

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

**In re: Nuclear Cost Recovery
Clause**

**DOCKET NO. 120009-EI
Submitted for filing: March 1, 2012**

**DIRECT TESTIMONY
OF JON FRANKE**

**ON BEHALF OF
PROGRESS ENERGY FLORIDA, INC.**

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IN RE: NUCLEAR COST RECOVERY CLAUSE

BY PROGRESS ENERGY FLORIDA, INC.

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DIRECT TESTIMONY OF JON FRANKE

1 **I. INTRODUCTION AND QUALIFICATIONS**

2 **Q. Please state your name and business address.**

3 A. My name is Jon Franke. My business address is Crystal River Nuclear Plant,
4 15760 West Power Line Street, Crystal River, Florida 34428.

5
6 **Q. By whom are you employed and in what capacity?**

7 A. I am employed by Progress Energy Florida, Inc. ("PEF" or the "Company") in the
8 Nuclear Generation Group and serve as Vice President – Crystal River Nuclear
9 Plant.

10
11 **Q. What are your responsibilities as the Vice President at the Crystal River
12 Nuclear Plant?**

13 A. As Vice President – Crystal River Nuclear Plant, I am responsible for the safe
14 operation of the nuclear generating station. The Plant General Manager,
15 Engineering Manager and Training sections report to me either directly or
16 indirectly. Additionally, I have responsibilities in oversight of major project
17 activities at the station. Through my management team I have more than 400
18 employees that perform the daily work required to operate and maintain the
19 station and provide engineering, training, and other support to the station.

1 **Q. Please summarize your educational background and work experience.**

2 A. I have a Bachelor's degree in Mechanical Engineering from the United States
3 Naval Academy at Annapolis. I have a graduate degree in the same field from the
4 University of Maryland and a Masters of Business Administration from the
5 University of North Carolina at Wilmington.

6 I have over 22 years of experience in nuclear operations. I received
7 training by the U.S. Navy as a nuclear officer and oversaw the operation and
8 maintenance of a nuclear aircraft carrier propulsion plant during my service.
9 Following my service in the Navy, I was hired by Carolina Power and Light and
10 have been with the company through the formation of Progress Energy. My early
11 assignments involved engineering and operations, including oversight of the daily
12 operation of the Brunswick nuclear plant as a Nuclear Regulatory Commission
13 ("NRC") licensed Senior Reactor Operator. I was the Engineering Manager of
14 that station for three years prior to assignment to Crystal River as the Plant
15 General Manager in 2002. In April of 2009, I was promoted to my current
16 position.

17
18 **II. PURPOSE AND SUMMARY OF TESTIMONY**

19 **Q. What is the purpose of your direct testimony?**

20 A. My direct testimony supports the Company's request for cost recovery pursuant to
21 the nuclear cost recovery rule for costs incurred in 2011 for the Crystal River 3
22 ("CR3") Extended Power Uprate ("EPU") project ("CR3 Uprate") and the
23 Company's request for a prudence determination of the costs incurred for the CR3
24 Uprate project in 2011.

1 I will also provide testimony regarding PEF's 2011 project management,
2 contracting, and oversight controls policies and procedures that are designed to
3 manage project costs and schedule and explain why they are reasonable and
4 prudent.

5
6 **Q. Do you have any exhibits to your testimony?**

7 A. No. I am however sponsoring Schedules T-6A, T-6B, T-7, T-7A and T-7B and
8 co-sponsoring the cost portions of Schedules T-4, T-4A, and T-6 and Appendix D
9 of the Nuclear Filing Requirements ("NFRs") for the 2011 CR3 Uprate project
10 costs, which are included as part of Exhibit No. __ (WG-2) to Will Garrett's
11 testimony. Schedule T-4 reflects Capacity Cost Recovery Clause ("CCRC")
12 recoverable Operations and Maintenance ("O&M") expenditures for the 2011
13 period. Schedules T-4A reflect CCRC recoverable O&M expenditure variance
14 explanations for the 2011 period. Schedule T-6.3 reflects the construction
15 expenditures for the project by category. Schedules T-6A.3 reflect descriptions
16 of the major cost categories of the expenditures and Schedules T-6B.3 reflect
17 explanations for the significant variances between these expenditures and
18 previously filed estimates for 2011. Schedules T-7 are lists of the contracts
19 executed in excess of \$1.0 million for 2011. Schedules T-7A reflect details
20 pertaining to the contracts executed in excess of \$1.0 million for 2011. Schedules
21 T-7B reflect contracts executed in excess of \$250,000, but less than \$1.0 million
22 for 2011. All of these schedules are true and accurate.

