

BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 080009-EI

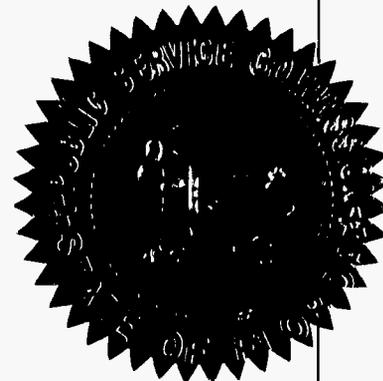
In the Matter of:

NUCLEAR COST RECOVERY CLAUSE.
_____ /

VOLUME 2

Pages 167 through 369

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PROCEEDINGS: HEARING

BEFORE: CHAIRMAN MATTHEW M. CARTER, II
COMMISSIONER LISA POLAK EDGAR
COMMISSIONER KATRINA J. McMURRIAN
COMMISSIONER NANCY ARGENZIANO
COMMISSIONER NATHAN A. SKOP

DATE: Thursday, September 11, 2008

TIME: Commenced at 9:30 p.m.
Concluded at 5:20 p.m.

PLACE: Betty Easley Conference Center
Room 148
4075 Esplanade Way
Tallahassee, Florida

REPORTED BY: MARY ALLEN NEEL, RPR, FPR

APPEARANCES: (As heretofore noted.)

DOCUMENT NUMBER-DATE

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FLORIDA PUBLIC SERVICE COMMISSION

FPSC-COMMISSION CLERK

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P R O C E E D I N G S

1
2 (Transcript follows in sequence from
3 Volume 1.)

4 CHAIRMAN CARTER: We are back on the record.
5 And when we left last time, we had finished the direct,
6 cross, and exhibits for witness Cross. And I think with
7 that, Ms. Triplett, you are recognized.

8 MS. TRIPLETT: Thank you. I think at this
9 point we would like to ask that the prefiled written
10 testimony for Garry Miller, who was excused from the
11 proceeding, be inserted into the record.

12 CHAIRMAN CARTER: Let's do this before you go
13 there. And I'm sorry for cutting you off, but you did
14 -- we asked you, and you did provide it for us.

15 Commissioners, it's a one-page errata sheet
16 for witness Cross, and it has got the numbers that we
17 were asking about. Show it entered into the record.
18 Without objection, show it done.

19 You did provide a copy to all the parties too;
20 right?

21 MS. TRIPLETT: Yes, sir.

22 CHAIRMAN CARTER: Thank you so kindly.

23 MS. TRIPLETT: Yes, sir.

24 CHAIRMAN CARTER: Sorry to interrupt you.
25 Ms. Triplett, you're recognized.

1 I didn't mean to throw your rhythm off like
2 that.

3 MS. TRIPLETT: No, I'm sorry. It doesn't take
4 much to throw my rhythm off.

5 Yes. I think we're up to Garry Miller's
6 testimony, so we would ask that the prefiled testimony
7 for Mr. Garry Miller be inserted into the record as
8 though read.

9 CHAIRMAN CARTER: The prefiled testimony of
10 the witness will be entered into the record as though
11 read.

12 MS. TRIPLETT: Thank you. And he did not have
13 any exhibits.

14 CHAIRMAN CARTER: Okay. Is this a stipulated
15 witness?

16 MS. TRIPLETT: Mr. Miller?

17 CHAIRMAN CARTER: Yes.

18 MS. TRIPLETT: Yes, he was stipulated and
19 excused.

20 CHAIRMAN CARTER: Okay.

21 MS. TRIPLETT: And now we're up to Mr. --

22 CHAIRMAN CARTER: Is that okay with the
23 parties? Is that correct? Commissioners? Okay. Show
24 it done. No exhibits with Mr. Miller?

25 MS. TRIPLETT: Correct, no exhibits.

**IN RE: PETITION TO ESTABLISH DISCOVERY DOCKET REGARDING
ACTUAL AND PROJECTED COSTS FOR LEVY NUCLEAR PROJECT BY
PROGRESS ENERGY FLORIDA, INC.**

BY PROGRESS ENERGY FLORIDA

FPSC DOCKET NO. 080149

DIRECT TESTIMONY OF GARRY MILLER

I. INTRODUCTION AND QUALIFICATIONS

1
2 **Q. Please state your name and business address.**

3 **A.** My name is Garry Miller. My business address is 100 East Davie Street,
4 TPP 15, Raleigh, NC 27601.

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

7 **A.** I am employed by Progress Energy Carolinas ("PEC") in the capacity of
8 General Manager – Nuclear Plant Development & License Renewal. As
9 General Manager – Nuclear Plant Development & License Renewal, I am
10 responsible for the siting, management, and oversight of all major land
11 purchases, and other contracts necessary for the construction of Progress
12 Energy Florida's ("PEF's" or the "Company's") proposed Levy Nuclear
13 Power Plants.

14
15 **Q. What are your responsibilities as the General Manager Nuclear Plant
16 Development & License Renewal?**

1 A. I am responsible for new nuclear plant development in both the Carolinas
2 and Florida, including Engineering, Licensing, and Project Controls
3 (including scheduling, contracts, commercial matters, training, document
4 control, records management, and project management). All the major
5 contracts approved to date on the Levy project, and for nuclear plant
6 development, have been under my management and responsibility.

7
8 **Q. Please summarize your educational background and work experience.**

9 A. I have a Bachelor of Science degree in Nuclear Engineering from North
10 Carolina State University. I also have a master's degree in Mechanical
11 Engineering from North Carolina State University. I have approximately
12 thirty years of experience in the nuclear industry. My experience involves
13 engineering and maintenance experience at all of Progress Energy's
14 nuclear plants and the Corporate office. I have held Engineering Manager
15 positions at the Brunswick Nuclear Plant and Robinson Nuclear Plant. I
16 have held the position of Chief Engineer for Nuclear Generation Group
17 (NGG). I have also held the position of Maintenance Manager at Progress
18 Energy's Harris Nuclear Plant.

19

20 **II. PURPOSE AND SUMMARY OF TESTIMONY**

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

22 A. The purpose of my direct testimony is to support the Company's request
23 for cost recovery pursuant to the nuclear cost recovery rule for certain

1 costs incurred from January through December 2007 for the acquisition of
2 real property necessary to support the construction of the Company's
3 proposed Levy Nuclear Power Plants.

4 Specifically, I will describe the land acquisition costs that have
5 been incurred, for which PEF is seeking recovery of the carrying costs. I
6 will explain why it was reasonable and necessary for the Company to
7 incur those land acquisition costs in the timeframe it did.

8
9 **Q. Do you have any exhibits to your testimony?**

10 **A.** No, I am not sponsoring any exhibits. I am, however, sponsoring
11 Schedules T-7 through T-8B of the Nuclear Filing Requirements
12 ("NFRs"), which are included as part of the exhibits to Will Garrett's
13 testimony. Schedule T-7 is a description of the nuclear technology
14 selected in 2007. Schedule T-8 is a list of the contracts executed in excess
15 of \$1.0 million in 2007. Schedule T-8A reflects details pertaining to the
16 contracts executed in excess of \$1.0 million. Schedule T-8B reflects
17 details pertaining to contracts executed in excess of \$200,000, but less
18 than \$1 million, of which there were none in 2007 for the Levy project.

19 All of these schedules are true and accurate.

20
21 **Q. Please summarize your testimony.**

22 **A.** The Company incurred real estate acquisition costs in 2007 to acquire land
23 necessary for its Levy Nuclear Project. PEF needed to acquire this real

1 property in 2007 to maintain the licensing and construction schedule to
2 successfully bring Levy Unit 1 into commercial service in 2016. As
3 demonstrated in my testimony and the NFR schedules attached to Mr.
4 Garrett's testimony, PEF took adequate steps to ensure these acquisition
5 costs were reasonable and prudent. PEF negotiated favorable contract
6 terms under the then-current market conditions and circumstances.

7 For all the reasons provided in my testimony and in the NFR
8 schedules, the Commission should approve PEF's costs incurred in 2007
9 as reasonable and prudent pursuant to the nuclear cost recovery rule.

10 11 **III. COSTS INCURRED IN 2007 FOR LEVY NUCLEAR PLANT**

12
13 **Q. Has PEF incurred any costs in 2007 for its Levy Nuclear Project?**

14 **A.** Yes, PEF incurred real estate acquisition costs to acquire the site for its
15 Levy Nuclear Project. Levy Units 1 and 2 are scheduled to be built at a
16 site selected in Levy County, Florida for commercial service in 2016 and
17 2017, respectively.

18
19 **Q. How did PEF choose the Levy site as the location for its new nuclear**
20 **power plants?**

21 **A.** The Company's Nuclear Plant Development Group ("NPD") utilized the
22 Electric Power Research Institute ("EPRI") siting guide, a widely accepted
23 guidance document for evaluating new nuclear power plant sites, and

1 applicable Nuclear Regulatory Commission (“NRC”) regulatory guidance,
2 to review and evaluate potential sites. Based on certain on-site analyses,
3 initial screening analyses, and on weighing strategic and transmission
4 considerations, NPD ultimately concluded that the Levy County site
5 presented the best overall site as compared to the other sites considered.

6 After initially selecting the Levy County site, PEF executed a
7 Purchase and Sales Agreement to acquire the parcel, known as the
8 Rayonier parcel, from the land owner in 2006. This allowed PEF to
9 conduct more detailed testing to ensure the viability of the site for a
10 nuclear plant, consistent with NRC regulatory guidance and regulations.
11 These analyses showed that the site was suitable for new nuclear plants.

12
13 **Q. Please generally describe the Rayonier Purchase and Sales**
14 **Agreement.**

15 **A.** PEF negotiated the Rayonier Purchase and Sales Agreement to provide
16 PEF the opportunity to ensure that the site was suitable for nuclear plant
17 development. Once those evaluations were complete, PEF closed on the
18 property in September 2007. PEF took several steps during the
19 negotiation of the Agreement to ensure that it received favorable terms
20 under the circumstances and market conditions. First, during the initial
21 negotiations for the Rayonier property, PEF maintained its anonymity by
22 utilizing a third-party representative, who acted on PEF’s behalf. PEF did
23 this to reduce the likelihood that property owners would inflate their initial

1 asking price solely based on the knowledge that the buyer was a large
2 utility. PEF also used comparable sales from the area to negotiate the
3 most appropriate price for that real estate market. In addition, PEF
4 engaged in lengthy negotiations with the property owner to obtain the
5 lowest possible price on the best possible terms.

6 One favorable contract term is that the Agreement provides for an
7 additional payment to the land owner once PEF has obtained its Combined
8 Operating License ("COL") from the NRC. Thus, in the event the
9 Company does not complete the process of obtaining a COL for the
10 nuclear plants for any reason, the Company will not have to pay any
11 additional money for the land. In addition to this price benefit, PEF's
12 acquisition of this parcel will be a benefit to its customers even if Levy
13 Units 1 and 2 are not ultimately constructed. Good sites, such as this one,
14 with access to an adequate water supply that can accommodate base load
15 and other generating units, are rare in Florida and becoming harder to find
16 and acquire. PEF may be able to utilize this site for alternative generating
17 units in the future.

18 The purchase price negotiated for the Rayonier parcel is a
19 reasonable and prudent price, given the circumstances and nature of the
20 transaction. The other terms of the Rayonier contract are also reasonable
21 and prudent. Further details of this contract are contained in Schedule T-8
22 and T-8A, attached as an exhibit to Mr. Garrett's testimony.
23

1 **Q. Why did PEF acquire land at this time?**

2 **A.** PEF needed to acquire this parcel in 2007 to ensure that the NRC licensing
3 process and construction would be completed timely for Levy Unit 1 to go
4 on-line in 2016. For example, PEF has already started to order long lead-
5 time materials for the Westinghouse AP-1000 reactors, which allows PEF
6 to stay on schedule and to preserve favorable pricing for key components.
7 Additionally, and most significantly, PEF plans to file its Site Certification
8 Application (“SCA”) with the Florida Department of Environmental
9 Protection (“DEP”) in the second quarter of 2008, and the Combined
10 Construction and Operating License Application (“COLA”) with the NRC
11 in the third quarter of 2008. We expect the DEP approval process to take
12 12-15 months and the NRC license approval process to take approximately
13 42 months. Placing these orders and obtaining key regulatory approvals
14 on a timely basis will be critical to maintaining the construction schedule,
15 meeting budgets, and moving forward with the project. All of these
16 efforts required PEF to have a site already selected for its nuclear reactor
17 units.

18 In addition, certain pre-construction activities, such as construction
19 of site access roads, office building, and training center, must commence
20 in 2008 to ensure the proposed commercial in-service date can be met.
21 Assuming PEF receives all regulatory approvals on schedule, it will
22 commence on-site preparation and pre-construction activities in 2010.
23 PEF plans to begin the pour of safety-related concrete; i.e., starting with

1 the reactor foundation in 2012, and expects completion of the balance of
2 plant by the end of 2015. Thus, the acquisition of the property in 2007
3 was necessary, reasonable, and prudent to maintain PEF's construction
4 schedule.

5
6 **Q. Has the Company purchased other real property for the Levy Nuclear**
7 **Project?**

8 **A.** Yes, PEF executed a purchase agreement and closed on another parcel,
9 known as the Lybass parcel, in December 2007. This parcel is contiguous
10 to the southern border of the Rayonier parcel, and also includes a smaller
11 parcel contiguous to the northwest corner of the Rayonier property and
12 abutting the U.S. 19 highway. Acquisition of this property was necessary
13 to provide access to the Levy site to the Cross Florida Barge Canal, which
14 in turn provides access to the Gulf of Mexico -- the cooling water source
15 for the nuclear units. The Lybass parcel also permits greater construction
16 and employee access to the Levy site along the U.S. 19 highway. In
17 addition, part of the Lybass parcel provides access to transmission exit
18 corridors from the Levy nuclear units.

19 Like the Rayonier Purchase and Sale Agreement described above,
20 the Lybass contract was required to maintain the licensing and
21 construction schedule for Levy Units 1 and 2. The Lybass parcel will
22 likewise provide benefits to PEF's customers by serving as a potential
23 future site for alternative generation. Indeed, as described more fully in

1 Mr. Garrett's testimony, the Company will allocate a portion of the parcel
2 as land held for future use.

3 The purchase price for the Lybass parcel is reasonable and prudent,
4 given the nature and circumstances of the transaction. The remainder of
5 the contract provisions are also reasonable and prudent. Further details of
6 the Lybass contract are contained in Schedule T-8 and T-8A, attached as
7 an exhibit to Mr. Garrett's testimony.

8
9 **Q. Why did the Company purchase a greater amount of the Lybass**
10 **property than was needed for the Levy project?**

11 **A.** The landowners would only sell a minimum of 2,150 acres, therefore, the
12 only way PEF could acquire the necessary land rights for the transmission,
13 piping and heavy haul path corridors, would have been to condemn a
14 portion of the Lybass property. The Company first analyzed how much
15 land was necessary to accommodate the four 500kV transmission lines
16 exiting the site and the corridor necessary to locate the intake and
17 discharge piping and heavy haul road on the Lybass property. The
18 Company estimated that it would need at least a 1,000 foot corridor
19 through the western portion of the Lybass property comprising
20 approximately 220 acres. The Company next retained a qualified Florida
21 real estate appraiser, and outside eminent domain counsel, to assist the
22 Company in its evaluation of the alternative cost to condemn the 1,000
23 foot corridor for the Levy Nuclear Project. Under Florida law, the costs

1 included the likely value of the property, hiatus damages, any damages to
2 the remainder of the Lybass property, and any legal fees and other costs
3 resulting from a condemnation proceeding that PEF likely would be
4 required to pay. Based on this evaluation, and considering that any
5 eminent domain trial would be before a Levy County jury, the Company
6 decided to purchase the entire property.

7
8 **Q. Has the Company incurred any other costs for the Levy Nuclear**
9 **Project?**

10 **A.** Yes, PEF incurred costs pursuant to a third, separate contract. PEF
11 executed a Nominee Agreement with a real estate agent to provide real
12 estate acquisition services to identify potential sites and help the Company
13 choose, negotiate, and contract for what ultimately became the Rayonier
14 and Lybass parcels. The company acted as PEF's agent in this process.
15 This contract was necessary for the acquisition of the two parcels that
16 make up the Levy site. The company was chosen for its familiarity with
17 Florida real estate, its experience with negotiating large real estate
18 purchase contracts, and its familiarity with PEF. For this contract, PEF
19 negotiated favorable contract terms under the then-current market
20 conditions and circumstances. Indeed, PEF's real estate agent performed
21 its contract services successfully and below the original contract price.
22 The costs incurred under this contract are thus reasonable and prudent.

1 Further details of the contract are contained in Schedule T-8 and T-8A,
2 attached as an exhibit to Mr. Garrett's testimony.

3

4 **Q. To summarize, were all the costs that the Company incurred in 2007**
5 **for the Levy Nuclear Project reasonable and prudent?**

6 **A.** Yes, the specific cost amounts contained in the schedules, which are
7 attached as exhibits to Mr. Garrett's testimony, reflect the reasonably and
8 prudently incurred costs which are described above for the Levy Nuclear
9 Project work in 2007.

10

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

12 **A.** Yes, it does.

13

1 CHAIRMAN CARTER: Okay. You're recognized.

2 MS. TRIPLETT: Thank you. And Progress Energy
3 would call Daniel Roderick to the stand.

4 CHAIRMAN CARTER: Daniel Roderick.

5 Thereupon,

6 DANIEL L. RODERICK

7 was called as a witness on behalf of Progress Energy
8 Florida and, having been first duly sworn, was examined
9 and testified as follows:

10 DIRECT EXAMINATION

11 BY MS. TRIPLETT:

12 Q. Would you please introduce yourself to the
13 Commission and provide your address?

14 A. Yes. My name is Daniel Roderick. My business
15 address is 15760 West Power Line Street, Crystal River,
16 Florida.

17 Q. And who do you work for, and what is your
18 position?

19 A. I work for Progress Energy. I'm the Vice
20 President for Nuclear Projects and Construction.

21 Q. And have you filed prefiled direct testimony
22 regarding PEF's 2008 actual/estimated and 2009 projected
23 costs associated with the CR3 uprate project?

24 A. Yes.

25 Q. Have you filed prefiled direct testimony

1 regarding PEF's costs incurred in 2006 and 2007 for the
2 CR3 uprate project?

3 A. Yes.

4 Q. Have you filed prefiled supplemental direct
5 testimony regarding PEF's 2008 estimated/actual costs
6 and 2009 projected costs associated with the CR3 uprate?

7 A. Yes.

8 Q. Have you filed rebuttal testimony regarding
9 the CR3 uprate project costs?

10 A. Yes.

11 Q. Have you filed prefiled revised direct
12 testimony regarding PEF's 2008 estimated/actual and 2009
13 projected costs associated with the Levy nuclear plant?

14 A. Yes.

15 Q. Have you filed prefiled direct testimony
16 regarding PEF's site selection costs associated with the
17 Levy nuclear construction project?

18 A. Yes.

19 Q. Have you filed prefiled supplemental direct
20 testimony regarding PEF's site selection,
21 actual/estimated, and projected costs associated with
22 the Levy nuclear project?

23 A. Yes.

24 Q. And does this supplemental testimony
25 supplement your revised prefiled direct testimony?

1 A. Yes.

2 Q. And do you have any changes to make to your
3 prefiled testimony and exhibits?

4 A. I have one correction that I want to make in
5 my direct testimony for in support of 2008
6 actual/estimated costs and 2009 projected costs. That's
7 on the May 1, 2008 testimony, and it's on page 9 on line
8 17. Where it says "approximately 12 million, gross of
9 joint owner billing and exclusive of carrying," the
10 12 million should be 8.4 million. That does not change
11 any of the exhibits or any of the other filings. It's
12 just an error in this particular document.

13 Q. And if I asked you the same questions in your
14 prefiled testimony today, would you give the same
15 answers, with the correction that you just made?

16 A. Yes.

17 MS. TRIPLETT: We would request that the
18 prefiled testimonies be moved into evidence as though
19 read in the record.

