AUDITOR WORKSHEETS-000117

	NUPIC Audit/Survey Number 20315, National Inspection & Consultants Fort Meyers FL, Audit Date 09/15/2009 thru 09/17/2009.
	Conclusions:
	Data Request(s) Generated:
	No. _____ Description:
	No. _____ Description:
	Follow-up Required:
Document #: EPU DR1.34	Document Title and Purpose of Review: List and describe any Quality Assurance actions taken, pending, or planned by PEF, on contractors for the CR3 project, including the events that the action was taken for, the date the action was taken by the company, a description of the disciplinary actions taken by the company, timetable for any fixes allowed, and whether the contractor was removed or allowed to continue work on the project.
Date Requested:	Summary of Contents:
Date Received:	Documents provided in response to Request EPU DR1.34 are as follows:
Comments: (i.e., Confidential) CONFIDENTIAL	<input type="checkbox"/> Nuclear Condition Reports (NCR) initiated since January 2009.
See Disk 12 containing:	Conclusions:
1) Action Request 317607 –	Data Request(s) Generated:
	No. _____ Description:
2) Action Request 318357 –	No. _____ Description:
	Follow-up Required:
3) Action Request 321640 –	
	
4) Action Request 326239 –	
	
5) Action Request 327185 –	
	

TOPMA-2010-AUDITOR WORKSHEETS-000122

Redacted

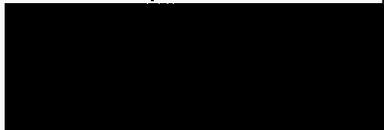
6) Action Request 330598 –



7) Action Request 333142 –



8) Action Request 334566 –



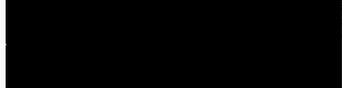
9) Action Request 340391 –



10) Action Request 342464 –



11) Action Request 356485 –



12) Action Request 360253 – Oil



13) Action Request 360964 –



14) Action Request 370585 –



15) Action Request 370645 –

10PMA-2010-AUDITOR WORKSHEETS-0007123

Redacted

Axial Position of [REDACTED]
Rotor [REDACTED]

16) Action Request 370659 -

[REDACTED]

17) Action Request 318752 -

[REDACTED]

Document #: EPU DR1.35
Date Requested:
Date Received:
Comments: (i.e., Confidential)
CONFIDENTIAL

Document Title and Purpose of Review:
Describe any changes in project management controls implemented as a result of quality assurance reviews, internal auditing, or external audit findings. Also provide a copy of all completed review/audit reports listed.

Summary of Contents:

See Disk 12 containing:

- 1) Assessment Number 300524
- EPU Major Projects Effectiveness and Readiness for 16R
- 2) Assessment Number 319977
- EPU/SGR Tool and Material Inventory Control
- 3) Assessment Number 320013
- Earned Value Analysis Process
- 4) Action Request Number 316637 -- NESD 2009-2011 Business Plan Initiative

Management Controls changes were made in financial, scope control, risk management, estimating and tool control. During 2009, these project management control changes resulted from quality assurance assessments, internal audits, and external audits. Several new Nuclear Projects Guidance Documents were created and/or revised as a result which are listed below:

- NPGD□002 Information and Process Management
- NPGD□003 Staffing Management Plan,
- NPGD□004 Financial Controls Internal Invoice Audit Process
- NPGD□006 Financial Group Invoice Processing
- NPGD□007 Financial End of Month Activities
- NPGD□008 Roll up Cost Management Report
- NPGD□009 Nuclear Projects Cash Flow Projections True□Up
- NPGD□010 Nuclear Projects Month□End Journal Entries,
- NPGD□011 Project Budget Preparation
- NPGD□012 Time Entry Guidelines

Finance:

10PMA-2010-AUDITOR WORKSHEETS-000124

Detailed Description of Audits Completed by the Audit Services Department in 2009

Florida Nuclear Plant Cost Recovery Rule Compliance Audit

The objective and scope of the Florida Nuclear Plant Cost Recovery Rule Compliance internal audit was to review compliance with 25-6.0423, FAC for filings made in 2009 related to the CR3 Uprate Project and Levy Nuclear Plant.

The key focus areas of this internal audit consisted of:

Reviewing planned regulatory filing reports for completeness and accuracy and adequacy of internal reviews.

Testing a sample of actual costs included in the filings to ensure that supporting documentation is sufficient.

Reviewing the process used to estimate projected costs for reasonableness.

The Audit Services Department concluded that overall compliance with the Florida Nuclear Plant Cost Recovery Rule [REDACTED] ASD tested a sample of invoices and supporting documentation which revealed that [REDACTED]

[REDACTED] Their review of the true-up, actual/estimated, and projections schedules showed that the schedules were [REDACTED]

Crystal River Construction Logistics Support Audit

The objective and scope of the Crystal River Construction Logistics Support internal audit was to assess the structure and effectiveness of the Crystal River Energy Complex (CREC) construction logistics initiative, integration into the CR4 & CR5 Clean Air, SGR and EPU project plans and identify potential risks that could impact the success of the 2009 Fall outage.

The key focus areas of this internal audit consisted of:

Assessing the core elements, structure, completeness and overall prudence of the integrated CREC logistics plan.

Reviewing and evaluating integration of the CREC logistics plan into the SGR, EPU, and Clean Air project schedules and supplier contracts.

Evaluating communication and information flow between CREC, NPC and the G&TC organizations and the logistics related change management process.

¹ PEF Response to Staff Data Request 1.31, BATES 000121

Confirming that the CREC emergency preparedness plan has been updated and is adequate to support the population and construction activity during this time frame.

The Audit Services Department concluded that the [REDACTED]

Observations and recommendations were presented to management by ASD with regards to the three areas needing improvement. Action Plans were developed and assignments were made to personnel with responsibility to complete by assigned completion dates. ASD made sure that all items were resolved and set the follow-up status for each to "closed".²

CR3 SGR and EPU Projects Audit

The primary objective of the CR3 SGR and EPU Projects internal audit was to evaluate project management, contract administration, financial controls, and communications associated with the CR3 SGR and EPU major projects. The scope included assessing CR3 SGR and EPU major projects activity in 2009. Assistance was provided by Nuclear Oversight for fieldwork activities.

The key focus areas of this internal audit consisted of:

Change control focusing on scope, schedule, and funding.

² PEF Response to Staff Data Request 1.31, BATES 000108 - 000119

Project controls for risk management, contract management, communications, and reporting.

Project accounting and financial practices including but not limited to budget projections, accruals, account classification, and performance reporting.

The Audit Services Department rated the audit of the CR3 SGR and EPU Projects as

[REDACTED]



Observations and recommendations were presented to management by ASD with regards to the three areas needing improvement. Action Plans were developed and assignments were made to personnel with responsibility to complete by assigned completion dates. ASD made sure that all items were resolved and set the follow-up status for each to "closed".³

³ PEF Response to Staff Data Request 1.31, BATES 000123 - 000135