1 **Q. Please summarize your testimony.**

2 A. PEF requests a prudence determination and approval of the recovery of its 2011
3 actual CR3 Uprate project costs. PEF incurred CR3 Uprate project costs in 2011
4 in preparation for Phase 3, the EPU phase of the project. The majority of these
5 costs were incurred for necessary engineering analyses for the engineering change
6 packages for the Phase 3 work, for long lead equipment payments, and for related
7 licensing work on the Company's EPU License Amendment Request ("LAR") to
8 the NRC, and associated project management work. PEF took appropriate steps
9 under its project management, contracting, and oversight policies and procedures
10 to ensure that the 2011 CR3 Uprate project costs were reasonable and prudent,
11 and that all of these costs were necessary for completion of the CR3 Uprate
12 project. Accordingly, the Commission should approve PEF's 2011 CR3 Uprate
13 project costs as reasonable and prudent pursuant to the nuclear cost recovery rule.
14

15 **III. STATUS OF CR3 UPRATE PROJECT.**

16 **Q. Please explain the status of the CR3 Uprate project.**

17 A. The CR3 Uprate project is a three-phase project involving the engineering,
18 design, equipment procurement, and equipment installation necessary to generate
19 an additional, estimated 180 MWe of efficient nuclear power at the Company's
20 existing nuclear unit. The work necessary for this project was divided into three
21 phases to be performed during separate, planned re-fueling outages at CR3. The
22 first phase of the work was successfully completed during the 2007 CR3 refueling
23 outage and it was brought online in January, 2008, providing an additional 12
24 MWe of nuclear energy generation. The second phase of the work, primarily

1 Balance of Plant (“BOP”) work, was performed during the 2009 CR3 16R
2 refueling outage and was successfully installed. When CR3 returns to service the
3 BOP phase work will yield an additional 4 MWe nuclear energy production and
4 support the final EPU phase. PEF is currently performing the engineering and
5 design analyses, licensing, and material procurement necessary to complete the
6 third and final phase of the CR3 Uprate, the EPU phase. Upon completion of the
7 EPU work and NRC approval of the LAR for the power uprate, the Company will
8 be able to increase the power generated at CR3 by an additional 164 MWe.
9

10 **IV. ACTUAL COSTS INCURRED IN 2011 FOR THE CR3 UPRATE
PROJECT.**

1 **Q. What costs did PEF incur for the CR3 Uprate project in 2011?**

2 A. PEF incurred construction costs related to the last phase of the CR3 Uprate
3 project in 2011. The total capital expenditures for 2011, gross of joint owner
4 billing and exclusive of carrying cost, were \$49.0 million. These costs cover (1)
5 license application, (2) project management, (3) permitting, (4) on-site
6 construction facilities, (5) power block engineering, procurement and related
7 construction, and (6) non-power block engineering, procurement, and related
8 construction. Schedule T-6 in Exhibit No. ____ (WG-2) to Mr. Garrett’s testimony
9 further details these costs.
10
11
12

1 **Q. Please describe the total License Application costs incurred and**
2 **explain why the Company incurred them.**

3 A. The License Application costs reflected on the T-6.3 Schedule were \$2.8 million.
4 These costs were incurred for activities related to the finalizing and submittal of
5 the EPU LAR to the NRC.

6 PEF submitted the EPU LAR to the NRC on June 15, 2011. The next step
7 in the NRC review process is referred to as Acceptance Review. During the
8 Acceptance Review process, the NRC technical branches reviewed the submittal
9 to confirm that adequate information was available to complete their review
10 without passing judgment on approval. The NRC completed its Acceptance
11 Review on November 21, 2011. Throughout 2011, PEF worked with the NRC to
12 address Requests for Additional Information ("RAIs") to support NRC submittal
13 acceptance. Feedback from the NRC staff and management during this phase of
14 the review was very positive. PEF is confident that the NRC will approve the
15 EPU LAR in time to support restart from the current extended outage.