20 CHAIRMAN CARTER: The prefiled testimony will
21 be entered into the record as though read.

22
23
24
25

IN RE: NUCLEAR COST RECOVERY CLAUSE

BY PROGRESS ENERGY FLORIDA

FPSC DOCKET NO. 080009

**DIRECT TESTIMONY OF DANIEL L. RODERICK
IN SUPPORT OF 2008 ACTUAL/ESTIMATED COSTS
AND 2009 PROJECTED COSTS**

I. INTRODUCTION AND QUALIFICATIONS

1

Q. Please state your name and business address.

2

A. My name is Daniel L. Roderick. My business address is Crystal River
Energy Complex, Site Administration 2C, 15760 West Power Line Street,
Crystal River, Florida 34428.

3

4

5

6

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

7

A. I am employed by Progress Energy Florida (“PEF” or the “Company”) in
the capacity of Vice President – Nuclear Projects & Construction. As
Vice President – Nuclear Projects & Construction, I am responsible for the
management and oversight of all large, capital nuclear projects for the
Company, including the Uprate Project at Crystal River Unit 3 (“CR3”),
PEF’s nuclear plant. Formerly, I was Director of Site Operations at CR3.

8

9

10

11

12

13

14

**Q. What are your responsibilities as the Vice President Nuclear Projects
and Construction?**

15

16

1 A. I am an officer of PEF and I am responsible for all aspects of major
2 projects and construction of nuclear generating assets in Florida.
3 Formerly, as director of Site Operations, I was responsible for the safe,
4 efficient, and reliable generation of electricity from CR3 and all plant
5 functions reported to me and were under my supervision.

6
7 **Q. Please summarize your educational background and work experience.**

8 A. I have a Bachelor of Science and Master of Science degree in Industrial
9 Engineering from the University of Arkansas and have completed the
10 NRC program for a Senior Reactor Operator License. I have been at CR3
11 since 1996, serving in my current position as Vice President Nuclear
12 Projects and Construction and, prior to that position, Director of Site
13 Operations, Plant General Manager, Engineering Manager, and Outage
14 Manager, respectively. Prior to my employment with the Company, I was
15 employed for twelve years with Entergy Corporation at its Arkansas
16 Nuclear One plant in Russellville, Arkansas with responsibilities in Plant
17 Operations and Engineering.

18

19 **II. PURPOSE AND SUMMARY OF TESTIMONY**

20

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

22 A. The purpose of my direct testimony is to support the Company's request
23 for cost recovery pursuant to the nuclear cost recovery rule for certain

1 costs incurred in 2008 for the replacement and modification of equipment
2 at CR3 to support an increase in electrical generation power from the
3 nuclear plant. My testimony will also support the Company's
4 actual/estimated and projected costs for the remainder of 2008 and 2009.
5 Finally, my testimony explains why the CR3 Uprate Project is feasible,
6 pursuant to Rule 25-6.0423(5)(c)5, F.A.C.
7

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

9 **A.** Yes, I am sponsoring one exhibit:

- 10 • Exhibit No. __ (DLR-1), which is the Integrated Project Plan ("IPP") for the
11 CR3 Uprate project.

12 I am also sponsoring portions of the schedules attached to Lori Cross' testimony.
13 Specifically, Schedules AE-7 through AE-8 of the Nuclear Filing Requirements
14 ("NFRs"), are included as part of Exhibit No. __ (LC-2) the exhibits to Lori
15 Cross' testimony. Schedule AE-7 is a description of the contracts and work for
16 the nuclear technology selected. Schedule AE-8 is a list of the contracts executed
17 in excess of \$1.0 million that have been executed to date. Schedule AE-8A
18 reflects details pertaining to the contracts executed in excess of \$1.0 million.

19 I am also sponsoring Schedules P-7, P-8, and P-8A, part of Exhibit No. __ (LC-
20 1), which provide similar details for technology selected and contracts as the AE
21 schedules do. Finally, I am sponsoring Schedule TOR-7 included as part of
22 Exhibit No. __ (LC-3) to Lori Cross' testimony.

23 This exhibit and all of these schedules are true and accurate.

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Q. Please summarize your testimony.

A. From January to March 2008, PEF has incurred reasonable and prudent costs to complete work scheduled for all three phases of the project. The first phase of the CR3 Uprate Project was completed during the 2007 refueling outage. PEF incurred costs for the remaining two phases, scheduled for the 2009 and 2011 refueling outages, because long lead-times to secure contracts and equipment for that work is required. To maintain the time schedule for the project, PEF's goal is to do as much work as possible during the 2009 refueling outage. These costs are appropriate for recovery pursuant to the nuclear cost recovery rule.

As demonstrated in my testimony and the NFRs filed as exhibits to Ms. Cross' testimony, PEF took adequate steps to ensure that the costs it incurred were reasonable and prudent. When selecting vendors, PEF utilized a Request for Proposals ("RFP"), or competitive bidding, process where appropriate, and used reasonable business judgment to select sole-source vendors when an RFP was not used. For all its contracts, PEF negotiated as favorable contract terms as it could given market conditions to provide reasonable cost certainty and appropriate risk-sharing.

Accordingly, the Commission should approve PEF's costs incurred for January to March 2008 as reasonable and prudent pursuant to the nuclear cost recovery rule.

1 PEF has also provided reasonable projections for costs to be
2 incurred during the remainder of 2008 and all of 2009. These projected
3 costs were developed using the best available information to the Company
4 at this time. Thus the Commission should approve PEF's projections as
5 reasonable.

6
7 **III. PRUDENCE OF COSTS AND UPDATED INFORMATION FOR**
8 **CR3 UPRATE**

9
10 **Q. Have you previously filed testimony in this docket in support of cost**
11 **recovery for the CR3 Uprate?**

12 **A.** Yes, on February 29, 2008, I provided testimony in which I discussed the
13 prudence of the costs incurred in 2006 and 2007 and supported the true-up
14 schedules that reflected contract information and technology selected.

15
16 **Q. Since you filed that testimony, have there been any changes in the**
17 **technology selected or contracts executed for the CR3 Uprate project?**

18 **A.** There has only been one change in the project, in terms of the status of
19 contracts executed and technology selected. PEF executed the Yuba
20 contract, which at the time of my previous testimony, had been issued but
21 not signed. PEF has continued to prudently administer the contracts
22 previously described in greater detail in my previous testimony.

1 The updated description of the contracts executed for the work
2 required for the technology chosen for the CR3 Uprate Project is
3 contained in Schedule AE-7, which is attached as part of an exhibit to Ms.
4 Cross' testimony. Also, a detailed description of the contracts executed in
5 excess of \$1 million, including the dollar value and term of the contract,
6 the method of vendor selection, the identity and affiliation of the vendor,
7 and current status of the contract, is contained in Schedules AE-8 through
8 AE-8A, attached to an exhibit to Ms. Cross' testimony.

9
10 **Q. Has the Company incurred costs for the CR3 Uprate Project?**

11 **A.** Yes, the total capital expenditures, for January to March 2008, gross of
12 joint owner billing and exclusive of carrying cost, were \$9.0 million.

13
14 **Q. Please generally describe these costs.**

15 **A.** As part of the MUR phase, which PEF completed during the 2007
16 refueling outage, PEF incurred costs related to the installation of improved
17 instruments to allow more accurate measurement of inputs to the
18 secondary heat balance. These costs were reasonable and prudent and
19 include engineering and licensing support, project management, the
20 improved instruments, and installation of those instruments. The MUR
21 went into commercial service on January 31, 2008 and the Company has
22 achieved approximately 12 additional megawatts of nuclear generation,
23 depending on the circumstances, as a result. In addition, PEF incurred

1 costs related to work necessary for the Balance of Plant (“BOP”) and the
2 Extended Power Uprate (“EPU”) phases of the project. This work
3 included engineering support, project management, contract labor, and
4 procurement of materials.

5 The specific cost amounts contained in Ms. Cross’ testimony and
6 exhibits reflect the reasonably and prudently incurred costs which are
7 described above for the CR3 Uprate project work for January to March
8 2008.

9
10 **Q. Why is the Company unable to separate costs specifically between the**
11 **BOP and the EPU phases, as was done in the need determination proceeding?**

12 **A.** In the need determination docket, PEF separated the phases between those
13 associated with making the ‘secondary’ side or BOP more efficient from
14 those necessary to support a higher NRC licensed power level output of
15 the reactor core, referred to as EPU. In that docket, however, PEF also
16 indicated that the goal was to do as much of the work during the 2009
17 outage as possible, so that the customers could obtain the benefit of that
18 work earlier. As the analyses progress, and PEF becomes more certain as
19 to the scope of the work, PEF can better identify what work can be done in
20 what outage. In many cases, significant aspects are absolutely essential to
21 support both. In addition, some of the work performed under certain
22 contracts relate to both the 2009 and 2011 work.

23

1 **IV. PROJECTIONS FOR COSTS TO BE INCURRED FOR THE**
2 **REMAINDER OF 2008 AND 2009**

3
4 **Q. Does the Company plan to incur costs for the CR3 Uprate Project**
5 **during the remainder of 2008 and 2009?**

6 **A.**Yes, PEF must incur costs to maintain the schedule for the uprate.
7

8 **Q. What major costs does PEF estimate incurring for the remainder of**
9 **2008?**

10 **A.**As reflected in Schedule AE-6, PEF estimates costs of \$58.6 million, gross
11 of joint owner billing and exclusive of carrying costs. This amount
12 includes purchase of materials for the moisture separator reheaters
13 (“MSRs”), purchase of generator and exciter components, and work done
14 by Siemens on the wheel disc machining and generator rotor winding.
15

16 **Q. What major costs does PEF project it will incur in 2009?**

17 **A.**As reflected in Schedule P-6, PEF projects costs of \$107.1 million, gross
18 of joint owner billing and exclusive of carrying costs for 2009. This
19 amount includes additional purchases of generator and exciter
20 components, completion of inner casing fabrication, purchase and
21 shipping of the low pressure turbines, progress payments for the delivery
22 of the MSR vessels to CR3, and the mobilization of equipment and labor

1 by Siemens in preparation for the installation work to be done during the
2 2009 scheduled refueling outage.

3
4 **Q. Has the Company made any projections regarding the costs that will**
5 **be incurred in 2009 to address the Point of Discharge (“POD”) issue?**

6 **A.** Yes, PEF has commissioned a study to determine the solution(s) necessary
7 to address the temperature and flow of the water in the discharge canal. The water in
8 the discharge canal is affected not only by CR3 but also by Crystal River Units 1 and
9 2. This study will also identify the respective impacts of CR3 to the discharge canal,
10 so that the appropriate costs of the solution(s) can be properly allocated to the CR3
11 Uprate project. The study is not yet complete, but the Company does have high level,
12 preliminary estimates for the anticipated expenditures for 2009. Because the
13 allocation has not been determined, PEF has assumed, to provide projections for year
14 2009, that 42% of the costs of the POD solution(s) should be allocated to the CR3
15 Uprate project. PEF will update its projections for 2009 costs upon completion of the
16 POD study. The projected expenditures for the POD in 2009 are estimated to be
17 approximately ^{\$44}~~\$12~~ million, gross of joint owner billing and exclusive of carrying
18 costs. This cost figure is reflected on Line 39 and Line 43 of Schedule P-6, attached
19 as an exhibit to Ms. Cross’ testimony.

20
21 **Q. How were all the projected costs prepared?**

22 **A.** PEF developed its estimates on a reasonable engineering basis, using the
23 best available information. In some instances, PEF utilized actual

1 information received from third parties with which it is negotiating, while
2 in other instances, the contracts have already been executed. In addition,
3 PEF developed these projected costs based on the detailed project
4 schedules which set forth the necessary milestones to maintain the
5 expected in-service date. Accordingly, the projected costs, as set forth in
6 Exhibits No. __ (LC-1) and (LC-2) to Lori Cross' testimony, should be
7 approved as reasonable.

8
9 **V. TRUE UP TO ORIGINAL COST FILING FOR 2008**

10
11 **Q. Has the Company filed schedules to provide information truing up the**
12 **original estimates to the actual costs incurred?**

13 **A.** Yes, these schedules are reflected as an Exhibit to Ms. Cross' testimony.

14
15 **Q. What is the current total project estimate, compared to the original**
16 **estimate?**

17 **A.** As reflected on Schedule TOR-7, the total current project estimate,
18 exclusive of AFUDC and fully loaded is \$364 million. The original
19 estimate provided in the need determination proceeding was \$381 million,
20 which did not reflect the full "Financial View" or fully loaded costs. The
21 original estimate inclusive of the indirect costs is \$439 million as
22 presented in Scheduled TOR-7. This current total project estimate is
23 based on the best available information at the time of this filing.

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**VI. RULE 25-6.0423(5)(c)5: LONG-TERM FEASIBILITY OF
COMPLETING CR3 UPRATE**

Q. Has the Company conducted an analysis to determine the long-term feasibility of completing the CR3 Uprate project?

A. Yes. In this case, the Company determined the feasibility of completing the CR3 Uprate project as part of its Integrated Project Plan (“IPP”). The IPP is a new, refined process for gaining management approval for expenditures of significant funds. It is another form of Project Plan or Business Analysis Package. The Company uses IPPs to manage non-routine capital projects with more than \$50 million in capital costs. After completion of the MUR phase, an IPP for the CR3 Uprate project was prepared on January 29, 2008. This IPP updates and replaces the Business Analysis Package for the project, which was issued November 10, 2006.

Q. Is the CR3 Uprate project completion feasible?

A. Yes, given the results of the IPP. The IPP provides an update of the status of the project, including the completion of the MUR phase during the 2007 outage and the continued progress on preparing for the 2009 and 2011 outage. It outlines the major work planned, and sets forth the planned schedule and project milestones necessary for timely completion. Updated cost estimates are provided in the IPP, for both capital and operating and maintenance (“O&M”). The total current estimate remains bounded by the initial Business Analysis Package.

1 The IPP also includes potential project risks, and strategies for managing
2 such risks. PEF feels confident that at this time, there is no indication of any risks
3 that would affect the project's feasibility. As indicated in the IPP, PEF has an
4 extensive risk management program in place that allows us to readily identify any
5 potential risks quickly and implement mitigation actions to reduce those risks. Also
6 included in the IPP is an update regarding the necessary regulatory approvals for the
7 project, particularly the Site Certification for the flow and temperature of the water at
8 the discharge canal and approval from the Nuclear Regulatory Commission ("NRC")
9 for the Extended Power Uprate. Obtaining these regulatory permits remains feasible
10 and on schedule.

11 The recommendation of the IPP is that the Company continue with the
12 remaining work for the CR3 Uprate project, to be completed during the 2009 and
13 2011 refueling outages. As set forth in the IPP, the project will result in economic
14 benefits to PEF's customers, in terms of fuel savings, and will provide additional
15 clean energy at low cost to PEF consumers. The implementation of the CR3 Uprate
16 project is an important element of the Progress Energy Balanced Solution. The IPP,
17 which is a confidential document, is attached as Exhibit No. __ (DLR-1) to my
18 testimony.

19
20 **Q. Does the Company plan to complete an updated IPP on an annual**
21 **basis to decide whether to go forward with the CR3 Uprate project?**

22 **A.**At this point, PEF does not plan to complete a formal IPP each year.
23 However, the Company will continue to provide regular updates to senior

1 management, following certain project milestones, so that the progress of the project
2 can be effectively monitored.

3

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

5 **A.** Yes, it does.

6

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**IN RE: PETITION TO RECOVER THE COSTS OF THE CRYSTAL RIVER
UNIT 3 UPRATE PURSUANT TO THE NUCLEAR COST RECOVERY RULE**

BY PROGRESS ENERGY FLORIDA

FPSC DOCKET NO. _____

DIRECT TESTIMONY OF DANIEL L. RODERICK

I. INTRODUCTION AND QUALIFICATIONS

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Q. Please state your name and business address.

A. My name is Daniel L. Roderick. My business address is Crystal River Energy Complex, Site Administration 2C, 15760 West Power Line Street, Crystal River, Florida 34428.

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

A. I am employed by Progress Energy Florida (“PEF” or the “Company”) in the capacity of Vice President – Nuclear Projects & Construction. As Vice President – Nuclear Projects & Construction, I am responsible for the management and oversight of all large, capital nuclear projects for the Company, including the Uprate Project at Crystal River Unit 3 (“CR3”), PEF’s nuclear plant. Formerly, I was Director of Site Operations at CR3.

Q. What are your responsibilities as the Vice President Nuclear Projects and Construction?

1 **A.** I am an officer of PEF and I am responsible for all aspects of major
2 projects and construction of nuclear generating assets in Florida.
3 Formerly, as director of Site Operations, I was responsible for the safe,
4 efficient, and reliable generation of electricity from CR3 and all plant
5 functions reported to me and were under my supervision.

6
7 **Q.** **Please summarize your educational background and work experience.**

8 **A.** I have a Bachelor of Science and Master of Science degree in Industrial
9 Engineering from the University of Arkansas and have completed the
10 NRC program for a Senior Reactor Operator License. I have been at CR3
11 since 1996, serving in my current position as Vice President Nuclear
12 Projects and Construction and, prior to that position, Director of Site
13 Operations, Plant General Manager, Engineering Manager, and Outage
14 Manager, respectively. Prior to my employment with the Company, I was
15 employed for twelve years with Entergy Corporation at its Arkansas
16 Nuclear One plant in Russellville, Arkansas with responsibilities in Plant
17 Operations and Engineering.

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

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

21 **A.** The purpose of my direct testimony is to support the Company's request
22 for cost recovery pursuant to the nuclear cost recovery rule for certain
23 costs incurred in 2006 and 2007 for the replacement and modification of

1 equipment at CR3 to support an increase in reactor power from the nuclear
2 plant.

3 Specifically, I will describe the construction costs that have been
4 incurred, for which PEF is seeking recovery of the carrying costs. I will
5 explain why those construction costs were reasonable and necessary to
6 accomplish the uprate. My testimony further supports the prudence of
7 those costs by describing the process by which vendors and technology
8 were selected.

9
10 **Q. Do you have any exhibits to your testimony?**

11 **A.** No, I am not sponsoring any exhibits. I am, however, sponsoring
12 Schedules T-7 through T-8B of the Nuclear Filing Requirements
13 (“NFRs”), which are included as part of the exhibits to Will Garrett’s
14 testimony. Schedule T-7 is a description of the contracts and work for the
15 nuclear technology selected, for years 2006 and 2007. Schedule T-8 is a
16 list of the contracts executed in excess of \$1.0 million, for years 2006 and
17 2007. Schedule T-8A reflects details pertaining to the contracts executed
18 in excess of \$1.0 million. Schedule T-8B reflects contracts executed in
19 excess of \$200,000, yet less than \$1.0 million.

20 All of these schedules are true and accurate.

21
22 **Q. Please summarize your testimony.**

1 A. The CR3 Uprate Project is being completed in three phases and will result
2 in the Company generating an additional 180 MWe of efficient nuclear
3 power by 2011. To improve the cost-effectiveness of this project, the
4 Company chose to complete the project in three phases by taking
5 advantage of already-scheduled refueling outages at CR3. Since
6 November 2006 and during 2007, PEF has incurred reasonable and
7 prudent costs to complete all three phases of the project. The first phase
8 of the CR3 Uprate Project was completed during the 2007 refueling
9 outage. PEF incurred costs for the remaining two phases, scheduled for
10 the 2009 and 2011 refueling outages, because long lead-times to secure
11 contracts and equipment for that work is required. These costs are
12 appropriate for recovery pursuant to the nuclear cost recovery rule.

13 As demonstrated in my testimony and the NFRs filed as exhibits to
14 Mr. Garrett's testimony, PEF took adequate steps to ensure that the costs it
15 incurred were reasonable and prudent. When selecting vendors, PEF
16 utilized a Request for Proposals ("RFP"), or competitive bidding, process
17 where appropriate, and used reasonable business judgment to select sole-
18 source vendors when an RFP was not used. For all its contracts, PEF
19 negotiated as favorable contract terms as it could given market conditions
20 to provide reasonable cost certainty and appropriate risk-sharing.

21 Accordingly, the Commission should approve PEF's costs incurred for
22 2006 and 2007 as reasonable and prudent pursuant to the nuclear cost
23 recovery rule.

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III. DESCRIPTION AND STATUS OF CR3 UPRATE PROJECT

Q. Please briefly describe the CR3 Uprate project.

A. The power uprate project for CR3 increases the electrical power output from the plant from about 900 MWe by approximately 180 MWe to 1,080 MWe. The power uprate project involves increasing the power or thermal MWs produced in the reactor core by making modifications to the design to allow for use of additional nuclear fuel. In addition, some modifications to supporting equipment are necessary to support the additional heat from the power increase to accommodate all designed accident conditions in the plant. The additional heat will raise the heat exchange between the Primary and Secondary Systems and create more steam to turn the turbines.

The major modifications resulting from the power uprate involve the secondary system; specifically, the turbine generator set, which has three parts, two low pressure and one high pressure rotor, and the generator, plus their supporting systems and equipment. The secondary system must be modified to accept the additional heat produced by the reactor core. This is accomplished by increasing the secondary system water and steam flow. Increasing the flow requires larger pumping capacity than currently exists, which requires modification or replacement of some existing pumps and heat exchangers. A series of evaluations,

1 models, and other studies have been completed to identify the required
2 pumps and motors to upgrade or replace .

3 In addition to the reactor power increase, design improvements to
4 some major system components will allow for increased efficiencies,
5 providing additional electrical power beyond that obtained from the higher
6 thermal output. These design improvements to obtain the steam
7 efficiencies are factored into the CR3 power uprate costs. For example,
8 when the steam turbine high pressure rotor was designed in 1962, a multi-
9 piece assembly was made. These multi-piece assemblies cause drag on
10 the system, but better technology did not exist at the time. Since then, in
11 the late 1990's, technological advancements have resulted in a single piece
12 rotor blade that has less drag and, therefore, provides increased megawatt
13 output for the same steam input.

14
15 **Q. Please explain when and how the CR3 Uprate project will be**
16 **accomplished.**

17 **A.** The CR3 power uprate project is planned for completion in three
18 scheduled refueling outages for CR3 in 2007, 2009 and 2011. By
19 completing this work during the times when CR3 will already be offline,
20 customers receive the benefits of the CR3 Uprate Project without incurring
21 replacement energy costs.

22 Phase I, the MUR, was installed during the 2007 refueling outage
23 and went on-line on January 31, 2008. The MUR is a series of

1 engineering analyses to measure the “secondary heat balance” with
2 improved accuracy through modifications to plant instrumentation and
3 associated calculations. The improved accuracy in measuring the
4 secondary heat balance, however, allows the rated thermal power to be
5 increased by 41 thermal megawatts (“MWt”) and plant electrical
6 generation to increase by approximately 12 megawatts electric (“MWe”).
7 Phase 2 of this project is a series of improvements to the efficiency of the
8 secondary plant also known as the Balance of Plant (“BOP”). The
9 Company currently anticipates, for example, that all or at least part of the
10 low pressure turbine and electrical generator replacement can be
11 completed during the BOP phase. The BOP phase is scheduled
12 concurrently with the steam generator replacement during the 2009
13 refueling outage. Other modifications and replacements will be
14 evaluated for inclusion in the 2009 refueling outage if the outage is not
15 extended, appropriate resources are available to support the changes, and
16 the impact of further modifications or replacements for the power uprate
17 project on the duration of the scheduled 2011 refueling outage can be
18 minimized.

19 The changes during the BOP phase do not increase the licensed
20 output of the nuclear reactor but they will improve the efficient use of that
21 output to produce a higher electrical output. The estimated increase in
22 output is 28 MWe from the BOP phase.

1 The full power uprate is scheduled for the 2011 refueling outage,
2 when the remaining work necessary to provide the full 180 MWe power
3 uprate, called the Extended Power Uprate (“EPU”) phase, will be
4 completed. The BOP phase improvements will be sized to support the
5 EPU. The EPU maximizes the output of the reactor and the BOP to their
6 ultimate capacity.

7 The remaining two phases of the CR3 uprate project are on
8 schedule to come online during the 2009 and 2011 outages.

9
10 **Q. Will the CR3 uprate project require changes to other units or the**
11 **Crystal River site?**

12 **A.** No. All changes necessary to generate the full power uprate are internal to
13 the CR3 power block. No changes to the Company’s current plant siting
14 are required. However, modifications to address Point of Discharge
15 (“POD”) issues to accommodate the full 180 MWe power uprate will be
16 necessary.

17
18 **Q. What changes are anticipated to address the Point of Discharge**
19 **issues?**

20 **A.** The power uprate from the project will generate additional heat and steam
21 thereby increasing the water temperature of the cooling water for the CR3
22 unit. This additional heat will likely cause the Company to exceed the
23 thermal permit requirements for the cooling water discharge flow and

1 temperature. The Company has begun a study to evaluate all reasonable
2 options before making a final determination of how to address the POD
3 issue. Whatever modifications are necessary to address the thermal
4 cooling water discharge limit, however, will accommodate the full power
5 generated by CR3.

6
7 **Q. Did PEF obtain a need determination for the CR3 Uprate project?**

8 **A.** Yes, the Commission approved the need for the CR3 Uprate in Order No.
9 PSC-07-0119-FOF-EI, issued on February 7, 2007.

10
11 **Q. What is the current status of the CR3 Uprate project in terms of**
12 **completion?**

13 **A.** Phase I, also known as the MUR phase, was successfully completed
14 during the 2007 scheduled outage. Concurrently with the MUR phase
15 work, we have been securing contracts, making plans, and incurring costs
16 for Phases II and III. The project thus far is progressing as expected, and
17 we expect no problems with completing them in the expected timeframes.

18
19 **Q. How did PEF choose the vendors with which it contracted during the**
20 **2006 and 2007 timeframe?**

21 **A.** PEF employed a competitive bidding process to choose most of the
22 vendors for the various projects associated with the CR3 Uprate Project.
23 PEF issued a Request for Proposal ("RFP"), evaluated the RFP responses

1 based on a variety of factors (including price, dependability of the vendor,
2 technical considerations, and the like), and chose the vendor that provided
3 the best value for the price.

4 In those instances in which an RFP process was not employed to
5 choose a vendor for a contract, PEF used reasonable business judgment to
6 justify that decision. For example, AREVA was chosen as a sole source
7 contract (meaning PEF did not issue an RFP) to perform the analytical and
8 licensing support for the NRC approval for the MUR and EPU phases.
9 This decision was made because AREVA had unique access to and
10 experience with the requisite safety analyses for CR3. This allows
11 AREVA to efficiently perform the analyses required to secure NRC
12 approval. AREVA has also out-performed other vendors in these types of
13 analyses. These factors reasonably lead to the selection of AREVA as the
14 vendor for such a time-sensitive project like the CR3 Uprate Project. We
15 nevertheless have secured a favorable contract terms with AREVA to
16 provide reasonable cost-certainty and appropriate risk-sharing.

17 A more detailed description of the contracts executed for the work
18 required for the technology chosen for the CR3 Uprate Project is
19 contained in Schedule T-7, which is attached as part of an exhibit to Will
20 Garrett's testimony. Also, a detailed description of the contracts executed
21 in excess of \$1 million, including the dollar value and term of the contract,
22 the method of vendor selection, the identity and affiliation of the vendor,

1 and current status of the contract, is contained in Schedules T-8 through T-
2 8B, attached to an exhibit to Mr. Garrett's testimony.

3
4 **IV. COSTS INCURRED IN 2006 AND 2007 FOR CR3 UPRATE**
5 **PROJECT**

6
7 **Q. Has the Company incurred costs for the CR3 Uprate Project?**

8 **A.** Yes, PEF has incurred costs related to all three phases of the CR3 Uprate
9 Project. The total capital expenditures, for both years 2006 and 2007,
10 gross of joint owner billing and exclusive of carrying cost, were \$38.5
11 million.

12
13 **Q. Please generally describe these costs.**

14 **A.** As part of the MUR phase, which PEF completed during the 2007
15 refueling outage, PEF incurred \$8.7 million in costs related to the
16 installation of improved instruments to allow more accurate measurement
17 of inputs to the secondary heat balance. These costs were reasonable and
18 prudent and include engineering and licensing support, project
19 management, the improved instruments, and installation of those
20 instruments. PEF entered into contracts with NuFlo Technologies Sales
21 Co., AREVA NP, Thermal Engineering International, and Atlantic Group
22 for these services and products.

1 PEF also incurred \$32.1 million in reasonable and prudent costs
2 for certain long-lead items associated with the BOP Phase (Phase II) and
3 with the EPU (Phase III). The remaining two phases for the CR3 Uprate
4 Project are proceeding in parallel. To maximize efficiencies, work related
5 to both phases is being simultaneously performed where possible. In
6 addition, as the studies progress, the Company is evaluating whether
7 certain equipment can be installed earlier, during the 2009 outage rather
8 than the 2011 outage. Until those decisions are made, and until the actual
9 2009 outage and installation are completed, the costs for Phases II and III
10 will not be separated as between those two phases. These costs, however,
11 were necessary to accomplish the entire Uprate Project and were prudently
12 incurred.

13 PEF entered into contracts with Yuba Heat Transfer Div. and
14 Siemens for the heat exchangers and turbine/generator retrofits,
15 respectively. PEF also entered into a contract with AREVA NP for a
16 detailed technical evaluation to ensure timely completion of the remaining
17 uprate work. PEF also contracted with AREVA NP for licensing and
18 analytical support to seek NRC approval for the EPU. In addition, PEF
19 entered into a contract with the limited partnership of Worley Parsons and
20 AREVA for the engineering support for the balance of the EPU. Each of
21 these contracts, along with how those vendors were selected, are explained
22 in greater detail in Schedules T-7 and T-8.

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The specific cost amounts contained in Will Garrett's testimony and exhibits reflect the reasonably and prudently incurred costs which are described above for the CR3 Uprate project work in 2006 and 2007.

Q. Does this conclude your testimony?

A. Yes, it does.

IN RE: NUCLEAR COST RECOVERY CLAUSE

BY PROGRESS ENERGY FLORIDA

FPSC DOCKET NO. 080009

**SUPPLEMENTAL DIRECT TESTIMONY OF DANIEL L. RODERICK
IN SUPPORT OF 2008 ACTUAL/ESTIMATED COSTS
AND 2009 PROJECTED COSTS**

1

I. INTRODUCTION AND SCOPE OF TESTIMONY

2

Q. Please state your name.

3

A. My name is Daniel L. Roderick.

4

5

Q. Did you file Direct Testimony on May 1, 2008 in this docket?

6

A. Yes, I filed testimony in support of PEF's actual/estimated and projected costs for the CR3 Uprate project.

7

8

9

Q. Why are you filing supplemental testimony to this direct testimony?

10

A. I am supplementing my direct testimony to provide additional information regarding the Company's actual/estimated and projected costs. I will also provide testimony regarding PEF's project management policies and procedures that are designed to manage project costs and maintain the project schedule and explain why they are reasonable and prudent.

11

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1 **II. PRUDENCE OF ACTUAL 2008 COSTS INCURRED FOR CR3**
2 **UPRATE PROJECT**

3
4 **Q. Has the Company incurred construction costs for the CR3 Uprate**
5 **Project?**

6 **A.** Yes, as shown on line 45 of Schedule AE-6, the total capital expenditures,
7 for January to March 2008, gross of joint owner billing and exclusive of
8 carrying cost, were \$9.0 million.

9
10 **Q. What does this \$9.0 million figure include?**

11 **A.** Using the terminology of the Nuclear Filing Requirements (“NFRs”), PEF
12 incurred Project Management costs of \$1 million and Power Block
13 Engineering, Procurement, etc. (i.e., related construction cost items) costs
14 of \$7.9 million that total \$9.0 million.

15
16 **Q. Please describe the total Project Management costs incurred and**
17 **explain why the Company incurred them.**

18 **A.** These costs include the following Project Management activities: (1)
19 project administration, including project instructions, staffing, roles and
20 responsibilities, and interface with accounting, finance, and senior
21 management; (2) contract administration, including status and review of
22 project requisitions, purchase orders, and invoices, contract compliance,
23 and contract expense reviews; (3) project controls, including schedule

1 maintenance and milestones, cost estimation, tracking and reporting, risk
2 management, and work scope control; (4) project management, including
3 project plans, project governance and oversight, task plans, task
4 monitoring plans, lessons learned, and task item completions; (5) project
5 training, including the uprate project training program, training of
6 personnel in accordance with the training program, and maintaining
7 training records; and (6) CR3 Uprate licensing work.

8 Each activity was conducted under the Company's project
9 management and cost control policies and procedures that I describe in my
10 testimony below. Such costs are necessary to ensure that the scope of
11 work is adequate to achieve the uprate project objectives, that the
12 engineering and construction labor, material, and equipment, provided by
13 PEF or outside vendors for the project, is available when needed at a
14 reasonable cost, and that the project schedule can be maintained.

15 The current schedule calls for the CR3 Uprate to be completed
16 during the 2009 and 2011 CR3 refueling outages. Through the Project
17 Management activities that I have identified, the Company is on-schedule
18 to perform the CR3 Uprate project work as planned. These necessary CR3
19 Uprate project costs are reasonable and prudent.

20
21 **Q. Please describe the total costs incurred for the Power Block**
22 **Engineering, Procurement and related construction cost items and**
23 **explain why the Company needed to incur them.**

1 **A.** These costs include (1) the purchase of improved instruments for more
2 accurate measurements, (2) contract labor for the engineering and
3 installation of these instruments, and (3) engineering and analytical
4 support work for Balance of Plant (“BOP”) and Extended Power Uprate
5 (“EPU”) work. These costs were necessary to achieve the power uprate
6 objectives of the CR3 Uprate project. Each of these costs directly
7 contributes labor or material to the performance of the power uprate,
8 which will increase the generation of electrical power using nuclear fuel at
9 CR3, resulting in substantial fuel savings for our customers. As a result,
10 these are reasonable and prudent costs.

11
12 **III. 2008 ACTUAL/ESTIMATED AND 2009 PROJECTED PERIODS**

13
14 **Q. Does the Company plan to incur costs for the CR3 Uprate Project**
15 **during the remainder of 2008?**

16 **A.** Yes, PEF must incur costs to maintain the schedule for the CR3 Uprate
17 project and to procure material and equipment and perform engineering
18 and analytical support work to accomplish the power uprate work during
19 the 2009 and 2011 CR3 refueling outages.

20
21 **Q. What types of costs does PEF project to incur for the CR3 Uprate**
22 **project during the remainder of 2008 and 2009?**

1 A. As reflected in Schedule AE-6 of Ms. Cross' Exhibit LC-2, the total 2008
2 actual/estimated costs are broken down into two categories: Project
3 Management cost of \$9.4 million and Power Block Engineering,
4 Procurement, and related construction costs of \$58.2 million.

5 As reflected in Schedule P-6 of Ms. Cross' Exhibit LC-1, the 2009
6 projected costs are broken down into two categories: Project Management
7 costs of \$21.6 million and Power Block Engineering, Procurement, and
8 related construction costs of \$85.5 million.

9
10 **Q. What Project Management work will be done in 2008 and 2009 and**
11 **why does the Company need to incur the cost of that work?**

12 A. In 2008 and 2009, Project Management costs will include: (1) project
13 administration, including project instructions, staffing, roles and
14 responsibilities, and interface with accounting, finance, and senior
15 management; (2) contract administration, including status and review of
16 project requisitions, purchase orders, and invoices, contract compliance,
17 and contract expense reviews; (3) project controls, including schedule
18 maintenance and milestones, cost estimation, tracking and reporting, risk
19 management, and work scope control; (4) project management, including
20 project plans, project governance and oversight, task plans, task
21 monitoring plans, lessons learned, and task item completions; (5) project
22 training, including the uprate project training program, training of

1 personnel in accordance with the training program, and maintaining
2 training records; and (6) CR3 Uprate licensing work.

3 Each activity was conducted under the Company's project
4 management and cost control policies and procedures that I describe in my
5 testimony below. Such costs are necessary to ensure that the scope of
6 work is adequate to achieve the uprate project objectives, that the
7 engineering and construction labor, material, and equipment, provided by
8 PEF or outside vendors for the project, is available when needed at a
9 reasonable cost, and that the project schedule can be maintained.

10 The Company reasonably projected its Project Management costs for
11 the remainder of 2008 and 2009 by using the Company's staffing plan
12 associated with the Uprate Project management staff and an approximate
13 three percent internal labor escalation.

14
15 **Q. What Power Block Engineering, Procurement, and related**
16 **construction work will be done in 2008 and 2009 and why does the**
17 **Company need to incur the cost of that work?**

18 **A.** These projected costs include purchase of materials for the moisture
19 separator reheaters ("MSRs"), purchase of generator and exciter
20 components, and work done by Siemens on the wheel disc machining and
21 generator rotor winding, completion of inner casing fabrication, purchase
22 and shipping of the low pressure turbines, progress payments for the
23 delivery of the MSR vessels to CR3, and the mobilization of equipment

1 and labor by Siemens in preparation for the installation work to be done
2 during the 2009 scheduled refueling outage.

3 These costs are necessary to achieve the power uprate objectives of the
4 CR3 Uprate project. Each of these costs directly contributes labor or
5 material to the performance of the power uprate, which will increase the
6 generation of electrical power using nuclear fuel at CR3, resulting in
7 substantial fuel savings for our customers. As a result, these are
8 reasonable and prudent costs.

9 PEF projected its 2008 and 2009 Power Block Engineering,
10 Procurement, and related construction item costs using actual contract
11 figures and project schedule milestones. For example, to maintain the
12 schedule for the planned outage in 2009, PEF must order and make
13 payments on certain equipment during a particular timeframe. These
14 payment amounts and the times for payment are set forth in various
15 contracts, and these payments are used for the projections. PEF has,
16 therefore, developed its construction cost estimates using the best
17 available information because the parameters of our cost estimates,
18 material and labor pricing, whether fixed or firm with industry recognized
19 escalations, and the schedule for payments, has been established by
20 contract. The 2008 and 2009 Power Block Engineering, Procurement, and
21 related construction item cost projections are, therefore, reasonable.
22

1 **Q. Are there any other costs included in the Company's projections for**
2 **2009 for the CR3 Uprate project?**

3 **A.** Yes, PEF projects that it will incur approximately \$12 million, gross of
4 joint owner billing and exclusive of carrying costs, to address the Point of
5 Discharge ("POD") issue. PEF has commissioned a study to determine
6 the solution(s) necessary to address the temperature and flow of the water
7 in the discharge canal. The water in the discharge canal is affected not
8 only by CR3 but also by Crystal River Units 1 and 2. This study will also
9 identify the respective impacts of CR3 to the discharge canal, so that the
10 appropriate costs of the solution(s) can be properly allocated to the CR3
11 Uprate project.

12 The study is in two phases, the first of which has been completed.
13 The phase 1 study reviewed various options available to mitigate the
14 increased heat load in the discharge canal. The recommendation from
15 phase 1 was that additional cooling towers and a recirculation line
16 connecting the discharge canal to the intake canal be added. The second
17 phase could also be described as a conceptual design phase, and it is not
18 yet complete. The phase 2 study currently in progress will resolve some
19 open engineering issues identified during phase 1 and establish the design
20 requirements needed to construct the new towers and recirculation line.
21 Phase 2 is currently scheduled to be completed by the end of 2008.

22 The Company does have confidence in the overall costs and, in
23 particular, those for the anticipated expenditures for 2009. Further, while

1 the final allocation has not been determined, PEF remains confident that
2 continued use of 42 percent of the overall costs of the POD solution(s)
3 should be allocated to the CR3 Uprate project. This projection is based on
4 the incremental heat load that is attributable to the CR3 uprate that the
5 cooling towers need to dissipate. The POD costs are part of both the
6 Project Management and Power Block Engineering, Procurement, and
7 related construction cost categories on Line 39 and Line 43 of Schedule P-
8 6 of Exhibit LC-1.

9
10 **IV. TRUE UP TO ORIGINAL COST FILING FOR 2008**

11
12 **Q. Has the Company filed schedules to provide information truing up the**
13 **original estimates to the actual costs incurred?**

14 **A.** Yes, these schedules are provided as an Exhibit to Ms. Cross' testimony.

15
16 **Q. What is the current total project estimate, compared to the original**
17 **estimate?**

18 **A.** As reflected on Schedule TOR-7, the total current project estimate,
19 exclusive of AFUDC and including fully loaded costs, is \$364 million.
20 The original estimate provided in the need determination proceeding was
21 \$381 million, which did not reflect the full "Financial View" or fully
22 loaded costs but instead reflected the estimated direct costs. The original
23 estimate inclusive of the indirect costs is \$439 million as presented in

1 Scheduled TOR-7. As I explained above, we now have contracts in place
2 for the CR3 Uprate project work, and our current cost estimates are based
3 on these contract costs and estimates of supporting project management
4 and other work by PEF. The current total project estimate is, therefore,
5 based on the best available information at the time of this filing.