16
17 **Q. Please describe the total Project Management costs incurred and**
18 **explain why the Company incurred them.**

19 A. The Company incurred Project Management costs of \$3.8 million. The
20 Company's Project Management costs include the following Project Management
21 activities for the CR3 Uprate project in 2011:

22 (1) project administration, including project instructions, staffing, roles and
23 responsibilities, and interface with accounting, finance, and senior
24 management;

1 (2) contract administration, including status and review of project requisitions,
2 purchase orders, and invoices, contract compliance, and contract expense
3 reviews;

4 (3) project controls, including schedule maintenance and milestones, cost
5 estimation, tracking and reporting, risk management, and work scope control;

6 (4) project management, including project plans, project governance and
7 oversight, task plans, task monitoring plans, lessons learned, and task item
8 completions; and

9 (5) overall management of CR3 Uprate licensing and LAR work.

10 Each activity was conducted under the Company's project management and
11 oversight control policies and procedures I will discuss in more detail below.

12
13 **Q. Please describe the total Permitting costs incurred and explain why the**
14 **Company incurred them.**

15 A. Permitting costs incurred were \$19,650 for permitting needs for 2011. These
16 costs were incurred for revisions to the EPU LAR environmental report.

17
18 **Q. Please describe the total On-Site Construction Facilities costs incurred**
19 **and explain why the Company incurred them.**

20 A. On-Site Construction Facilities costs incurred were \$37,791. These costs were
21 incurred for erection of tent storage for components and tools, temporary lavatory
22 facilities, and rental costs for trailers housing CR3 Uprate project personnel.

23

1 **Q. Please describe the total costs incurred for the Power Block**
2 **Engineering, Procurement and related construction cost items and**
3 **explain why the Company incurred them.**

4 A. The Company incurred \$42.4 million for Power Block Engineering, Procurement,
5 and related construction cost items. The majority of the costs incurred in this
6 category in 2011 were associated with the preparation of design changes for the
7 Phase 3 scope and for procurement of long lead time equipment.

8 Engineering developed the Engineering Change (“EC”) packages for the
9 EPU Phase 3 to various levels of design completion in 2011. Overall to date
10 design completion is estimated at 70 percent. Engineering did not reach 100
11 percent completion in 2011 as previously estimated because of a slow down and
12 reprioritization of work based on the containment repair schedule impacts on EPU
13 installation schedule and plant in-service dates. Phase 3 ECs completed and
14 approved by management in 2011 included:

- 15 ○ EC 68886 – Add Feedwater Heat Exchangers (“FWHE”) 1 (De-aerator
16 Bypass Line)
- 17 ○ EC 79352 – High Pressure Injection Modification
- 18 ○ EC 74873 – Safety Related Motor Operated Valves Specification
- 19 ○ EC 73351 – Feedwater Booster Pump & Feedwater Valve-14/15 Change
20 Out Specification
- 21 ○ EC 73932 – Low Pressure Injection (“LPI”) Crosstie Installation
22 Specification
- 23 ○ EC 73907 – Atmospheric Dump Valve Specification
- 24 ○ EC 78022 – Main Feedwater Pump Specification

- 1 ○ EC 80348 – FWHE 3A/B Feedwater Heater Replacement Specification
- 2 ○ EC 77337 – Inadequate Core Cooling Mitigation System (“ICCMS”)
- 3 Specification
- 4 ○ EC 80137 – ICCMS Core Exit Thermocouple Conduit & Cable Routing
- 5 ○ EC 73794 – Low Pressure Turbine (“LPT”) Implementation
- 6 ○ EC 74980 – Replace (2) LPTs
- 7 ○ EC 73917 – Replace FWHE 2A/2B
- 8 ○ EC 74526 – Replace Condensate Pump/Motor/Head/Valves/Recirculation
- 9 (“CDP”) 1A/1B
- 10 ○ EC 74980 – Replace High Pressure Turbine (“HPT”)
- 11 ○ EC 75004 – Reconcile/Adjust Replacement Once Through Steam
- 12 Generator (“ROTSG”) (ROTSG Orifice Plate)
- 13 ○ EC 75659 – Add Make Up Tank (“MUT”) Injection Line Bypass 1
- 14 ○ EC 76095 – Modify Safety Related Main Steam (“SR MS”)
- 15 Supports/Restraints
- 16 ○ EC76339 – Heavy Haul Path Evaluation
- 17 ○ EC 76344 – Add Vibration (Pipe Vibration Monitoring System)
- 18 ○ EC 77901 – Modify Turbine Building for FWHE 2A/2B Removal