6 The cost estimates for the CR3 Uprate project, when compared on
7 the same cost basis, have changed. One reason is that the installation costs
8 for the work already completed were larger than originally projected. This
9 is consistent with the Company's overall experience with recent
10 construction labor and engineering cost increases. Similarly, the costs of
11 material have increased since the initial estimate was prepared consistent
12 with material cost increases in the utility industry and in the construction
13 industry as a whole. At this time, however, the current estimate reflects
14 costs under contracts that are in place, which was not the case when the
15 initial cost estimate was prepared. The Company, therefore, believes the
16 current estimate reasonably reflects the cost of the Uprate project based on
17 costs that are better defined under circumstances where the Company is
18 closer to completing the project and simply has better cost information
19 under its contracts for its projections.

20 Another change to the estimate is the elimination of the
21 transmission costs that were included in the original estimate. The
22 Company completed its transmission study related to the CR3 Uprate
23 project after its initial cost estimate was prepared. As a result of that

1 study, the Company determined that no additional transmission upgrades
2 and related costs were necessary as a result of the CR3 Uprate.

3
4 **V. PROJECT MANAGEMENT AND COST CONTROL OVERSIGHT**

5
6 **Q. Has the Company implemented project management and cost control**
7 **oversight mechanisms for the CR3 Uprate project?**

8 **A.** Yes. The Company is utilizing several policies and procedures to ensure
9 that the costs for the CR3 Uprate project are reasonably and prudently
10 incurred and that the project remains on schedule. The CR3 Uprate
11 project is being undertaken by the Company consistent with its Project
12 Management Manual, which has been in place at the Company and used to
13 manage capital projects since early in this decade. A copy of the
14 Company's Project Management Manual has been provided in discovery.
15 Additionally, the CR3 Uprate project is a major capital project for the
16 Company. As such, the uprate project must comply with the Company's
17 policies and procedures in its Major Capital Projects – Integrated Project
18 Plan that was issued in January 2008. A copy of the Integrated Project
19 Plan for Major Capital Projects has also been provided in discovery.

20 The CR3 Uprate project was also approved in accordance with the
21 Company's Project Evaluation and Authorization Process. This
22 evaluation and project authorization process has been in place at the
23 Company for many years. Finally, the CR3 Uprate project is subject to

1 the Progress Energy Project Governance Policy, which also has been in
2 place for many years. Both the Project Evaluation and Authorization
3 Process and the Project Governance Policy have been provided in
4 discovery too.

5
6 **Q. Can you describe some of the project management and cost control**
7 **policies or procedures in the Company's project management**
8 **documents that are being used to manage the CR3 Uprate project and**
9 **control project costs?**

10 **A.** Yes. PEF has several control mechanisms in place to manage the CR3
11 Uprate project and the costs incurred on the project. By utilizing these
12 policies, PEF is able to effectively keep the CR3 Uprate project on
13 schedule and ensure that costs incurred are reasonable and prudent.

14 For example, the CR3 Uprate project management team conducts a
15 wide variety of regular, internal meetings. These regular meetings allow
16 the project management team to monitor the progress of the project, its
17 costs, and to incorporate the collective knowledge and experience of the
18 team in addressing the scope of the work, the cost of the work,
19 engineering and construction implementation of the work items, and
20 schedule performance. During these meetings PEF's project management
21 team reviews team member roles and responsibilities, tasks are identified,
22 and the necessary steps to implement the tasks, including incorporating
23 lessons learned, are planned. Any staffing issues are discussed and

1 addressed. Procurement under contracts, through the status of
2 requisitions, purchase orders, and invoices for necessary engineering and
3 material, is addressed as well as the status of administration of the
4 contracts with outside vendors. Project training updates are provided.
5 The status of work on the uprate licensing is regularly discussed. Risk
6 management is discussed and addressed. Finally, project management
7 expectations are communicated and implemented by the CR3 Uprate
8 project management team.

9 PEF's CR3 Uprate project managers also meet regularly with
10 outside contract vendors working on the project to review the contract
11 scope of work, engineering and construction implementation of that work
12 scope, and the schedule for the work under the vendor contracts. Project
13 requisitions, purchase orders, and invoices are discussed. Project
14 management expectations are communicated to the outside vendors. By
15 maintaining supervision over the project, the project schedule, and the
16 work performed by outside vendors, PEF is able to anticipate and manage
17 scope changes, if any, and project expenditures.

18 There are other regular project reviews too. CR3 Uprate project
19 managers prepare Project Cost Reports that include all contract, labor,
20 equipment, material and other project cost transactions recorded to the
21 CR3 Uprate project. Monthly Department Cost Reports reflecting
22 department capital expenditures for the CR3 Uprate project are also
23 prepared by the department managers and/or financial analysts. These

1 reports are regularly reviewed by the CR3 Uprate project management
2 team.

3 PEF also has monthly PEF Finance Committee meetings, in which
4 management reviews the CR3 Uprate project costs. Prior to these
5 meetings, responsible operations managers and Finance Management for
6 the organization review various monthly cost and variance analysis reports
7 for the capital budget. Variances from total budget or projections are
8 reviewed, discrepancies are identified and corrections made as needed.
9 The specific reports used are the Cost Management Reports produced by
10 PEF Accounting. All cost reporting for the CR3 Uprate project is tied
11 back to the Cost Management Reports which are tied back to the Legal
12 Entity Financial Statements. In addition to the monthly Finance
13 Committee meetings, senior management will periodically review the CR3
14 Uprate project to monitor its cost and ensure that it is on schedule.
15

16 **Q. Are employees involved in the CR3 Uprate Project trained in the**
17 **Company's project management and cost control policies and**
18 **procedures?**

19 **A.** Yes, they are. PEF's project management team for the CR3 Uprate project
20 has been trained in these Company policies. There are in fact formal
21 Project Manager qualification requirements for projects of various size as
22 well as for other roles within the Project Team (Designated
23 Representative, Field Lead, etc.). Also, members of the CR3 Uprate

1 project management team have experience implementing these project
2 management and cost control policies and procedures successfully on
3 other Progress Energy projects. And, members of the Project Team also
4 have been hired from other organizations which brings a rich mixture of
5 experience to bear on the project's demands.

6
7 **Q. How has this experience helped the Company's employees with the**
8 **project management of the CR3 Uprate project?**

9 **A.** PEF incorporated lessons learned from its experience with the uprates at
10 other Progress Energy nuclear plants. Having been through those uprates,
11 the Company has valuable experience that the Company can rely on in the
12 course of this uprate project. The Company's prior experience adds value
13 to all aspects of this uprate project, including staffing, vendor
14 relationships, scheduling, and cost management. Additionally, although
15 the entire CR3 uprate project cannot be compared to any of these other
16 uprates, particular portions of the projects can be compared. By making
17 such comparisons, PEF is able to ensure that the costs for these particular
18 parts of the project are reasonably consistent with each other. This
19 provides greater assurance that the CR3 Uprate project costs are
20 reasonable and prudent.

21

1 **Q. You mentioned outside vendors on the CR3 Uprate project. How does**
2 **the Company ensure that its selection and management of outside**
3 **vendors is reasonable and prudent?**

4 **A.** First, a requisition is created in the Passport Contracts module for the
5 purchase of services. The requisition is reviewed by the appropriate
6 Contract Specialist in Corporate Services, or field personnel on the CR3
7 Uprate project, to ensure sufficient data has been provided to process the
8 contract requisition. The Contract Specialist prepares the appropriate
9 contract document from pre-approved contract templates in accordance
10 with the requirements stated on the contract requisition.

11 The contract requisition then goes through the bidding or
12 finalization process. Once the contract is ready to be executed, it is
13 approved online by the appropriate levels of the approval matrix as per the
14 Approval Level Policy and a contract is created. Contract invoices are
15 received by the CR3 Uprate project managers. The invoices are validated
16 by the project managers and Payment Authorizations approving payment
17 of the contract invoices are entered and approved in the Contracts module
18 of the Passport system.

19 When selecting vendors for the CR3 Uprate project, as I indicated,
20 PEF utilizes bidding procedures through a Request for Proposal (“RFP”)
21 when it can for the particular services or material needed to ensure that the
22 chosen vendors provide the best value for PEF’s customers. When a RFP
23 cannot be used, PEF ensures that the contracts with the sole source

1 vendors contain reasonable and prudent contract terms with adequate
2 pricing provisions (including fixed price and/or firm price, escalated
3 according to indexes, where possible). When deciding to use a sole source
4 vendor, PEF provides sole source justifications for not doing an RFP for
5 the particular work.

6 In some instances where a sole source vendor must be used, for
7 example, the vendor selected has particular experience with the plant or
8 the work required, thus making it advantageous for that vendor to
9 accomplish the work. This occurred, for example, with PEF's decision to
10 contract with AREVA for certain work on the CR3 Uprate. AREVA
11 purchased Babcock & Wilcox ("B&W"). The CR3 plant has a B&W
12 designed reactor. By buying B&W, AREVA now owns the proprietary
13 analysis and detailed information on how the reactor works. Further, they
14 have partnered with Worley Parsons which was previously the primary
15 Architect/Engineer firm responsible for the CR3 design. This obviously
16 provides AREVA with a distinct advantage over any other vendor and
17 reduces cost and potential schedule impacts from adding an additional
18 vendor interface.

19 In other instances where a sole source vendor is selected, the
20 vendor has a fleet contract (which was secured through an RFP prior to the
21 CR3 project) in which it provides service for other Progress Energy
22 nuclear plants. Because of this working relationship, and the vendor's

1 ongoing knowledge of and experience with Progress Energy's nuclear
2 plants, it is reasonable for PEF to continue working with these vendors.

3
4 **Q. Does the Company verify that the Company's project management
5 and cost control policies and procedures are followed?**

6 **A.** Yes, it does. PEF uses internal audits to verify that its program
7 management and oversight control are being implemented and are
8 effective in practice. On December 28, 2007, an audit was completed
9 regarding the effectiveness of project management and cost management
10 for the CR3 Uprate project. This confidential audit report, and the
11 associated workpapers, was provided in discovery. Other internal audits
12 of the project and cost management on the CR3 Uprate project are
13 scheduled for 2008 through 2010. These audits were listed on Attachment
14 B to the Company's response to a Commission audit request.
15 Additionally, the Company's project management policies themselves,
16 produced in discovery and included in the Company project management
17 documents that I have described above, contain their own mechanisms to
18 ensure that they are followed and effectively implemented.

19
20 **Q. Are the Company's project management and cost control policies and
21 procedures on the CR3 Uprate project reasonable and prudent?**

22 **A.** Yes, they are. These project management policies and procedures reflect
23 the collective experience and knowledge of the Company. As a result,

1 Company employees have, in preparing the policies and procedures
2 reflected in the Company's major capital project management documents
3 that I have identified above, incorporated their experience and knowledge
4 of project management policies and procedures that work within the
5 Company and within the industry. These policies and procedures have
6 also been tested by the Company on other capital projects. Any lessons
7 learned from those projects have been incorporated in the current policies
8 and procedures. We believe, therefore, that our project management
9 policies and procedures are consistent with best practices for capital
10 project management in the industry.

11
12 **Q. Does this conclude your testimony?**

13 **A.** Yes, it does.
14

IN RE: NUCLEAR COST RECOVERY CLAUSE

BY PROGRESS ENERGY FLORIDA

FPSC DOCKET NO. 080009

REBUTTAL TESTIMONY OF DANIEL L. RODERICK

I. INTRODUCTION AND SCOPE OF TESTIMONY

1

2

Q. Please state your name.

3

A. My name is Daniel L. Roderick.

4

5

Q. Did you file Direct Testimony on February 29, 2008 and May 1, 2008 in this docket, as well as Supplemental Direct Testimony on July 1, 2008?

6

7

8

A. Yes, I filed direct and supplemental direct testimony in support of PEF's actual/estimated and projected costs for the Crystal River 3 ("CR3") Uprate project.

9

10

11

12

Q. Have you reviewed the intervenor testimony of William R. Jacobs, Jr., filed on behalf of the Office of Public Counsel ("OPC")?

13

14

A. Yes, I have read Mr. Jacobs' testimony, specifically as it pertains to PEF's request for cost recovery under the nuclear cost recovery clause.

15

16

17

Q. What is the purpose of your rebuttal testimony?

1 A. The purpose of my rebuttal testimony is to respond to Mr. Jacobs'
2 apparent assertion that the Commission should require PEF to conduct an
3 analysis to ensure that any costs associated with the license renewal for
4 CR3 have not been included as part of the Company's request for cost
5 recovery for the CR3 Uprate project. Mr. Jacobs' apparently suggests that
6 this analysis should be a condition to PEF's recovery of its CR3 Uprate
7 project carrying costs through the Capacity Cost Recovery Clause (CCRC)
8 under the Nuclear Power Plant Cost Recovery rule, despite the fact that
9 PEF has already performed such an analysis. I will also address how the
10 Company conducted this analysis and determined whether a particular
11 project should be included in the CR3 Uprate project or whether it was a
12 maintenance item under base rates.

13
14 **Q. Does Mr. Jacobs contend that PEF's CR3 Uprate project costs are**
15 **unreasonable or imprudent?**

16 A. No, he does not. Mr. Jacobs apparently agrees with PEF that its CR3
17 Uprate project actual costs are prudent and its CR3 Uprate project
18 projected costs are reasonable.

19
20 **Q. Does Mr. Jacobs present any evidence that PEF is seeking to recover**
21 **carrying costs on CR3 Uprate project costs that are actually needed**
22 **for the CR3 license renewal and not the CR3 Uprate project?**

1 A. No, he does not. Mr. Jacobs, on pages 9-10 of his testimony, merely
2 provides hypothetical examples of what might happen if a utility were
3 required to make some changes to its nuclear plant for license renewal that
4 were also needed for an uprate at the plant. In fact, Mr. Jacobs
5 specifically references PEF's steam generator replacement as an example
6 of something he assumes is necessary for the extension of CR3's operating
7 life in its license renewal application to the Nuclear Regulatory
8 Commission (NRC) (page 10). However, Mr. Jacobs admits, as he must,
9 that "PEF has not requested that the cost of the steam generator
10 replacement project be recovered via the Nuclear Plant Cost Recovery
11 mechanism." (page 10)

12
13 **Q. Do you agree with Mr. Jacobs' assumption that the steam generators**
14 **are being replaced so that the CR3 license will be extended?**

15 A. No, I do not. Apart from the fact that Mr. Jacobs admits that PEF has not
16 requested that the cost of the steam generator replacement project be
17 recovered via the Nuclear Plant Cost Recovery mechanism, the
18 Company's decision to replace the steam generators is not related to its
19 license renewal application. The steam generators are being replaced
20 because the tubing material used has exhibited over time a tendency
21 toward corrosion and cracking phenomena that will require an increase in
22 refueling interval inspections, time required for these inspections, potential
23 power reductions in operation, and potential repairs. To avoid these future

1 costs and to ensure that CR3 will continue to operate without significant
2 power reductions, Progress Energy decided to replace the steam generators
3 at CR3.

4
5 **Q. Did OPC ask the Company in discovery for any analysis of the capital**
6 **requirements for the CR3 Uprate project and the CR3 license**
7 **renewal?**

8 **A.** No, we did not receive any discovery asking for this information despite
9 receiving and responding to dozens of interrogatories and producing
10 thousands of pages of documents in response to document requests since
11 the Company filed its petition and testimony in this docket on February
12 29, 2008. I was also deposed by OPC on July 1, 2008 and Mr. Jacobs was
13 present at my deposition. I was not asked in that deposition if the
14 Company's license renewal application for CR3 requires the replacement
15 of equipment that is also being replaced in the CR3 Uprate project. Had
16 OPC asked for any of this information, Mr. Jacobs would have known that
17 none of the relevant capital costs for the CR3 Uprate project are necessary
18 for the license renewal for CR3 and he could have avoided filing
19 testimony with respect to PEF.

20
21 **Q. Are any of the capital costs for the CR3 Uprate project for which PEF**
22 **is requesting cost recovery in this proceeding necessary for the license**
23 **renewal for CR3?**

1 A. No. No CR3 Uprate project capital costs are necessary for the license
2 renewal. The capital cost items identified in the Company's filings in this
3 proceeding are associated entirely with the CR3 Uprate project. The
4 license renewal application process was initiated before the CR3 Uprate
5 project and is entirely separate from the CR3 Uprate project.

6

7 **Q. Has the Company conducted any analysis to determine if any capital**
8 **modifications and costs are necessary to obtain a renewed license**
9 **from the NRC?**

10 A. Yes. For approximately three years, PEF has been working on obtaining a
11 renewed license for CR3 from the NRC. As part of that process, PEF has
12 conducted an aging analysis of the various components of CR3. In this
13 analysis, PEF reviewed each piece of equipment within the scope of
14 License Renewal to determine whether it would be able to continue safe
15 operation for an additional twenty years or whether it was necessary to
16 replace it as a condition for receiving a renewed license.

17

18 **Q. What were the results of this analysis?**

19 A. PEF did not identify any piece of equipment that will need to be replaced
20 in order to obtain the license renewal from the NRC. PEF expects to
21 submit its application to the NRC in January 2009 and, in its application,
22 PEF does not expect to make any recommendations for any necessary
23 equipment replacements.

1

2

Q. The Company regularly conducts maintenance of plant equipment.

3

Has PEF included any of these maintenance costs into the uprate

4

project costs?

5

A. Absolutely not. PEF has diligently evaluated the uprate project costs to

6

only include those costs for which the uprate has a significant impact on

7

the particular piece of equipment. This issue has arisen several times

8

throughout the planning for the scope of the uprate project, and each time

9

the Company has analyzed the particular cost on a case-by-case basis to

10

determine whether it should fairly be included as an uprate cost.

11

For example, the control complex chiller is nearing the end of its

12

expected life. Having a new chiller may be beneficial to the uprate

13

project. However, because the CR3 Uprate project is not directly

14

dependent on the chiller being replaced, and because the uprate does not

15

have a significant impact on the performance of the chillers, the Company

16

opted to replace the chiller as part of routine, base rate maintenance.

17

Another example involves the replacement of feedwater heat

18

exchangers. Due to flow accelerated corrosion (FAC), the walls of the

19

various vessels, pipes and tubes in the nuclear plant can become thin and

20

therefore more prone to fail. PEF must carefully monitor wall thinning to

21

identify components or sections of pipes that need replacement. The

22

uprate will increase the flow rate and temperature. Both these changes

23

result in the walls of the tubes becoming thinner more quickly than if the

1 uprate was not completed. Although PEF could have included the
2 replacement of all components that are somewhat impacted by the uprate,
3 PEF opted to not replace them as part of the uprate because the uprate only
4 incidentally affects their performance. Thus those components will be
5 monitored and replaced as needed as part of normal plant maintenance.
6

7 **Q. How did PEF make the decision whether to include a particular**
8 **equipment upgrade or replacement in the uprate project?**

9 **A.** PEF continually analyzed whether a particular equipment modification or
10 replacement should be included in the scope of the uprate project as it
11 planned the project scope. These issues regularly arose, and we resolved
12 them by continually interfacing with plant personnel and management
13 during project meetings. We consciously went through the exercise of
14 determining what was part of the uprate project in the engineering and
15 planning for the project. We used our engineering judgment and our
16 extensive, specialized knowledge of the plant materials and equipment, to
17 decide what plant components would be impacted by the uprate and, thus,
18 should properly be included in the uprate project. We have carefully
19 separated the uprate project scope from maintenance items at the CR3
20 plant.
21

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

23 **A.** Yes, it does.

**IN RE: PETITION TO ESTABLISH DISCOVERY DOCKET REGARDING
ACTUAL AND PROJECTED COSTS FOR LEVY NUCLEAR PROJECT BY
PROGRESS ENERGY FLORIDA, INC.**

BY PROGRESS ENERGY FLORIDA

FPSC DOCKET NO. 080149

**REVISED DIRECT TESTIMONY OF DANIEL L. RODERICK
IN SUPPORT OF ACTUAL/ESTIMATED AND PROJECTED COSTS**

I. INTRODUCTION AND QUALIFICATIONS

1
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16

Q. Please state your name and business address.

A. My name is Daniel L. Roderick. My business address is Crystal River Energy Complex, Site Administration 2C, 15760 West Power Line Street, Crystal River, Florida 34428.

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

A. I am employed by Progress Energy Florida (“PEF” or the “Company”) in the capacity of Vice President – Nuclear Projects & Construction. As Vice President – Nuclear Projects & Construction, I am responsible for the management and oversight of all large, capital nuclear projects for the Company. These include the Crystal River Unit 3 (“CR3”) power uprate project, the CR3 steam generator replacement project scheduled for 2009, and the development, siting, engineering, and construction of two new nuclear generating facilities at the Company’s Levy County site. Prior to assuming my current position, I served as the CR3 Director of Site

1 Operations. In that capacity, I was responsible for the safe, efficient, and
2 reliable generation of electricity from the Company's CR3 nuclear plant.
3 All plant functions, including the Plant General Manager, Engineering
4 Manager, Training Manager, and Licensing, reported to me and were
5 under my supervision.

6
7 **Q. Please summarize your educational background and work experience.**

8 **A.** I have a Bachelor of Science and Master of Science degree in Industrial
9 Engineering from the University of Arkansas and have completed the
10 NRC program for a Senior Reactor Operator License. I have been at CR3
11 since 1996, serving in my current position as Vice President Nuclear
12 Projects and Construction and, prior to that position, Director of Site
13 Operations, Plant General Manager, Engineering Manager, and Outage
14 Manager, respectively. Prior to my employment with the Company, I was
15 employed for twelve years with Entergy Corporation at its Arkansas
16 Nuclear One plant in Russellville, Arkansas with responsibilities in Plant
17 Operations and Engineering.

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

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

21 **A.** The purpose of my direct testimony is to support the Company's request
22 for cost recovery pursuant to the nuclear cost recovery rule for certain
23 costs incurred, from March 12, 2008 to March 31, 2008, for the

1 construction of the Company's proposed Levy Nuclear Power Plants. My
2 testimony will also support the Company's projected costs for April 1,
3 2008 through December 31, 2009. Finally, my testimony explains why
4 the Levy Nuclear Project is feasible, pursuant to Rule 25-6.0423(5)(c)5,
5 F.A.C.

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

8 **A.** No, I am not sponsoring any exhibits. I am, however, sponsoring portions
9 of Schedules AE-7 through AE-8B of the Nuclear Filing Requirements
10 ("NFRs"), which are included as part of the exhibits to Lori Cross'
11 testimony. Specifically, I will support all of Schedule AE-7, which is a
12 description of the nuclear technology selected for 2008. I am sponsoring
13 those portions, not related to transmission, of Schedule AE-8, which is a
14 list of the contracts executed in excess of \$1.0 million for 2008.
15 Accordingly, I sponsor pages 1 through 4 and 7 through 10 of Schedule
16 AE-8A, which reflects details pertaining to the contracts executed in
17 excess of \$1.0 million.

18 I am also sponsoring Schedules P-7, P-8, and P-8A, which provide
19 similar details for technology selected and contracts as the AE schedules
20 do.

21 All of the portions of these schedules, which I sponsor, are true and
22 accurate.

23

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

2 **A.** The Company incurred preconstruction costs from March 12, 2008 to
3 March 31, 2008 to continue its evaluation of an advanced reactor
4 technology for its Levy Nuclear Project, and to begin preparation of the
5 Combined Operating License Application (“COLA”). PEF needed to
6 enter into these contracts and incur costs during this time period to
7 maintain the licensing and construction schedule to successfully bring
8 Levy Unit 1 into commercial service in 2016. As demonstrated in my
9 testimony and the NFR schedules attached to Ms. Cross’ testimony, PEF
10 took adequate steps to ensure these preconstruction costs were reasonable
11 and prudent. PEF negotiated favorable contract terms under the then-
12 current market conditions and circumstances.

13 For all the reasons provided in my testimony and in the NFR
14 schedules, the Commission should approve PEF’s costs incurred from
15 March 12, 2008 to March 31, 2008 as reasonable and prudent pursuant to
16 the nuclear cost recovery rule.

17 The Company is also presenting projected costs for April 1, 2008
18 through December 31, 2009. These estimates are based on the best
19 currently-available information. These planned expenditures are
20 necessary to keep the Levy Nuclear Project on schedule to meet the
21 planned in-service date, and they should be approved as reasonable.
22

1 reactor designs: General Electric (“GE”); Westinghouse; and Areva, for
2 the GE Economic Simplified Boiling Water Reactor (“ESBWR”), the
3 Westinghouse AP-1000 advanced passive pressurized water reactor, and
4 the Areva European Pressurized Reactor (“EPR”), respectively. NPD
5 completed a thorough and extensive evaluation of the vendor proposal
6 responses associated with technical and operational requirements for
7 licensing, design, construction, and capability input by the vendors.
8 Following nearly a year of detailed evaluation, NPD initially selected the
9 Westinghouse AP-1000 design as the best advanced technology for PEF.

10
11 **Q. Following the initial selection of the AP-1000 technology, did PEF**
12 **continue to evaluate this and other advanced reactor technologies?**

13 **A.** Yes. Since the preliminary selection of the Westinghouse AP-1000 design
14 in January 2006, NPD continued to monitor industry changes, advanced
15 reactor technology developments, and other information that might affect
16 PEF’s technology selection, or the assumptions NPD used in its initial
17 analysis. In January 2007, NPD updated its January 17, 2006 technology
18 evaluation. Among other things, NPD included a review of the GE
19 Advanced Boiling Water Reactor (“ABWR”), a 1,350 MW plant similar to
20 existing boiling water reactor technology. NPD chose to analyze the GE
21 ABWR because two U.S. utilities announced their intent to construct the
22 ABWR following NPD’s initial technology evaluation. In addition, NPD

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requested all vendors to provided updated pricing information to the extent available.

Q. What did your updated analysis show?

A. Following the same evaluation criteria as our initial analysis, NPD’s updated evaluation confirmed the initial recommendation to utilize the Westinghouse AP-1000 design. This technology is further described in Schedule AE-7, attached as part of the exhibit to Lori Cross’ testimony.

Q. Please describe any agreements that PEF has entered into regarding the potential design and construction of the Levy project.

A. PEF has executed a Letter of Intent (“LOI”) with Westinghouse Electric Corporation and Shaw Stone & Webster which, among other things,

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] The details of

these Work Authorizations are provided in Schedule AE-8, lines 1 through 4 and lines 7 through 10, and Schedule AE-8A, pages 1 through 4 and 7 through 10, attached as an exhibit to Ms. Cross’ testimony. As described above, the Company first analyzed which advanced reactor design would

1 be the best option for its Levy Nuclear Project. That analysis included a
2 comprehensive RFP process for the technologies. Once that detailed
3 evaluation was completed, and the Company selected the AP-1000 for
4 further evaluation and possible construction, then the Company naturally
5 commenced more detailed negotiations with the Consortium that owned
6 that nuclear reactor design. Because the Consortium is the only vendor
7 offering the chosen AP-1000 technology, the Company obviously cannot
8 engage in another RFP process for the contracts for the engineering,
9 procurement, and construction of the Westinghouse AP-1000 nuclear
10 power plants. PEF negotiated and obtained as favorable contract terms as
11 the market conditions have allowed. The contract terms, as well as the
12 costs incurred pursuant to those contracts, are reasonable and prudent.

13
14 **Q. Why has PEF executed these contracts and incurred costs when the**
15 **final EPC contract has not even been executed?**

16 **A.** It is customary with a project of this size for companies to expend money
17 even during the negotiation process. For example, in order for
18 Westinghouse and Shaw Stone & Webster to develop the site specific cost
19 estimates for the Levy units, they had to perform detailed analyses and
20 studies specific to the site. Factors such as soil suitability, geographic
21 proximity to roads for delivery of supplies, and labor costs in the area,
22 among other things, all impact the cost of building a nuclear plant in a
23 particular location. If PEF did not execute these contracts, Westinghouse

1 and Shaw Stone & Webster would not have undertaken the cost to develop
2 these estimates.

3 Likewise, [REDACTED]

4 [REDACTED]
5 [REDACTED] PEF executed the LOI with the Consortium.

6 This LOI, among other things, authorizes the Consortium to order long
7 lead time equipment. [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED]

11 [REDACTED]

12
13 **Q. Has the Company incurred any other costs for the Levy Nuclear**
14 **Project?**

15 **A.** Yes, PEF has incurred costs for the development of a COLA for the Levy
16 Nuclear Project. These costs were incurred pursuant to a contract
17 executed with the Joint Venture team of Sargent & Lundy, CH2M Hill,
18 and Worley Parson. This vendor was chosen as a result of an RFP, in
19 which six vendors were solicited and provided bids. After consideration
20 of a number of factors, including cost, experience, technical expertise, and
21 ability to timely complete the COLA, PEF awarded the contract to the
22 Joint Venture team.

1 The costs incurred under the Sargent & Lundy, CH2M Hill, and
2 Worley Parson contract are reasonable and prudent, given the nature and
3 circumstances of the transaction. The remainder of the contract
4 provisions are also reasonable and prudent. Further details of this contract
5 are contained in Schedule AE-8 and AE-8A, attached as an exhibit to Ms.
6 Cross' testimony.

7
8 **Q. To summarize, were all the costs that the Company incurred from**
9 **March 12, 2008 through March 31, 2008 for the Levy Nuclear Project**
10 **reasonable and prudent?**

11 **A.** Yes, the specific cost amounts contained in the schedules, which are
12 attached as exhibits to Ms. Cross' testimony, reflect the reasonably and
13 prudently incurred costs which are described above for the Levy Nuclear
14 Project work from March 12, 2008 to March 31, 2008.

15
16 **IV. ESTIMATES AND PROJECTIONS FOR COSTS TO BE**
17 **INCURRED FOR THE REMAINDER OF 2008 AND 2009**

18
19 **Q. Does the Company plan to incur costs for the Levy Nuclear Project**
20 **during the remainder of 2008 and 2009?**

21 **A.** Yes, PEF must incur costs to maintain the schedule for the expected
22 commercial in-service dates of the units.

23

1 **Q. What major costs does PEF estimate incurring for the remainder of**
2 **2008?**

3 **A.**As reflected in Schedule AE-6, PEF estimates preconstruction costs of
4 \$198.7 million and construction costs of \$5.5 million for 2008 [REDACTED]

5 [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]

10 [REDACTED]

11

12 **Q. What major costs does PEF project it will incur during 2009?**

13 **A.**As reflected in Schedule P-6, PEF projects it will incur \$86.0 million gross
14 of joint owner and exclusive of AFUDC in preconstruction generation
15 costs and \$425.6 million gross of joint owner and exclusive of AFUDC in
16 construction generation costs. The Company will incur costs to support
17 the license application and the clearing, grading, and excavation of the
18 Levy site.

19

20 **Q. How were these projected costs prepared?**

21 **A.**PEF developed these estimates on a reasonable engineering basis, using
22 the best available information. In some instances, PEF utilized actual
23 information received from third parties with which it is negotiating, while

1 in other instances, the contracts have already been executed. In addition,
2 PEF developed these projected costs based on the detailed project
3 schedules which set forth the necessary milestones to maintain the
4 expected in-service date. Of course, we are still in the process of
5 negotiating an Engineering, Procurement, and Construction (“EPC”)
6 contract with the Consortium, which, depending on the ultimate terms and
7 conditions of that agreement (and possibly others), could affect the project
8 cost estimate. Based on what we know now, however, the estimated and
9 projected costs, as set forth in Exhibits No. __ (LC-1) and (LC-2) to Lori
10 Cross’ testimony, should be approved as reasonable.

11
12 **V. RULE 25-6.0423(5)(c)5: LONG-TERM FEASIBILITY OF**
13 **COMPLETING LEVY NUCLEAR PROJECT**

14
15 **Q. Has the Company conducted an analysis to determine the long-term**
16 **feasibility of completing the Levy Nuclear Project?**

17 **A.** On April 8, 2008, PEF prepared a revision to its Business Analysis
18 Package (“BAP”), which revises the March 2006 BAP and provides the
19 approval mechanism and official documentation to continue moving
20 forward with the Levy Nuclear Project. In this BAP, the Company
21 analyzed the project schedule and presented updated information
22 regarding project scope and funding requirements. The BAP contains a
23 recommendation that the Company authorize the updated COLA funding

1 requirements and the purchase of initial long-lead items for the AP-1000.
2 Accordingly, PEF has no reason to believe that completion of the Levy
3 Nuclear Project is not feasible; in fact, PEF is moving forward with the
4 project because PEF believes it is feasible. In subsequent years, PEF will
5 perform other feasibility analyses, consistent with its standard business
6 practice in evaluating whether to continue with a project like the Levy
7 Nuclear Project, at appropriate milestones in this Project.
8

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

10 **A.** Yes, it does.
11

**IN RE: PETITION TO ESTABLISH DISCOVERY DOCKET REGARDING
ACTUAL AND PROJECTED COSTS FOR LEVY NUCLEAR PROJECT BY
PROGRESS ENERGY FLORIDA, INC.**

BY PROGRESS ENERGY FLORIDA

FPSC DOCKET NO. 080149

**DIRECT TESTIMONY OF DANIEL L. RODERICK
IN SUPPORT OF SITE SELECTION COSTS**

I. INTRODUCTION AND QUALIFICATIONS

1
2 **Q. Please state your name and business address.**

3 **A.** My name is Daniel L. Roderick. My business address is Crystal River
4 Energy Complex, Site Administration 2C, 15760 West Power Line Street,
5 Crystal River, Florida 34428.

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

8 **A.** I am employed by Progress Energy Florida (“PEF” or the “Company”) in the
9 capacity of Vice President – Nuclear Projects & Construction. As Vice President
10 – Nuclear Projects & Construction, I am responsible for the management and
11 oversight of all large, capital nuclear projects for the Company. These include the
12 Crystal River Unit 3 (“CR3”) power uprate project, the CR3 steam generator
13 replacement project scheduled for 2009, and the development, siting, engineering,
14 and construction of two new nuclear generating facilities at the Company’s Levy
15 County site. Prior to assuming my current position, I served as the CR3 Director
16 of Site Operations. In that capacity, I was responsible for the safe, efficient, and

1 reliable generation of electricity from the Company's CR3 nuclear plant. All
2 plant functions, including the Plant General Manager, Engineering Manager,
3 Training Manager, and Licensing, reported to me and were under my supervision.
4

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

6 **A.** I have a Bachelor of Science and Master of Science degree in Industrial
7 Engineering from the University of Arkansas and have completed the
8 NRC program for a Senior Reactor Operator License. I have been at CR3
9 since 1996, serving in my current position as Vice President Nuclear
10 Projects and Construction and, prior to that position, Director of Site
11 Operations, Plant General Manager, Engineering Manager, and Outage
12 Manager, respectively. Prior to my employment with the Company, I was
13 employed for twelve years with Entergy Corporation at its Arkansas
14 Nuclear One plant in Russellville, Arkansas with responsibilities in Plant
15 Operations and Engineering.
16

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

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

19 **A.** The purpose of my direct testimony is to support the Company's request
20 for cost recovery pursuant to the nuclear cost recovery rule for site
21 selection costs incurred prior to the Company's need determination filing
22 on March 11, 2008, for the construction of the Company's proposed Levy
23 Nuclear Power Plants.

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Q. Do you have any exhibits to your testimony?

A. No, I am not sponsoring any exhibits. I am, however, sponsoring portions of Schedules SS-7 through SS-8B of the Nuclear Filing Requirements (“NFRs”), which are included as part of the exhibits to Lori Cross’ testimony. Specifically, I will support all of Schedule SS-7, which is a description of the nuclear technology selected. I am sponsoring those portions, not related to transmission, of Schedule SS-8, which is a list of the contracts executed in excess of \$1.0 million. Accordingly, I sponsor all but pages 5 and 6 of Schedule SS-8A, which reflects details pertaining to the contracts executed in excess of \$1.0 million. I am also sponsoring those portions, not related to transmission, of Schedule SS-8B, which is a list of the contracts executed in excess of \$200,000. Mr. Dale Oliver will sponsor those portions of the site selection NFRs related to transmission.

All of the portions of these schedules, which I sponsor, are true and accurate.

Q. Please summarize your testimony.

A. The Company incurred site selection costs prior to filing its need determination on March 11, 2008 to select an advanced reactor technology for its Levy Nuclear Project, to select a site for the new nuclear units, and to begin preparation of the Combined Operating License Application (“COLA”). PEF needed to enter into these contracts and incur costs during this time period to maintain the licensing and construction schedule

1 to successfully bring Levy Unit 1 into commercial service in 2016. As
2 demonstrated in this testimony, in my testimony filed simultaneously in
3 this docket in support of the actual/estimated and projection NFR
4 schedules, and in the site selection NFR schedules attached to Ms. Cross'
5 testimony, PEF took adequate steps to ensure these site selection costs
6 were reasonable and prudent. PEF negotiated favorable contract terms
7 under the then-current market conditions and circumstances.

8 For all the reasons provided in these testimonies and in the NFR
9 schedules, the Commission should approve PEF's site selection costs
10 incurred prior to March 11, 2008 as reasonable and prudent pursuant to the
11 nuclear cost recovery rule.

12
13 **III. SITE SELECTION COSTS INCURRED PRIOR TO**
14 **MARCH 11, 2008 FOR LEVY NUCLEAR PLANT**
15

16 **Q. Did PEF incur any costs prior to March 11, 2008 for its Levy Nuclear**
17 **Project?**

18 **A.** Yes, PEF incurred site selection costs associated with its continued
19 evaluation of the reactor technology for its Levy Nuclear Project and the negotiation
20 of the contract for the engineering, design, and construction of all facilities necessary
21 to place this reactor technology in commercial operation at the Levy site. In addition,
22 PEF incurred costs for the selection of the Levy site as the preferred site for the
23 development of nuclear generation. PEF also incurred costs for the process of

1 obtaining a COLA for the project. Levy Units 1 and 2 are scheduled to be built at a
2 site selected in Levy County, Florida for commercial service in 2016 and 2017,
3 respectively.

4
5 **Q. Have you filed other testimony in this docket?**

6 **A.** Yes, simultaneous with the filing of this testimony, I have filed testimony
7 in support of the Company's actual/estimated and projected costs for the Levy
8 Nuclear Project. In that testimony, I explained the prudence and necessity of the
9 costs incurred from March 12, 2008 to March 31, 2008 for the technology chosen
10 and the development of the COLA. The Company incurred the same categories
11 of costs, in 2007 and 2008, prior to the Company filing the petition need
12 determination on March 11, 2008. The Company incurred \$29.6 million in site
13 selection costs for these categories. Thus, for the reasons stated in my testimony
14 in support of the actual/estimated and projected costs, the Company's site
15 selection costs, related to the choice of technology and the COLA preparation, for
16 2006, 2007 and 2008 are reasonable and prudent.

17
18 **Q. Does your simultaneously-filed testimony also provide details regarding the**
19 **executed contracts for the choice of technology and the COLA preparation?**

20 **A.** Yes, in my testimony supporting the Company's actual/estimated and
21 projected costs, I describe the Westinghouse and Shaw Stone & Webster contracts, as
22 well as the COLA contract with the Joint Venture team of Sargent & Lundy, CH2M
23 Hill, and Worley Parson. Details regarding these contracts are also provided in

1 Schedules SS-8 and SS-8A, which are part of Exhibits No. __ (LC-4) and (LC-5).
2 The contracts are listed in these schedules for 2007 and for 2008. For the reasons
3 provided in my simultaneously-filed testimony, and for the reasons in the site
4 selection schedules, the contract terms, as well as the site selection costs incurred
5 pursuant to those contracts, are reasonable and prudent.

6
7 **Q. What did the Company incur, for 2006, 2007, and 2008, in site**
8 **selection costs to select the reactor technology, select the Levy site,**
9 **and for the COLA preparation?**

10 **A.** The Company incurred \$2.8 million in site selection costs for these
11 categories in 2006, \$20.5 million in 2007, and \$8.3 million for 2008. These costs
12 also include costs related to engineering assistance in determining whether the
13 Levy site could support the development of nuclear generation. The Company
14 had to incur these costs to ensure that the commercial in-service date will be met.
15 These site selection costs are reasonable and prudent.

16
17 **Q. How did the Company choose the Levy site as the preferred site to**
18 **develop nuclear generation?**

19 **A.** The Company completed a detailed site selection study, which resulted in
20 the selection of the Levy site. This study was produced in response to Staff's
21 Fourth Request for Production of Documents in Docket Number 080148, PEF's
22 need determination proceeding. It contains bates ranges PEF-LNN-002576
23 through PEF-LNN-2830.

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Q. To summarize, were all the site selection costs that the Company incurred prior to filing its need petition on March 11, 2008 for the Levy Nuclear Project reasonable and prudent?