19 In addition, contract payments were made for major components including the
20 Feedwater Heaters 3A/3B and 2A/2B, the Analog Actuation and Control System,
21 Atmospheric Dump Control Valves, Condensate Motors, Booster Pumps, and the
22 In-Core Detector Assemblies. These 2011 Power Block Engineering and
23 Procurement costs were necessary for the implementation of the CR3 Uprate
24 work.

1 **Q. Please describe the total costs incurred for the Non-Power Block**
2 **Engineering, Procurement and related construction cost items and explain**
3 **why the Company incurred them.**

4 A. These costs total \$40,457. The majority of the costs incurred in this category in
5 2011 were associated with transport, storage, and maintenance of the Point of
6 Discharge (“POD”) helper cooling tower parts. As a result of pending and
7 emerging environmental regulations that could impact the fossil units at Crystal
8 River, and due to the schedule shift from the extended 16R outage, the POD
9 portion of the EPU project remained on hold until such time that the impact of
10 these changes can be properly assessed and recommendations presented to senior
11 management.

12
13 **Q. Please explain how the approval of the Motion for Deferral in Docket No.**
14 **110009-EI in the 2011 NCRC proceeding affects your testimony regarding**
15 **true-up of the 2011 CR3 Uprate costs.**

16 A. On August 10, 2011, the Commission approved PEF’s Motion for Deferral of
17 2011 and 2012 projected CR3 Uprate construction expenditures and deferred
18 review of PEF’s 2011 costs to this docket. As a result of this ruling, PEF filed
19 revised NFR AE schedules – attached to Mr. Thomas G. Foster’s revised August
20 12, 2011, testimony as Exhibit No. ____ (TGF-4). PEF had previously filed NFR
21 AE Schedules on May 2, 2011 reflecting its best available estimate at the time for
22 actual/estimated 2011 CR3 Uprate costs. As noted in my May 2, 2011 testimony
23 in Docket No. 110009-EI, these schedules were prepared prior to the March 14,
24 2011 delamination at CR3.

1 In preparing my current testimony the variances described below are based
2 on PEF's actual expenditures for 2011 compared to the AE Schedules attached to
3 Mr. Foster's May 2, 2011 testimony, which reflected actual/estimated 2011 CR3
4 Uprate costs prior to the March 2011 delamination.

5
6 **Q. How did actual capital expenditures for January 2011 through December**
7 **2011 compare to PEF's actual/estimated costs for 2011?**

8 A. PEF's actual capital expenditures for the CR3 Uprate project in 2011 were lower
9 than PEF's actual/estimated costs for 2011 by \$45.2 million. This variance is
10 primarily due to the extended outage at CR3 and the Company's decision to
11 postpone CR3 Uprate project construction work. I will explain the reasons for the
12 major (more than \$1.0 million) variances below:

13 **License Application:**

14 The 2011 License Application capital expenditures on the T-6 Schedule
15 were \$2.8 million with a total estimate of \$1.2 million, resulting in a
16 variance of \$1.6 million. This variance is primarily due to AREVA
17 engineering support costs associated with PEF responses to NRC RAIs for
18 the EPU LAR being budgeted in engineering but invoiced to licensing.

19
20 **Project Management:**

21 Project Management capital expenditures were \$3.8 million. The original
22 estimate was \$8.5 million, resulting in a variance of (\$4.7 million). This
23 variance is due to reallocation of project management resources based on

1 the deferral of construction activities for Phase 3 of the CR3 Uprate
2 project because of the extended CR3 outage.