A. Yes, the specific cost amounts contained in the schedules, which are attached as exhibits to Ms. Cross' testimony, reflect the reasonably and prudently incurred costs which are described above for the Levy Nuclear Project work prior to March 11, 2008.

Q. Does this conclude your testimony?

A. Yes, it does.

**IN RE: PETITION TO ESTABLISH DISCOVERY DOCKET REGARDING
ACTUAL AND PROJECTED COSTS FOR LEVY NUCLEAR PROJECT BY
PROGRESS ENERGY FLORIDA, INC.**

BY PROGRESS ENERGY FLORIDA

FPSC DOCKET NO. 080149

**SUPPLEMENTAL DIRECT TESTIMONY OF DANIEL L. RODERICK
IN SUPPORT OF SITE SELECTION COSTS,
ACTUAL/ESTIMATED AND PROJECTED COSTS**

I. INTRODUCTION AND SCOPE OF TESTIMONY

1
2 **Q. Please state your name.**

3 **A.** My name is Daniel L. Roderick.
4

5 **Q. Did you file Direct Testimony on May 1, 2008 in this docket?**

6 **A.** Yes, I filed two sets of direct testimony in support of PEF's site selection
7 costs and its actual/estimated and projected costs, specifically for the
8 nuclear generation portions of the Levy new nuclear generation project.
9

10 **Q. Why are you filing supplemental testimony to this direct testimony?**

11 **A.** I am supplementing my direct testimony to provide additional information
12 regarding the Company's site selection, actual/estimated, and projected
13 costs. Rather than filing two sets of supplemental testimonies, this one
14 testimony will supplement both of my testimonies filed May 1. Because
15 my May 1 actual/estimated and projected testimony provided information

1 regarding the Company's nuclear generation contracts, I will not be
2 including information as to the contracts in this testimony. I will also
3 provide supplemental testimony regarding PEF's reasonable and prudent
4 project management policies and procedures, designed to manage nuclear
5 generation project costs and maintain the project schedule.

6
7 **II. SITE SELECTION COSTS INCURRED PRIOR TO**
8 **MARCH 11, 2008 FOR LEVY NUCLEAR PLANT**
9

10 **Q. Has the Company incurred nuclear generation-related site selection**
11 **costs for the Levy Nuclear Plant?**

12 **A.** Yes, PEF incurred site selection costs for generation, reflected in the
13 NFR's, for 2006, 2007, and 2008. As reflected in Schedule SS-6 of Ms.
14 Cross' Exhibits LC-3, LC-4 and LC-5, PEF incurred \$2.8 million in 2006,
15 \$20.5 million in 2007 and \$8.3 million in 2008 in License Application
16 costs.

17
18 **Q. For the License Application costs you identified, please describe what**
19 **these costs are and explain why the Company had to incur them.**

20 **A.** These costs include detailed on-site characterization for
21 geotechnical/geological and environmental analysis. These analyses were
22 necessary to support the Company's submission of the combined
23 operating license application ("COLA") to the Nuclear Regulatory

1 Commission (“NRC”) and the site certification application (“SCA”) to the
2 Florida Department of Environmental Protection (“DEP”). To support
3 these applications, the Company must demonstrate that the Levy site has
4 certain geotechnical features that will support nuclear generation. PEF
5 therefore conducted detailed, comprehensive on-site testing and
6 evaluations of the property consistent with industry and NRC regulatory
7 guidance and regulations. The detailed analyses included months of on-
8 site geotechnical analysis that included more than 80 borings, geophysical
9 logging, and detailed examination of soil/rock core samples. In addition,
10 other costs for License Application included the completion of other
11 detailed assessments of the site, including environmental assessments,
12 such as for threatened and endangered species, and archeological/cultural
13 resources.

14 These License Application costs were incurred to maintain the project
15 schedule for the 2016 in-service date of Levy Unit 1 and the 2017 in-
16 service date of Levy Unit 2. The Company submitted the SCA to DEP on
17 June 2, 2008, and it plans to submit the COLA to the NRC by the end of
18 the year. The Company had to incur these costs at this time to ensure that
19 these applications were completed timely and the schedule maintained so
20 that the construction activities can begin in time to meet the expected
21 commercial in-service dates for Levy Units 1 and 2.

22
23 **III. GENERATION PRE-CONSTRUCTION ACTIVITIES**

1 **Q. What costs has PEF included in this filing for nuclear generation pre-**
2 **construction costs?**

3 **A.** PEF has 2008 actual/estimated and 2009 projected Pre-Construction costs for
4 generation for the Levy Nuclear Plant. Schedule AE-6 of Exhibit LC-1 shows
5 generation pre-construction costs for 2008 actual/estimates in the following
6 categories: License Application development costs of \$29.2 million;
7 Engineering, Design & Procurement costs (which are confidential); and On-
8 Site Construction Facilities costs of \$3.8 million. Schedule P-6 of Exhibit LC-
9 2 breaks down the 2009 projected generation pre-construction costs into the
10 following categories: License Application costs of \$20.4 million; Engineering,
11 Design & Procurement costs of \$16.4 million; Clearing, Grading and
12 Excavation costs of \$47.2 million; and On-Site Construction Facilities costs of
13 \$2.0 million.

14
15 **Q. Please describe what the License Application costs are, and why the**
16 **Company has to incur them.**

17 **A.** These costs include the NRC and DEP fees that accompany the Company's
18 COLA and SCA filings. Also included in this category are the costs needed to
19 prepare the application submittals themselves and legal support costs. Each
20 application involves thousands of pages of documents and detailed information
21 regarding various aspects of the project. After the submittal of these
22 applications, the Company will incur costs to constantly monitor and support
23 the technical review of these applications by the regulatory agencies. In

1 addition, PEF is considering stationing an employee near the NRC to provide
2 constant oversight of the Company's COLA as it works its way through the
3 regulatory process. The regulatory process is a fluid and interactive one, in
4 which the Company will be expected to work with the NRC and DEP to
5 provide additional information and perform analyses.

6 These License Application costs are necessary to ensure the timely
7 submittal and approval of the Company's COLA and SCA filings. PEF expects
8 the DEP approval process to take approximately 12-15 months and the NRC
9 license approval process to take approximately 42 months. Obtaining key
10 regulatory approvals on a timely basis will be critical to maintaining the
11 construction schedule, meeting budgets, and moving forward with the project to
12 meet the expected commercial in-service dates for the Levy units.

13 PEF developed these preconstruction License Application cost estimates
14 on a reasonable engineering basis, using the best available information,
15 consistent with utility industry and PEF practice. PEF included the estimated
16 application/review fees for the COLA and SCA that it anticipates incurring
17 upon/following submittal. For the costs associated with the COLA review,
18 PEF also used the terms of its COLA contract to estimate the costs it will incur
19 for the technical support necessary for the NRC review. In addition, PEF based
20 its projections on known project milestones necessary to obtain the requisite
21 NRC and DEP licenses. Because PEF is using actual or expected contract
22 costs, its own experience and relevant utility industry insight, PEF's cost
23 estimates for the preconstruction License Application work are reasonable.

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Q. Please describe what the Engineering, Design & Procurement costs are, and explain why the Company has to incur them.

A. These costs include the engineering and design associated with the site layout, power blocks, and non-power block support facilities. Also included are payments which will be made pursuant to a Letter of Intent (“LOI”) with the reactor vendor, Westinghouse and its joint venture partner Shaw Stone & Webster (collectively referred to as the “Consortium”). Under the terms of the LOI, PEF must make payments so that the Consortium can order certain long-lead equipment (such as large vessel forgings) necessary for the Levy project.

PEF must incur these Engineering, Design & Procurements costs to support the timely submission of the COLA and SCA applications and the planned in-service dates. In addition, the costs are necessary to ensure that, while PEF continues to negotiate the Engineering, Procurement & Construction (“EPC”) contract with the Consortium, the project can continue to stay on schedule and the required equipment can be timely ordered. These projected costs are needed so that the planned in-service dates for Levy Units 1 and 2 are met.

PEF developed these preconstruction Engineering, Design & Procurement cost estimates on a reasonable engineering basis, using the best available information, consistent with utility industry and PEF practice. To develop the costs, PEF utilized actual cost information from the LOI it signed with the Consortium. PEF developed the other projected costs based on the detailed

1 project schedules which set forth the necessary milestones to maintain the
2 expected in-service date. Because PEF is using actual or expected contract
3 costs, its own experience and utility industry practice, PEF's cost estimates for
4 the preconstruction Engineering, Design & Procurement work are reasonable.
5 PEF notes, however, that it is currently negotiating with the Consortium to
6 execute the EPC contract. Because these cost estimates were developed based
7 upon the cost and project schedule information that was available from the
8 negotiations at the time PEF made these estimates, these estimates will likely
9 change once the Company finalizes and executes the EPC contract.

10
11 **Q. Please describe what the Clearing, Grading & Excavation costs are, and**
12 **explain why the Company has to incur them.**

13 **A.** These costs include technical planning and execution of grubbing, clearing,
14 grading, excavation, backfill, onsite disposal, drainage and erosion control at
15 the Levy site. PEF has also included costs for the construction of parking lots,
16 lay-down areas, and construction access roads into and at the site.

17 PEF has to incur these Clearing, Grading & Excavation costs to ensure
18 that the site will be prepared for the start of construction once the regulatory
19 approvals are obtained. The site land must be prepared for the actual
20 construction of the nuclear plants. In addition, the site must be equipped with
21 proper facilities to support construction once it begins. These costs must be
22 incurred during this time period so that the expected commercial in-service date
23 of Levy 1 can be met.

1 PEF developed these preconstruction Clearing, Grading & Excavation cost
2 estimates on a reasonable engineering basis, using the best available
3 information, consistent with utility industry and PEF practice. Based on PEF's
4 experience with other construction projects, which involve similar types of
5 activities that are necessary before construction can commence, PEF developed
6 reasonable estimates for the Clearing, Grading & Excavation costs for the Levy
7 project. These cost projections also use the preliminary generation construction
8 project schedules to determine when the Clearing, Grading & Excavation work
9 will be done to achieve the necessary project milestones to maintain the
10 expected in-service dates for the Levy Units. Because PEF is using its own
11 experience and utility industry practice, PEF's cost estimates for the
12 preconstruction Clearing, Grading & Excavation work are reasonable. PEF
13 notes, however, that it is currently negotiating with the Consortium to execute
14 the EPC contract. Because these cost estimates were developed based upon the
15 cost and project schedule information that was available from the negotiations
16 at the time PEF made these estimates, these estimates will likely change once
17 the Company finalizes and executes the EPC contract.

18
19 **Q. Please describe what the On-Site Construction Facilities costs are, and**
20 **explain why the Company has to incur them.**

21 **A.** These costs include the installation of warehouses necessary during
22 construction, including an electrical shop, carpenter shops, and the like. In

1 addition, the costs to develop and install temporary construction power and
2 lighting are included in this category.

3 PEF must incur these On-Site Construction Facilities costs to ensure that
4 the site will be prepared for the start of construction once the regulatory
5 approvals are obtained. The site must be equipped with proper facilities to
6 support construction once it begins. These costs must be incurred during this
7 time period so that the expected commercial in-service date of Levy 1 and Levy
8 2 can be met.

9 PEF developed these preconstruction On-Site Construction Facilities cost
10 estimates on a reasonable engineering basis, using the best available
11 information, consistent with utility industry and PEF practice. Based on PEF's
12 experience with other construction projects, which involve similar types of
13 activities that are necessary before construction can commence, PEF developed
14 reasonable estimates for the On-Site Construction Facilities costs for the Levy
15 project. These cost projections also use the preliminary generation construction
16 project schedules to determine when the On-Site Construction Facilities work
17 will be done to achieve the necessary project milestones to maintain the
18 expected in-service dates for the Levy Units. Because PEF is using its own
19 experience and utility industry practice, PEF's cost estimates for the
20 preconstruction On-Site Construction Facilities work are reasonable. PEF
21 notes, however, that it is currently negotiating with the Consortium to execute
22 the EPC contract. Because these cost estimates were developed based upon the
23 cost and project schedule information that was available from the negotiations

1 at the time PEF made these estimates, these estimates will likely change once
2 the Company finalizes and executes the EPC contract.

3 4 **IV. GENERATION CONSTRUCTION ACTIVITIES**

5 **Q. What costs has PEF included in this filing for generation construction**
6 **costs?**

7 **A.** PEF has 2008 actual/estimated and 2009 projected Construction costs for
8 nuclear generation for the Levy Nuclear Plant. Schedule AE-6 of Exhibit LC-1
9 shows generation construction costs for 2008 actual/estimates in the following
10 categories: Real Estate Acquisition costs of \$5.0 million and Permanent
11 Staff/Training costs of \$0.6 million. Schedule P-6 of Exhibit LC-2 breaks
12 down the 2009 projected generation construction costs into the following
13 categories: Permanent Staff/Training costs of \$1.8 million; Site Preparation
14 costs of \$14.2 million; On-Site Construction Facilities costs of \$1.0 million;
15 Power Block Engineering and Procurement costs (which are confidential); and
16 Non-Power Block Engineering and Procurement costs of \$56.8 million.

17
18 **Q. Please describe what the Real Estate Acquisitions costs are, and explain**
19 **why the Company has to incur them.**

20 **A.** These costs primarily include payments associated with right-of-way
21 acquisition for a rail spur line to the nearest active railroad. PEF needs to incur
22 these Real Estate Acquisition costs so that the site will have access to a railroad
23 for the delivery of construction supplies, during construction, and eventually

1 fuel and other supplies, once the units go on-line. PEF also needs access to and
2 ownership of this right of way so that it can obtain the necessary regulatory
3 approvals to begin construction of the rail spur. These costs are necessary to
4 meet the expected commercial in-service date of 2016 for Levy Unit 1 and
5 2017 for Levy Unit 2.

6 PEF developed these construction Real Estate Acquisition cost estimates
7 on a reasonable engineering basis, using the best available information,
8 consistent with utility industry and PEF practice. These cost projections were
9 based on actual contracts executed with the sellers of other property in the area
10 of the right of way to be acquired. Because PEF is using actual or expected
11 comparable contract costs, PEF's cost estimates for the construction Real
12 Estate Acquisition work are reasonable

13
14 **Q. Please describe what the Permanent Staff/Training costs are, and explain**
15 **why the Company has to incur them.**

16 **A.** These costs include obtaining and training qualified staff to operate and work at
17 Levy Units 1 and 2 by the date on which the nuclear fuel is loaded. Pursuant to
18 NRC regulations, before the fuel can be loaded into the reactor, the Company
19 must be able to prove that a certain number of NRC-licensed staff are available
20 and capable of operating the nuclear plant. Every nuclear plant is different, and
21 operators must be trained to operate a specific nuclear reactor. The required
22 training is significant and takes up to 18 to 24 months to complete. Given the

1 increase in planned nuclear plants around the country, PEF must act quickly to
2 attract these highly qualified staff members.

3 These Permanent Staff/Training costs are necessary to ensure that the
4 required staff will be trained and ready when the fuel is loaded into the reactor.
5 PEF needs highly skilled staff to operate the Levy units, and this training takes
6 months to complete. These costs include the development of the training
7 program. Without an adequate number of trained and licensed staff, the
8 Company will not be able to load the nuclear fuel and the project will
9 necessarily be delayed. These costs are thus necessary to meet the expected
10 commercial in-service date of 2016 for Levy Unit 1.

11 PEF developed these Permanent Staff/Training construction cost estimates
12 on a reasonable engineering basis, using the best available information,
13 consistent with utility industry and PEF practice. These cost projections use
14 the preliminary construction project schedules to determine when the
15 Permanent Staff/Training work will be done to achieve the necessary project
16 milestones to maintain the expected in-service dates for the Levy Units. PEF
17 was also able to use the knowledge gained from operating and training
18 operators for its Crystal River 3 (“CR3”) nuclear unit to develop these cost
19 estimates. Because PEF is using its own experience and utility industry
20 practice, PEF’s cost estimates for the construction Permanent Staff/Training
21 work are reasonable.
22

1 **Q. Please describe what the Site Preparation costs are, and explain why the**
2 **Company has to incur them.**

3 **A.** These costs include the engineering, design, and planning of site preparations
4 to support fabrication and construction. Specifically, the Company must
5 perform remedial work of the geotechnical substrate to facilitate construction of
6 the nuclear plant foundation. These Site Preparation costs are necessary to
7 support the timely construction of Levy Units 1 and 2. If this site preparation
8 work is not done during the 2009 time period, the project schedule will not be
9 maintained. These costs are thus necessary to meet the expected commercial
10 in-service date of 2016 for Levy Unit 1 and 2017 for Levy Unit 2.

11 PEF developed these Site Preparation construction cost estimates on a
12 reasonable engineering basis, using the best available information, consistent
13 with utility industry and PEF practice. These cost projections use the
14 preliminary construction project schedules to determine when the Site
15 Preparation work will be done to achieve the necessary project milestones to
16 maintain the expected in-service dates for the Levy Units. Based on PEF's
17 experience with other construction projects, PEF developed reasonable
18 estimates for the Levy project. Because PEF is using its own experience and
19 utility industry practice, PEF's cost estimates for the construction Site
20 Preparation work are reasonable. PEF notes, however, that it is currently
21 negotiating with the Consortium to execute the EPC contract. Because these
22 cost estimates were developed based upon the cost and project schedule
23 information that was available from the negotiations at the time PEF made

1 these estimates, these estimates will likely change once the Company finalizes
2 and executes the EPC contract.

3
4 **Q. Please describe what the On-Site Construction Facilities costs are, and**
5 **explain why the Company has to incur them.**

6 **A.** These costs include the design and installation of warehouses and other
7 permanent construction support facilities necessary during construction,
8 including an electrical shop, carpenter shops, and the like. In addition, the
9 costs to develop and install permanent construction power and lighting are
10 included in this category.

11 PEF must incur these On-Site Construction Facilities to ensure that the site
12 will be prepared for the start of construction once the regulatory approvals are
13 obtained. The site must be equipped with proper facilities to support
14 construction once it begins. These costs must be incurred during this time
15 period so that the expected commercial in-service date of Levy Units 1 and 2
16 can be met.

17 PEF developed these construction On-Site Construction Facilities cost
18 estimates on a reasonable engineering basis, using the best available
19 information, consistent with utility industry and PEF practice. Based on PEF's
20 experience with other construction projects, PEF developed reasonable
21 estimates for the On-Site Construction Facilities costs for the Levy project.
22 These cost projections also use the preliminary generation construction project
23 schedules to determine when the On-Site Construction Facilities work will be

1 done to achieve the necessary project milestones to maintain the expected in-
2 service dates for the Levy Units. Because PEF is using its own experience and
3 utility industry practice, PEF's cost estimates for the construction On-Site
4 Construction Facilities work are reasonable. PEF notes, however, that it is
5 currently negotiating with the Consortium to execute the EPC contract.
6 Because these cost estimates were developed based upon the cost and project
7 schedule information that was available from the negotiations at the time PEF
8 made these estimates, these estimates will likely change once the Company
9 finalizes and executes the EPC contract.

10
11 **Q. Please describe what the Power Block Engineering, Procurement, etc. costs**
12 **are, and explain why the Company has to incur them.**

13 **A.** These costs include the initial fabrication/construction of the nuclear power
14 block, including major equipment/components such as the reactor vessel, steam
15 generators, pressurizer, containment vessel, and the like. These costs include
16 work to be performed under the EPC contract, which is currently being
17 negotiated with the Consortium.

18 The Power Block Engineering, Procurement, etc. costs are necessary to
19 ensure that the engineering and planning for the actual construction of the
20 nuclear units can timely commence pursuant to the project schedule. These
21 costs are also necessary to ensure PEF's place in line in front of other utilities
22 wanting to build nuclear. This project schedule must be maintained for timely
23 commercial in-service date of 2016 for Levy Unit 1 and 2017 for Levy Unit 2.

1 PEF developed these projected Power Block Engineering, Procurement,
2 etc. costs based on the detailed project schedules which set forth the necessary
3 milestones to maintain the expected in-service date. PEF also developed the
4 costs using the detailed library of pricing information obtained from the
5 Consortium in the course of its negotiation for the EPC contract. These cost
6 projections also use the preliminary generation construction project schedules
7 to determine when the Power Block Engineering, Procurement, etc. work will
8 be done to achieve the necessary project milestones to maintain the expected
9 in-service dates for the Levy Units. Because PEF is using actual or expected
10 contract costs, PEF's cost estimates for the preconstruction Power Block
11 Engineering, Procurement, etc. work are reasonable. PEF notes, however, that
12 it is currently negotiating with the Consortium to execute the EPC contract.
13 Because these cost estimates were developed based upon the cost and project
14 schedule information that was available from the negotiations at the time PEF
15 made these estimates, these estimates will likely change once the Company
16 finalizes and executes the EPC contract.

17
18 **Q. Please describe what the Non-Power Block Engineering, Procurement, etc.**
19 **costs are, and explain why the Company has to incur them.**

20 **A.** These costs include the construction of site permanent structures and associated
21 facilities outside the power block that support the AP1000 power blocks,
22 including: (1) structural; (2) electrical; (3) mechanical, (4) civil; and (5)
23 security items. Examples of such structures include the cooling tower make-up

1 intake structure, administration building, training center, security towers,
2 transmission switchyard, roads, railroad, and barge facility.

3 The Non-Power Block Engineering, Procurement, etc. costs are necessary
4 to ensure that support buildings needed to support the nuclear units can timely
5 commence pursuant to the project schedule. For example, the training center
6 must be fully operational by the time nuclear construction commences, to allow
7 adequate time for the rigorous training of control room operators that the NRC
8 requires. The costs are thus necessary to maintain the project schedule for
9 timely commercial in-service date of 2016 for Levy Unit 1 and 2017 for Levy
10 Unit 2.

11 PEF developed these Non-Power Block Engineering, Procurement, etc.
12 construction cost estimates on a reasonable engineering basis, using the best
13 available information, consistent with utility industry and PEF practice. PEF
14 used historical Company or utility industry experience to determine what Non-
15 Power Block Engineering, Procurement, etc. construction costs are necessary
16 and to estimate them. Based on PEF's experience with other construction
17 projects, PEF developed reasonable estimates for the Non-Power Block
18 Engineering, Procurement, etc. costs for the Levy project. These cost
19 projections also use the preliminary generation construction project schedules
20 to determine when the Non-Power Block Engineering, Procurement, etc. work
21 will be done to achieve the necessary project milestones to maintain the
22 expected in-service dates for the Levy Units. Because PEF is using its own
23 experience and utility industry practice, PEF's cost estimates for the

1 construction Non-Power Block Engineering, Procurement, etc. work are
2 reasonable. PEF notes, however, that it is currently negotiating with the
3 Consortium to execute the EPC contract. Because these cost estimates were
4 developed based upon the cost and project schedule information that was
5 available from the negotiations at the time PEF made these estimates, these
6 estimates will likely change once the Company finalizes and executes the EPC
7 contract.

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

10 **Q. Has the Company implemented project management and cost control**
11 **oversight mechanisms for the Levy project?**

12 **A.** Yes. The Company is utilizing several policies and procedures to ensure
13 that the costs for the Levy project are reasonably and prudently incurred
14 and that the project remains on schedule. The Levy project is being
15 undertaken by the Company consistent with its Project Management
16 Manual, which has been in place at the Company and used to manage
17 capital projects since early in this decade. A copy of the Company's
18 Project Management Manual has been provided in discovery.

19 The Levy project was approved in accordance with the Company's
20 Project Evaluation and Authorization Process. This evaluation and project
21 authorization process has been in place at the Company for many years.

22 Finally, the Levy project is subject to the Progress Energy Project
23 Governance Policy, which also has been in place for many years. Both the

1 Project Evaluation and Authorization Process and the Project Governance
2 Policy have been provided in discovery too.

3
4 **Q. Can you describe some of the project management and cost control**
5 **policies or procedures in the Company's project management**
6 **documents that are being used to manage the Levy project and**
7 **control project costs?**

8 **A.** Yes. PEF has several control mechanisms in place to manage the Levy
9 project and the costs incurred on the project. By utilizing these policies,
10 PEF is able to effectively keep the Levy project on schedule and ensure
11 that costs incurred are reasonable and prudent.

12 For example, the Levy project management team has regular,
13 internal meetings. These regular meetings allow the project management
14 team to monitor the progress of the project, its costs, and to incorporate
15 the collective knowledge and experience of the team in addressing the
16 scope of the work, the cost of the work, engineering and construction
17 implementation of the work items, and schedule performance. During
18 these meetings PEF's project management team reviews team member
19 roles and responsibilities, tasks are identified, and the necessary steps to
20 implement the tasks, including incorporating lessons learned, are planned.
21 Any staffing issues are discussed and addressed. Procurement under
22 contracts, through the status of requisitions, purchase orders, and invoices
23 for necessary engineering and material, is addressed as well as the status

1 of administration of the contracts with outside vendors. Project training
2 updates are provided. The status of work on the COLA and SCA
3 applications is discussed. Risk management is discussed and addressed.
4 Finally, project management expectations are communicated and
5 implemented by the Levy project management team.

6 PEF's Levy project managers also meet regularly with outside
7 contract vendors working on the project to review the contract scope of
8 work, engineering and construction implementation of that work scope,
9 and the schedule for the work under the vendor contracts. Project
10 requisitions, purchase orders, and invoices are discussed. Project
11 management expectations are communicated to the outside vendors. By
12 maintaining supervision over the project, the project schedule, and the
13 work performed by outside vendors, PEF is able to anticipate and manage
14 scope changes, if any, and project expenditures.

15 There are other regular project reviews too. Levy project
16 managers prepare monthly Cost Management Reports that include all
17 contract, labor, equipment, material and other project cost transactions
18 recorded to the Levy project. Financials included in the report include
19 comparison of actual costs to budget, with explanations for any variances.
20 These reports are regularly reviewed by the Levy project management
21 team.

22 PEF also has monthly PEF Finance Committee meetings, in which
23 management reviews the Levy project costs. Prior to these meetings,

1 responsible operations managers and Finance Management for the
2 organization review various monthly cost and variance analysis reports for
3 the capital budget. Variances from total budget or projections are
4 reviewed, discrepancies are identified and corrections made as needed.
5 The specific reports used are the Cost Management Reports produced by
6 PEF Accounting. All cost reporting for the Levy project is tied back to the
7 Cost Management Reports which are tied back to the Legal Entity
8 Financial Statements. In addition to the monthly Finance Committee
9 meetings, senior management will periodically review the Levy project to
10 monitor its cost and ensure that it is on schedule. For the Levy project,
11 there are also monthly meetings with senior management to discuss the
12 status of the on-going EPC contract negotiations.

13 Additionally, the Company has developed the Levy Integrated
14 Nuclear Committee (“LINC”), which is comprised of PEF leaders with
15 organizational accountability for areas that support the Levy nuclear
16 project. The group helps coordinate activities that cross multiple
17 organizational areas because of the integrated nature of the Levy project.
18 LINC schedules meetings at least monthly to review project activities,
19 evaluate business conditions, address emerging issues, and discuss agenda
20 items. LINC is intended to serve as the single point for management
21 oversight of all phases of the project.
22

1 **Q. Has the Company developed a separate organization to specifically**
2 **oversee and manage the Levy project?**

3 **A.** Yes, the Company formed the Nuclear Project & Construction (NPC)
4 department, which is made up of highly skilled project management
5 personnel from inside and outside the nuclear industry. Since the project
6 will be built under a combined operating and construction license,
7 stringent nuclear standards will be in place throughout construction. If
8 and when the need determination is approved, the department will add
9 several sections to address these Levy responsibilities. The Nuclear Plant
10 Development (NPD) section is responsible for the NRC and State
11 licensing activities and site engineering. The Operational readiness
12 section is responsible to develop the operating plant staff, procedures,
13 training programs, and community emergency preparedness. The
14 Construction section is responsible for the construction activities of the
15 EPC contract and of any self-built structures the Company will build. The
16 Quality section will ensure that all standards are met by contractors and
17 staff in accordance with NRC rules. The Project Controls section is
18 responsible for cost transparency, performance monitoring, scheduling,
19 estimating, risk analysis, and cost engineering functions. The Project
20 Support section is responsible to audit the supply chain activities, contract
21 claims resolution, site licensing activities, contractor training and
22 qualification, in-processing, and security.

1 **Q. Are employees involved in the Levy Project trained in the Company's**
2 **project management and cost control policies and procedures?**

3 **A.** Yes, they are. PEF's project management team for the Levy project has
4 been trained in these Company policies. Our employees with
5 responsibilities for managing capital projects receive training on the
6 Company's project management and cost control policies and procedures.
7 Also, when we decide to commence a major capital project like the Levy
8 project additional training is provided or available as a reminder of the
9 Company's policies and procedures. This training was provided to the
10 members of the Levy project management team. Also, members of the
11 Levy project management team have experience implementing these
12 project management and cost control policies and procedures successfully
13 on other Progress Energy projects.

14
15 **Q. You mentioned outside vendors on the Levy project. How does the**
16 **Company ensure that its selection and management of outside**
17 **vendors is reasonable and prudent?**

18 **A.** First, a requisition is created in the Passport Contracts module for the
19 purchase of services. The requisition is reviewed by the appropriate
20 Contract Specialist in Corporate Services, or field personnel on the Levy
21 project, to ensure sufficient data has been provided to process the contract
22 requisition. The Contract Specialist prepares the appropriate contract

1 document from pre-approved contract templates in accordance with the
2 requirements stated on the contract requisition.

3 The contract requisition then goes through the bidding or
4 finalization process. Once the contract is ready to be executed, it is
5 approved online by the appropriate levels of the approval matrix as per the
6 Approval Level Policy and a contract is created. Contract invoices are
7 received by the Levy project managers. The invoices are validated by the
8 project managers and Payment Authorizations approving payment of the
9 contract invoices are entered and approved in the Contracts module of the
10 Passport system.

11 When selecting vendors for the Levy project, as I indicated, PEF
12 utilizes bidding procedures through a Request for Proposal (“RFP”) when
13 it can for the particular services or material needed to ensure that the
14 chosen vendors provide the best value for PEF’s customers. When an
15 RFP cannot be used, PEF ensures that the contracts with the sole source
16 vendors contain reasonable and prudent contract terms with adequate
17 pricing provisions (including fixed price and/or firm price, escalated
18 according to indexes, where possible). When deciding to use a sole source
19 vendor, PEF provides sole source justifications for not doing an RFP for
20 the particular work.

21 In those instances where a sole source vendor must be used, there
22 is a justification for choosing that vendor which makes it advantageous for
23 that vendor to accomplish the work. This occurred, for example, with

1 PEF's decision to negotiate for the EPC contract with the Consortium.
2 PEF selected the AP 1000 as its nuclear reactor technology after
3 completing a thorough and extensive evaluation of vendor proposal
4 responses received from three potential vendors. The factors evaluated
5 included technical and operational requirements for licensing, design,
6 construction, and capability input by the vendors. After the technology
7 vendor, Westinghouse and Shaw Stone & Webster, was selected pursuant
8 to this analysis, there was no need to competitively bid.

9
10 **Q. Does the Company verify that the Company's project management**
11 **and cost control policies and procedures are followed?**

12 **A.** Yes, it does. PEF uses internal audits to verify that its program
13 management and oversight control are in place and being implemented.
14 Internal audits are conducted of outside vendors. In addition, internal
15 auditing completed a review of the COLA Licensing process in December
16 2007 and has audits planned for the Levy project, including project
17 management, nuclear cost recovery rule compliance, and the data
18 repository audits. The Company's project management policies
19 themselves, produced in discovery and included in the Company project
20 management documents that I have described above, also contain their
21 own mechanisms to ensure that they are followed and effectively
22 implemented.

23

1 **Q. Are the Company's project management and cost control policies and**
2 **procedures on the Levy project reasonable and prudent?**

3 **A.** Yes, they are. These project management policies and procedures reflect
4 the collective experience and knowledge of the Company. As a result,
5 Company employees have, in preparing the policies and procedures
6 reflected in the Company's major capital project management documents
7 that I have identified above, incorporated their experience and knowledge
8 of project management policies and procedures that work within the
9 Company and within the industry. These policies and procedures have
10 also been tested by the Company on other capital projects. Any lessons
11 learned from those projects have been incorporated in the current policies
12 and procedures. We believe, therefore, that our project management
13 policies and procedures are consistent with best practices for capital
14 project management in the industry.

15
16 **Q. Does this conclude your testimony?**

17 **A.** Yes, it does.
18
19

1 BY MS. TRIPLETT:

2 Q. Do you have a summary of your prefiled
3 testimonies?

4 A. Yes. I basically have submitted theses
5 testimonies, and I'm opening myself up for questions.

6 MS. TRIPLETT: We tender Mr. Roderick for
7 cross-examination.

8 MR. BURGESS: No questions.

9 CHAIRMAN CARTER: Thank you. Mr. Twomey?

10 MR. TWOMEY: No, sir.

11 CHAIRMAN CARTER: Mr. McWhirter?

12 CROSS-EXAMINATION

13 BY MR. McWHIRTER:

14 Q. Mr. Roderick, do you project your costs
15 further into the future than 2009?

16 A. Yes. As part of our project management tools
17 that we have, we looked at total project costs, which
18 would go the entire life cycle of the project.

19 Q. Do you project that the costs in your
20 pass-through will remain fairly static from this time
21 forward, or will they fall off?

22 A. Well, you know, the cash flows right now,
23 until we have all of our contracts in place, we don't
24 know exactly for sure. I don't see them falling off in
25 the next several years. I think that with the way the

1 construction schedule is to support the 2016 in-service
2 date for Unit 1 and 2017 for Unit 2, we will see that
3 number go up over the next several years over what we're
4 at right now.

5 Q. It will be 420 million this year, and will it
6 be an additional 420-plus next year?

7 A. Yes. I believe when you look at 2009, it will
8 be very consistent with this year, in that range.

9 Q. Does that mean that it will be an additional
10 420, or will it be a repeat on the same number?

11 A. No, it will be an additional 420.

12 Q. So this time next year, we'll be looking at
13 \$800 million a year charges to customers based upon the
14 nuclear program?

15 A. No. I think what we're saying is, what we're
16 filing this year is actuals to date. Once actuals are
17 spent, you know, they're gone, and then a projection for
18 next year. What we're saying is, after you pay those,
19 then you still have new costs coming in, and the new
20 costs coming in are going to be fairly similar in nature
21 into next year with what the project demands are.

22 Q. If I understand you correctly, then it looks
23 like we're going to have a level 420 million in those
24 numbers every year until after the plant is completed.

25 A. No, I didn't say that at all. I said what I

1 saw between this year, what we're filing, and what we
2 have projected for next year, that those two numbers are
3 about the same.

4 When you get after this and we get in further
5 in the licensing process -- and realize, we're very
6 early in this process for the new nuclear plant. We
7 have, you know, a site certification that we filed that
8 we talked about. We have the combined operating license
9 that we have filed, and all the pre-construction costs
10 with the site itself are all going to start coming into
11 the project for us to support the 2016 in-service date.

12 Q. Okay. I guess I'm still not quite
13 understanding what you're saying. The charge for
14 customers this year is going to be 420 million including
15 income tax, according to Ms. Cross. What will the
16 charge next year be?

17 A. I don't know. I don't calculate the rate, the
18 per month. What I can say is that from a cash flow
19 standpoint, for the project needs, to continue the
20 project, that our projection for next year is very
21 similar to this year, based on the schedule. It's based
22 on physical work that we have laid out.

23 For example, we're working right now with the
24 Department of Environmental Protection on wetland
25 mitigations for the property, and so some of those costs

1 will incur as we, you know, work out the agreement for
2 the site certification process. So we've projected
3 those into next year into the overall, you know, project
4 costs that we have. And so the estimates that we
5 provided before earlier this year, you know, we still
6 have those estimates in front of us and are still
7 working towards those.

8 Q. Now, the biggest number, as I understand it,
9 in this group is the site costs, the 300 and -- what was
10 that amount? 207 million that she said?

11 A. Well, the largest portion of this is really in
12 the costs for the pre-construction that we have,
13 primarily with our letter of intent that we signed and
14 in buying long lead time materials.

15 Q. And so what you're doing is paying in advance
16 for those items, and since construction hasn't started
17 yet, you're collecting the entire cost of the item as
18 opposed to carrying costs?

19 A. No. What we -- and again, I'm not into the
20 filing part of this. But what we need to do is, we have
21 to assure ourselves that we could get the major
22 components that we needed to keep the construction
23 schedule in 2016, reactor vessels, the pressurizer, the
24 internals of the reactor. We needed to get those locked
25 in because of the market conditions of those major

1 components.

2 We also saw that those components were
3 escalating at a rate that we -- when we looked at our
4 risk matrix to talk about how could we stabilize the
5 price on this, we made the decision to go ahead and sign
6 that letter of intent to lock in those prices and to
7 lock in the delivery schedule for those large
8 components.

9 Q. And how much did you pay with that letter of
10 intent?

11 A. Well, that's -- it's a confidential document.
12 It has been provided to all of the intervenors as well
13 as OPC. It has been provided to the Commission. It has
14 also been provided to -- all of you have been provided
15 that information.

16 Q. Do you know whether Progress borrowed the
17 money to make that payment?

18 A. I don't know. That's not my area.

19 Q. I'm still a little bit unclear. If I were
20 making a mortgage payment of \$400 million a year, I
21 would know that I had a level term payment each year of
22 400 million. But from what you're telling me, are you
23 saying that it's going to be a level 400 million from
24 now on out, or is it going to be 400 million plus
25 another 400 million?

1 A. No. What I said was, this year, you have the
2 projection in front of you, and I said that next year
3 when we come back to this, I would expect that number to
4 be somewhere in that same range, about 400 million. As
5 the construction, as the EPC, the engineering
6 procurement and construction contract comes to
7 completion for negotiation, then we'll revisit the cash
8 flows for that. That may do something different in the
9 out years. But no matter how you go to get into the
10 construction schedule, this number is going to get
11 bigger every single year up until we get to the
12 substantial completion of the unit, at which time, then
13 it's done, and the costs will go back down.

14 Q. Do I understand that to mean that it's going
15 to be more than 400 million next year that is going to
16 be passed through to the consumer?

17 A. Well, I think we've provided the information
18 of what the total plant cost is of 17.2 billion. That's
19 our current -- it's our current estimate. We're very
20 early in this process, and we're still working with all
21 the licensing agencies to get what their requirements
22 are. We're working with our engineering procurement
23 contract to get the final numbers in place. But nothing
24 I'm seeing right now from what we testified in the need
25 case is any different in cost from what we laid out

1 there. There's been ebbs and flows in that, but over
2 the course of the next eight years, you know, we will
3 incur those expenses. So, you know, that number is
4 going to go up until we get to 17.2 billion.

5 Q. Are you the person involved with negotiating
6 potential sales to other wholesale customers or unit
7 sales?

8 A. No.

9 Q. Who is the person that's responsible for that
10 in your company?

11 A. I think that's a combination of people under
12 Jeff Lyash with Progress Energy Florida.

13 MR. McWHIRTER: I tender the witness,
14 Mr. Chairman.

15 CHAIRMAN CARTER: Thank you, Mr. McWhirter.
16 Mr. Brew.

17 CROSS-EXAMINATION

18 BY MR. BREW:

19 Q. Thank you, Mr. Roderick. I hadn't planned any
20 questions, but your discussion with Mr. McWhirter just
21 confused me a little bit, if you could. Are there
22 points in the licensing or construction process where
23 we're likely to see a step change in what's being asked
24 for recovery in the nuclear recovery?

25 A. What we need to do is finish the EPC contract.

1 And realize, we have joint teams working. And when you
2 have a project like this, over 30 percent of the project
3 is the carrying cost of money. And so, you know, we
4 don't want to spend money any earlier than we have to to
5 be able to stay with the in-service date.

6 By the same point in time, you can't afford to
7 spend it late, or then you deprive the benefit of the
8 result of the \$92 billion we're expecting in savings in
9 fuel for the unit. So we have teams working very hard
10 right now to get that cash flow just right so that it is
11 the least impact to the total cost of the project.

12 Until we have that EPC contract, engineering
13 procurement and construction contract, finalized and
14 done, and negotiate all of those moves around the
15 schedule to get that optimal schedule and the least cost
16 that we can produce, then your -- that's why I'm saying
17 it's going to change, but it will build over time.

18 Q. And the EPC is supposed to be done this year?

19 A. We don't know. We're working on it extremely
20 hard. We have dedicated teams that are working full
21 time on it, but it takes two parties to sign that
22 contract, and I can't speak for the other side.