3
4 **Power Block Engineering, Procurement and related construction**
5 **costs:**

6 Power Block Engineering, Procurement and related construction costs
7 capital expenditures were \$42.3 million for 2011. The original estimate
8 was \$76.5 million, resulting in a variance of (\$34.2 million). This variance
9 is due to the Company's decision to defer construction activities on the
10 CR3 Uprate project because of the extended CR3 outage and to align such
11 activities with the containment repair estimated schedule. Approximately
12 50 percent of the variance to budget is attributed to deferral of
13 equipment/material payments; approximately 25 percent of the variance to
14 budget is attributed to under-runs in Engineering, Project Management,
15 Health Physics, and Administrative support; and approximately 25 percent
16 of the variance to budget is attributed to deferring 2011 contingency funds.

17
18 **Non-Power Block Engineering, Procurement, and related**
19 **construction cost items:**

20 Non-Power Block capital expenditures were \$40,457. The original
21 estimate was \$7.7 million, resulting in a variance of (approximated \$7.7
22 million). This variance is driven by deferral of the POD/Cooling Tower
23 construction work, which is a result of pending and emerging
24 environmental regulations that could impact the fossil units at Crystal

1 River, and the schedule shift from the extended 16R outage. The POD
2 construction portion of the EPU project remained on hold in 2011 until
3 such time that the impact of these changes can be properly assessed and
4 recommendations presented to senior management.

5
6 **Q. Did PEF incur O&M costs in 2011 for the CR3 Uprate project?**

7 A. Yes. PEF incurred necessary O&M costs to support the CR3 Uprate project work
8 in 2011. These O&M costs are identified and included in Schedule T-4 in Exhibit
9 No. ____ (WG-2) to Mr. Garrett's testimony.

10
11 **Q. How did actual O&M expenditures for January 2011 through December
12 2011 compare with PEF's actual/estimated O&M expenditures for 2011?**

13 A. Schedule T-4A, Line 15, on Exhibit No. ____ (WG-2) to Mr. Garrett's testimony
14 shows that total O&M costs were \$0.5 million or \$18,000 less than estimated.
15 Schedule T-4A shows the variance explanations for the O&M costs categories.
16 There were no major cost variances.

17
18 **Q. Were all of PEF's 2011 CR3 Uprate project costs reasonably and prudently
19 incurred?**

20 A. Yes. PEF reasonably and prudently incurred the 2011 CR3 Uprate project costs.
21 These costs were necessary for the continuation of work for the EPU phase. All
22 of PEF's 2011 CR3 Uprate project costs were reasonably and prudently incurred.

1 V. **ALL COSTS INCLUDED FOR THE CR3 UPRATE ARE**
2 **“SEPARATE AND APART FROM” THOSE COSTS NECESSARY**
3 **TO RELIABLY OPERATE CR3 DURING ITS REMAINING LIFE**

1 Q. **Are the CR3 Uprate project costs included in this NCRC docket for recovery**
2 **separate and apart from those that the Company would have incurred to**
3 **operate CR3 during the extended life of the plant?**

4 A. Yes, PEF has only included for recovery in this proceeding those costs that were
5 incurred solely for the CR3 Uprate project. In other words, the Company only
6 included project costs that would not have been incurred but for the CR3 Uprate
7 project.

8
9 VI. **PROJECT MANAGEMENT AND COST CONTROL OVERSIGHT.**

10 Q. **What project management and cost control oversight policies and**
11 **procedures does PEF utilize for its capital projects?**

12 A. The Company has several project management and cost oversight control policies
13 and procedures that it employs for all of its capital projects on a fleet-wide basis.
14 These are the same Company-wide capital project policies and procedures that are
15 applicable to the Levy Nuclear Project (“LNP”) and that have been approved as
16 reasonable and prudent in previous years NCRC proceedings. PEF continually
17 reviews these policies, procedures, and controls and issues new procedures as
18 necessary based on changing business conditions, organizational changes, and
19 project schedules.

1 **Q. Were the CR3 Uprate project Management and Cost Control Oversight**
2 **policies and procedures the same in 2011 as they were for 2009 and 2010?**

3 A. Yes, they are essentially the same. There have been no substantial changes to the
4 project management and cost oversight controls since the process was described
5 most recently in my direct testimony in Docket No. 110009-EI.

6
7 **Q. Can you please provide an overview of the Company's 2011 project**
8 **management and cost oversight policies and procedures?**

9 A. Yes. The CR3 Uprate project is being undertaken by the Company consistent
10 with its Project Management Manual, which the Company has used to manage
11 capital projects since early in this decade. Additionally, because the CR3 Uprate
12 project is a major capital project for the Company, the project must comply with
13 the Company's Major Capital Projects – Integrated Project Plan (“IPP”)
14 procedure, which provides guidance regarding evaluation and funding
15 authorization for major projects. The CR3 Uprate is also being undertaken by the
16 Company consistent with the project standards established and implemented by
17 Progress Energy's Project Management Center of Excellence organization
18 (“PMCoE”). These standards are based on principles from the internationally
19 recognized Project Management Institute Project Management Body of
20 Knowledge and establish a standardized project management approach that spans
21 tools, templates and processes; training and qualification programs; and adoption
22 of best practices.

23 The CR3 Uprate project was also approved in accordance with the
24 Company's Project Evaluation and Authorization Process. This evaluation and

1 project authorization process has been in place at the Company for many years.
2 The CR3 Uprate project is subject to the Progress Energy Project Governance
3 Policy, which also has been in place for many years. The Company also utilizes
4 several specific project management and cost oversight Nuclear Generation
5 Group (“NGG”) and Corporate procedures.

6
7 **Q. Have PEF’s project management and cost oversight controls substantially**
8 **changed between 2010 and 2011?**

9 A. No, however the Company continuously reviews and revises policies and
10 procedures based on changing conditions, lessons learned, and best industry
11 practices and makes changes as necessary and appropriate. PEF revised more
12 than 75 of its policies and procedures in 2011, and created 13 new policies and
13 procedures since April of 2011. In addition, in late first quarter of 2011, Project
14 Management Controls implemented three revised cost reports that have provided
15 project management a more detailed view of project cost information. The
16 reports include a Variance Report by Project and Work Breakdown Structure
17 (“WBS”), a Contract Summary Report, and a Labor Report.

18
19 **Q. What policies or procedures are in place to assess and mitigate project risks?**

20 A. The Company routinely assesses various project risks and assigns each risk with a
21 probability of occurrence and level of importance in terms of effect on project
22 schedule and cost using its CR3 Uprate Risk Register. The risk register facilitates
23 monitoring and controlling risk by providing a tool to document risk probability,
24 impact, response plans, ownership, triggers, and expected monetary value. It also

1 provides the ability to document risk mitigation opportunities for the project. In
2 addition monthly risk management meetings are held and risk management
3 reports are generated that are the basis for the continuous updates to the overall
4 CR3 Uprate Risk Register.

5
6 **Q. Are employees involved in the CR3 Uprate Project trained in the Company's**
7 **project management and cost control policies and procedures?**

8 A. Yes, they are. PEF's project management team for the CR3 Uprate project has
9 been trained in these Company policies. There are also formal Project Manager
10 qualification requirements for projects of various sizes as well as for other roles
11 within the Project Team (Designated Representative, Field Lead, etc.).

12
13 **Q. What policies and procedures does the Company utilize to ensure that its**
14 **selection and management of outside vendors is reasonable and prudent?**

15 A. First, a requisition is created in the Passport Contracts module for the purchase of
16 services. The requisition is reviewed by the appropriate Contract Specialist in
17 Corporate Services, or field personnel on the CR3 Uprate project, to ensure
18 sufficient data has been provided to process the contract requisition. The Contract
19 Specialist prepares the appropriate contract document from pre-approved contract
20 templates in accordance with the requirements stated on the contract requisition.

21 The contract requisition then goes through the bidding or finalization
22 process. Once the contract is ready to be executed, it is approved online by the
23 appropriate levels of the approval matrix pursuant to the Approval Level Policy
24 and a contract is created. Contract invoices are received by the CR3 Uprate

1 project managers. The invoices are validated by the project managers and
2 Payment Authorizations approving payment of the contract invoices are entered
3 and approved in the Contracts module of the Passport system.

4 When selecting vendors for the CR3 Uprate project, PEF utilizes bidding
5 procedures through a Request For Proposal (“RFP”) process when possible for the
6 particular services or materials needed to ensure that the chosen vendors provide
7 the best value for PEF’s customers. When an RFP cannot be used, PEF ensures
8 that the contracts with the sole source vendors contain reasonable and prudent
9 contract terms with adequate pricing provisions (including fixed price and/or firm
10 price, escalated according to indexes, where possible). When deciding to use a
11 sole source vendor, PEF must provide a sole source justification for not doing an
12 RFP for the particular work.

13 In addition, CR3 EPU contractor oversight and management, including
14 external vendors, has been a continuous project focus in an effort to improve
15 schedule adherence, vendor deliverables, and process efficiencies. Policies and
16 procedures for contractors are revised and updated on an ongoing basis to include
17 lessons learned. For 2011, changes included (1) establishment and
18 implementation of new EPU Organization and EPU Engineering Charts; (2) the
19 addition of scheduling resources; and (3) establishing quarterly management
20 review meetings to discuss scope and resources for vendors.

1 Q. **Does the Company verify that the Company's project management and cost**
2 **control policies and procedures are followed?**

3 A. Yes, it does. PEF uses internal audits to verify that its program management and
4 oversight controls are being implemented and are effective in practice. Quality
5 assurance reviews and audits of external vendors are also conducted.

6 On March 23, 2011, the Florida Nuclear Plant Cost Recovery audit was
7 completed and issued. This audit involved testing a sample of invoices for
8 compliance with the Nuclear Plant Cost Recovery Rule related to the CR3 Uprate
9 project. The overall audit was effective and no specific observations or
10 recommendations were identified or resulted from the audit.

11 In addition, the Nuclear Oversight Organization ("NOS") conducted an
12 assessment of the Nuclear Upgrades Section (across the NGG fleet) during the
13 period April 5, 2011 through May 26, 2011. This was a multi-site assessment
14 which included the EPU project. This assessment has been completed and overall
15 assessment was needs improvement, but generally solid performance. The review
16 team noted two findings for the CR3 Uprate project. These findings related to
17 adverse condition and quality assurance documentation and reporting. These
18 finding have been resolved and closed.

19 Several contractor and quality assurance evaluations were also performed
20 in 2011 including at the Sciencetech facility and at the Siemens regional and
21 international facilities and a NUPIC Joint Utility Audit of Energetech – Curtiss
22 Wright Flow Control Corporation at its California facility. The results of the
23 Siemens facilities reviews were satisfactory with no open items. The Sciencetech
24 audit concluded Sciencetech had an effective quality assurance program and

1 identified minor variant conditions which were corrected through the vendor's
2 internal processes. The NUPIC audit concluded Enertech had an effective quality
3 assurance program and issued three finding that were administrative in nature.
4

5 **Q. Has the Commission previously determined that these CR3 Uprate project**
6 **management and cost oversight controls were reasonable and prudent?**

7 A. Yes. In Order No. PSC-09-0783-FOF-EI, issued Nov. 19, 2009 and Order No.
8 PSC-11-0547-FOF-EI, issued Nov. 23, 2011, the Commission determined that the
9 CR3 Uprate project management and cost oversight controls were reasonable and
10 prudent for 2008, 2009, and 2010 respectively. As I discussed above, the
11 Company's 2011 CR3 Uprate project management and cost oversight controls are
12 substantially the same as they were in 2008, 2009, and 2010.
13

14 **Q. Are the Company's project management and cost control policies and**
15 **procedures on the CR3 Uprate project reasonable and prudent?**

16 A. Yes, they are. These project management policies and procedures reflect the
17 collective experience and knowledge of the Company across the fleet. These
18 policies and procedures have also been tested by the Company on other capital
19 projects. Any lessons learned from those projects have been incorporated in the
20 current policies and procedures. In addition, as I discussed, PEF's policies and
21 procedures are reviewed and revised on a continuous basis as necessary and have
22 been approved as reasonable and prudent by the Commission. We believe,
23 therefore, that our project management policies and procedures are consistent

1 with best practices for capital project management in the industry and are
2 reasonable and prudent.

3

4 **Q. Does this conclude your testimony?**

5 A. Yes, it does.