23 MR. BREW: Thank you. That's all I have.

24 CHAIRMAN CARTER: Thank you, Mr. Brew. Staff?

25 MR. YOUNG: No questions.

1 CHAIRMAN CARTER: Commissioner Argenziano.

2 COMMISSIONER ARGENZIANO: Thank you. Sorry.

3 In regards to the parcels that were needed and
4 bought, I think there were two parcels for the plant
5 site. I understand -- from what I read, I believe we
6 needed actually 200 acres for the plant itself, but had
7 to acquire 2,100 acres. And I guess there's a few
8 questions that I had.

9 What are you going to do with the remainder of
10 the acreage? Is that extra acreage calculated into used
11 and useful? And for people at home, if they are
12 listening, if they're not glazed over, so that they have
13 a good understanding of what's going to happen with
14 that, if the land is sold in the future, does that then
15 get refunded back to the consumers?

16 THE WITNESS: I want to answer your second
17 question first. I don't know the answer of what happens
18 to it when it gets sold back, but I'll talk to you about
19 the land itself.

20 You know, when you build a nuclear power
21 plant, you need to build your buffer between you and the
22 nearest residence. And so by the location of this site
23 and the geographic of that site, our nearest neighbor
24 where someone physically lives is just over a mile away.
25 It's 6,000 feet to the nearest neighbor. That allows us

1 to put the security perimeters that we need at the plant
2 for protection and to be able to defend the plant, to
3 define that outer perimeter. And so while the plant
4 itself may sit, you know, on 200 acres, you have buffer
5 zones around that that we are required to have with the
6 Nuclear Regulatory Commission. And then, you know, we
7 have just the whole border patrolled area that allows us
8 to control what comes in and out of that site.

9 The other thing on the site --

10 COMMISSIONER ARGENZIANO: I'm sorry. May I
11 ask --

12 CHAIRMAN CARTER: You're recognized.

13 COMMISSIONER ARGENZIANO: What is the required
14 buffer zone?

15 THE WITNESS: Well, you know, we will
16 typically keep a half a mile diameter around that. But
17 every site has specific requirements that we -- we have
18 to work with the Nuclear Regulatory Commission to
19 establish those. Most plant sites, we keep it as a mile
20 as a general rule of thumb. That bounds, you know,
21 future regulations or changes with that.

22 COMMISSIONER ARGENZIANO: And if can I
23 elaborate on that, and then you were going to say
24 something else. But in the acquisition of the land, I
25 think it was indicated that originally you needed 200

1 acres. Did that include the buffer zone?

2 THE WITNESS: The 200 acres is actually where
3 the plant, the physical power block sits. The reactor,
4 the turbine, the cooling towers, the switch yard, all
5 those components sit on that part of the plant.

6 COMMISSIONER ARGENZIANO: And that didn't
7 include the buffer zone?

8 THE WITNESS: No, no. And also, in addition
9 to that, you also have -- we have to have runoff ponds
10 for water drainage. We have to have a security training
11 zone for shooting practice and things like that. So
12 when you add all those things together, that's why the
13 acreage, the actual acreage that the plant consumes is a
14 little -- is bigger than just what the plant site sits
15 on.

16 COMMISSIONER ARGENZIANO: Okay. Let me ask it
17 a different way. Did you need 2,100 acres?

18 THE WITNESS: Well, when you make a purchase
19 like that and realize -- define that kind of acreage,
20 most people don't like to peel off just that corner of
21 it.

22 So when you say do you need it, we know we're
23 going to need wetland mitigation property. We don't --
24 you know, when you go try to find that in Levy County,
25 unlike counties further south that have land banks for

1 wetland mitigation, we don't have that in Levy. There
2 is no wetland mitigation bank. And so we strategically
3 want to try to work with the DEP and others, the
4 Department of Environmental Protection and others in the
5 state and try to take advantage of where that makes
6 sense or where it doesn't make sense and how we can
7 aggregately mitigate all those properties.

8 So, you know, that's how we ended up with the
9 2,200 acres. It was that block of land that -- the
10 seller of that was not potentially amenable --

11 COMMISSIONER ARGENZIANO: That was the Lybass?

12 THE WITNESS: This is Rayonier.

13 COMMISSIONER ARGENZIANO: Okay. What about
14 the Lybass?

15 THE WITNESS: You know, Lybass is a little
16 different situation. That is the south property that we
17 have. We spent a lot of time and a lot of detail with
18 them. We originally, you know, looked at that site
19 because it's closer to the water, and we couldn't really
20 come to any agreement on the whole purchase of that
21 property. And that's when we went north and found good
22 rock up north and found that our construction costs
23 could even, you know, be a little bit lower because we
24 had better rock on the north property. We knew that we
25 needed to get from the north property down to the water

1 at the barge canal, and so as we negotiated that, you
2 know, we had to look at all the options of how to get
3 that property, whether we condemned it, you know, how we
4 went about getting that south property. And we
5 basically did discussions with them and came to an
6 agreement on the south property for what we needed
7 there.

8 COMMISSIONER ARGENZIANO: Okay. You came to
9 agreement on the Lybass property.

10 THE WITNESS: The south property.

11 COMMISSIONER ARGENZIANO: Which is for
12 transmission and to enable you to get to the barge
13 canal.

14 THE WITNESS: It give you the water to and
15 from the plant. It's the transmission corridor. It's
16 where our heavy road, rail -- not rail, but the heavy
17 haul path that -- when the barges bring the big
18 construction modules in, they'll be offloaded, and then,
19 instead of us having to go on the highways and disturb
20 the highways, we basically can cut across over to the
21 Lybass property, to that south property, and then go
22 straight up to the site.

23 COMMISSIONER ARGENZIANO: Okay. And then
24 maybe just one more. On the Lybass property, that's a
25 bigger piece than you really needed. Isn't there extra

1 land there? And I think that's probably what my
2 original questions go to.

3 THE WITNESS: And my only answer is that I
4 don't know right know that they have any extra land,
5 because right now, when I look at the wetland
6 mitigations and the strategies behind that, they may
7 consume all that land. I have to give that up to
8 preserve for the State just for the wetland mitigation.
9 That's all still in discussion right now. So I don't
10 know that I have any extra land.

11 COMMISSIONER ARGENZIANO: Okay. Thank you.

12 THE WITNESS: As a matter of fact, I would
13 tell you that before this is done, I believe we will
14 have to purchase additional land just because of the
15 regulations with, you know, getting through DEP.

16 COMMISSIONER ARGENZIANO: Thank you.

17 CHAIRMAN CARTER: Thank you. Anything further
18 from the bench?

19 Ms. Triplett.

20 One second. Commissioner Skop, you're
21 recognized, sir.

22 COMMISSIONER SKOP: Thank you, Mr. Chairman.

23 In the mounds and mounds of paper, I actually
24 had some of the same concerns in reviewing the prefiled
25 testimony as Commissioner Argenziano, but I cannot find

1 it directly in front of me at the moment. But I heard
2 Mr. Roderick testify, at least with respect to the
3 Lybass property, that the acquisition of that property
4 was somewhat probably strategic, to the extent that it
5 was critical to being able to have access with this
6 property to the barge canal, that it was necessary for
7 the water supply and the transport. Would that be
8 correct?

9 THE WITNESS: Yes.

10 COMMISSIONER SKOP: And also it's mentioned
11 somewhere, but I think you may have stated that
12 additional property would be required. But I thought
13 that I read somewhere else in the prefiled testimony to
14 the extent that some of the excess property may be used
15 for future generation sites, like for a combined cycle
16 plant or something like that, if there were some excess
17 that was suitable and feasible within that. Would that
18 be also correct?

19 THE WITNESS: Yes. I mean, there is some
20 strategic value, and that was separated out from the
21 part that we needed for the plant. So I don't know, you
22 know, on that.

23 COMMISSIONER SKOP: And then just one final
24 question. In making that acquisition, I guess they had
25 done some internal analysis on looking at what the

1 landowner was willing to sell versus the other
2 alternatives which would enable the company to go get
3 the parcel of property or access down to the barge canal
4 that it needed; is that correct?

5 THE WITNESS: Yes.

6 COMMISSIONER SKOP: All right. Thank you.

7 COMMISSIONER ARGENZIANO: Just one other
8 thing.

9 CHAIRMAN CARTER: Commissioner Argenziano.

10 COMMISSIONER ARGENZIANO: I'm just thinking,
11 because I know that area very well. I live in that
12 area. I don't know if I -- maybe I better not ask this
13 now. I'm trying to think of appraised value of land,
14 and I'm just wondering if it was within the realm of
15 everything else that sold in that area.

16 THE WITNESS: I'll answer that very globally,
17 because the --

18 COMMISSIONER ARGENZIANO: Okay. Right, right.

19 THE WITNESS: -- details of that I can't
20 really discuss. But, you know, we looked very hard at
21 that. And we use an independent person to represent us
22 when we're dealing with a landowner, because if they
23 hear a power plant is coming, then prices will skyrocket
24 for that large of a property.

25 And so, you know, one of the reasons we left

1 the south property was because we felt with the volume
2 of real estate that they were going to drive us to
3 purchase at the price, it was -- we just said, "We're
4 not going to do that." So I do believe we found
5 property that was within market of the size and scope
6 and nature that we needed.

7 COMMISSIONER ARGENZIANO: Thank you.

8 CHAIRMAN CARTER: Thank you, Commissioners.
9 Ms. Triplett.

10 MS. TRIPLETT: No redirect.

11 CHAIRMAN CARTER: Okay. Do we have any -- I
12 think we've got one. Is that Exhibit 14?

13 MS. TRIPLETT: Yes, sir. We would ask that
14 Exhibit 14 be moved into the record.

15 CHAIRMAN CARTER: Any objections? Without
16 objection, show it done, Exhibit 14 entered into the
17 record.

18 (Exhibit Number 14 was admitted into the
19 record.)

20 CHAIRMAN CARTER: And I believe the witness
21 may be excused.

22 MS. TRIPLETT: Thank you. You anticipated my
23 question.

24 CHAIRMAN CARTER: Okay. Ms. Triplett,
25 anything further?

1 MS. TRIPLETT: No. Progress Energy would
2 rest.

3 CHAIRMAN CARTER: Okay. Mr. -- hang on one
4 second. Let me look at my notes here. Mr. Burgess,
5 you're recognized, sir.

6 MR. BURGESS: Thank you. We would call
7 Dr. Jacobs to the witness stand, please.
8 Thereupon,

9 WILLIAM R. JACOBS, JR., Ph.D.
10 was called as a witness on behalf of the Citizens of the
11 State of Florida and, having been first duly sworn, was
12 examined and testified as follows:

13 DIRECT EXAMINATION

14 BY MR. BURGESS:

15 Q. Would you state your name and business address
16 for the record, please.

17 A. Yes, sir. My name is William R. Jacobs. My
18 business address is 1850 Parkway Place, Marietta,
19 Georgia.

20 Q. Dr. Jacobs, did you prefile testimony in July
21 2008 in this docket?

22 A. Yes, I did.

23 Q. And did you have exhibits attached to the
24 testimony that was prefiled?

25 A. Yes, I did.

1 Q. As it pertains to Progress Energy -- let me
2 back up and just make sure that we understand
3 organizationally. When you filed the prefiled
4 testimony, did it pertain to both Florida Power & Light
5 and Progress Energy?

6 A. Yes, that's correct.

7 Q. And you understand that what we're going to be
8 discussing now pertains specifically only to Progress
9 Energy?

10 A. Yes, I do.

11 Q. With regard to Progress Energy and its
12 application, did you also have Exhibit 1 attached to
13 your prefiled testimony that consists of your resumé?

14 A. Yes, I did.

15 Q. By way of introduction to the Commission,
16 would you provide just a very concise summary of your
17 background?

18 A. Yes, I will.

19 Good afternoon, Mr. Chairman and
20 Commissioners. I'm Williams Jacobs. I'm vice president
21 of GDS Associates out of Marietta, Georgia. I earned a
22 Ph.D. in nuclear engineering from Georgia Tech in 1971
23 and have been in the nuclear power business for 35-plus
24 years since that time.

25 I have extensive construction and startup

1 experience. I spent about 10 years overseas. I was an
2 advisor to the Korea Electric Company during the startup
3 of their first nuclear power plant in the Republic of
4 Korea. And then I joined Westinghouse. I was the
5 startup manager for a nuclear plant in Krsko,
6 Yugoslavia, and then I was the startup manager and site
7 manager ultimately for a nuclear plant in the
8 Philippines.

9 In the mid '80s, I moved back to the United
10 States. I spent a year at INPO, the Institute of
11 Nuclear Power Operation, that was formed after Three
12 Mile Island to assist all the utilities in operating
13 their nuclear power plants.

14 And then in 1986, I joined GDS Associates, and
15 I have been doing consulting work for GDS for a number
16 of clients throughout the country, primarily in
17 evaluating nuclear plant operation and nuclear plant
18 outages, and I also assist minority owners or
19 non-operating owners of nuclear power plants to help
20 them oversee the operation of their plant for the
21 non-operating owner.

22 I actually filed testimony here in the
23 mid-'90s dealing with an outage at Crystal River Unit 3.
24 And currently, I am also helping the Georgia Public
25 Service Commission evaluate the proposed two new Georgia

1 Power nuclear units, Plant Vogel Units 3 and 4. I am
2 also helping the South Carolina Commission evaluate the
3 proposed two new nuclear power units, Summer Units 2 and
4 3.

5 Q. Thank you, Dr. Jacobs. As to the main body of
6 your testimony as it pertains to Progress Energy, do you
7 have any changes or corrections to make?

8 A. No, I not.

9 Q. If the same questions posed in the prefiled
10 testimony were posed to you today, would your answers be
11 the same?

12 A. Yes, they would.

13 MR. BURGESS: Mr. Chairman, I would ask that
14 Dr. Jacobs' prefiled testimony be entered into the
15 record as though read.

16 CHAIRMAN CARTER: The prefiled testimony will
17 be entered into the record as though read.

18 MR. BURGESS: Thank you, Mr. Chairman.
19
20
21
22
23
24
25

1 REVISED DIRECT TESTIMONY

2 OF

3 William R. Jacobs, Jr. Ph.D.

4 On Behalf of the Office of Public Counsel

5 Before the

6 Florida Public Service Commission

7 Docket No. 080009-EI

8

9

I. Introduction10 **Q. PLEASE STATE YOUR NAME, TITLE AND BUSINESS ADDRESS.**11 A. My name is William R. Jacobs, Jr., Ph.D. I am a Vice President of GDS Associates, Inc.
12 My business address is 1850 Parkway Place, Suite 800, Marietta, Georgia, 30067.

13

14 **Q. DR. JACOBS, PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND**
15 **AND EXPERIENCE.**16 A. I received a Bachelor of Mechanical Engineering in 1968, a Master of Science in
17 Nuclear Engineering in 1969 and a Ph.D. in Nuclear Engineering in 1971, all from the
18 Georgia Institute of Technology. I am a registered professional engineer and a member
19 of the American Nuclear Society. I have more than thirty years of experience in the
20 electric power industry including more than twelve years of power plant construction
21 and start-up experience. I have participated in the construction and start-up of seven
22 power plants in this country and overseas in management positions including start-up
23 manager and site manager. As a loaned employee at the Institute of Nuclear Power

1 Operations (“INPO”), I participated in the Construction Project Evaluation Program,
2 performed operating plant evaluations and assisted in development of the Outage
3 Management Evaluation Program. Since joining GDS Associates, Inc. in 1986, I have
4 participated in rate case and litigation support activities related to power plant
5 construction, operation and decommissioning. I have evaluated nuclear power plant
6 outages at numerous nuclear plants throughout the United States. I am currently on the
7 management committee of Plum Point Unit 1, a 650 MWe coal fired power plant under
8 construction near Osceola, Arkansas. As a member of the management committee, I
9 assist in providing oversight of the EPC contractor for this project. My resume is
10 included as Exhibit WRJ-1.

11
12 **Q. WHAT IS THE NATURE OF YOUR BUSINESS?**

13 A. GDS Associates, Inc. (“GDS”) is an engineering and consulting firm with offices in
14 Marietta, Georgia; Austin, Texas; Corpus Christi, Texas; Manchester, New Hampshire;
15 Madison, Wisconsin, Manchester, Maine; Bellingham, Washington; and Auburn,
16 Alabama. GDS provides a variety of services to the electric utility industry including
17 power supply planning, generation support services, rates and regulatory consulting,
18 financial analysis, load forecasting and statistical services. Generation support services
19 provided by GDS include fossil and nuclear plant monitoring, plant ownership
20 feasibility studies, plant management audits, production cost modeling and expert
21 testimony on matters relating to plant management, construction, licensing and
22 performance issues in technical litigation and regulatory proceedings. GDS also

1 frequently provides consulting services regarding utility-related matters to public entities
2 such as state attorneys general and regulatory agencies.

3

4 **Q. FOR WHOM ARE YOU APPEARING IN THIS PROCEEDING?**

5 A. I am testifying on behalf of the Florida Office of Public Counsel.

6

7 **Q. WHAT WAS YOUR ASSIGNMENT IN THIS PROCEEDING?**

8 A. I was asked to assist the Florida Office of Public Counsel in the review and evaluation of
9 requests by Florida Power & Light Company (FPL) and Progress Energy Florida (PEF)
10 for authority to collect historical and projected costs associated with nuclear uprate
11 projects being pursued at FPL's Turkey Point Units 3 and 4 and St. Lucie Units 1 and 2
12 and PEF's Crystal River Unit 3, and historical and projected costs associated with FPL's
13 proposed Turkey Point Units 6 and 7 through the utilities' respective capacity cost
14 recovery clauses, all pursuant to the Commission's Rule 25-6.0423, Florida
15 Administrative Code, "Nuclear or Integrated Gasification Combined Cycle Power Plant
16 Cost Recovery" ("nuclear cost recovery rule"). I was also asked to review preliminary
17 costs submitted in the discovery docket associated with PEF's plan to develop and
18 construct two new nuclear generating units in Levy County.

19

20 **II. The Nuclear Cost Recovery Rule**

21

22 **Q. PLEASE BRIEFLY DESCRIBE THE NUCLEAR COST RECOVERY RULE**

23 **THAT THE COMMISSION ADOPTED IN 2006.**

24 A. The stated purpose of the rule is to:

1 establish alternative cost recovery mechanisms for the recovery of
2 costs incurred in the siting, design, licensing, and construction of
3 nuclear or integrated gasification combined cycle power plants in
4 order to promote electric utility investment in nuclear or
5 integrated gasification combined cycle power plants and allow for
6 the recovery in rates of all such prudently incurred costs.
7

8 Costs are to be recovered annually through the individual requesting utility's Capacity
9 Cost Recovery Clause. The Commission Staff and parties to this proceeding have been
10 working to develop the Nuclear Filing Requirements (NFRs) needed to present the
11 project status and cost data in a consistent format. The NFRs require the submission of
12 three categories of cost data: (1) True-Up for Previous Years, (2) Actual/Estimated
13 (A/E) costs for the current year, and (3) Projected costs for Subsequent years. For a
14 given time period, the Commission is to consider the prudence of historical, actual True-
15 Up costs. With respect to the Actual / Estimated costs and Projected costs, it is to
16 consider whether such costs appear reasonable when determining the amount the
17 requesting utility can collect (subject to additional review) in the first instance, but a
18 final determination of prudence, including whether any amounts should be disallowed, is
19 reserved until the costs come before the Commission in a true-up filing. These costs are
20 then used in establishing the costs to be recovered through the Capital Cost Recovery
21 Clause.
22

23 **Q. HOW DO THESE DISTINCTIONS BEAR ON YOUR TESTIMONY IN THIS**
24 **PROCEEDING?**

25 **A.** I am informed by counsel that FPL and PEF have agreed that, while the historical costs
26 included in the utilities' true-up claim may be incorporated in the calculation of their
27 recovery factors, the issue of the prudence of those 2006-2007 costs, including whether

1 any portion should be disallowed, will be deferred until the next annual hearing cycle of
2 the nuclear cost recovery mechanism. Accordingly, the scope of my testimony reaches
3 only the more preliminary threshold consideration of whether the costs claimed by the
4 utilities appear to be “reasonable.”

5
6 **III. Requests for Authorization to Collect Costs**

7
8 **Q. PLEASE SUMMARIZE THE COSTS THAT FPL HAS REQUESTED**
9 **AUTHORITY TO COLLECT UNDER THE NUCLEAR COST RECOVERY**
10 **RULE.**

11 **A.** FPL has requested that the Commission approve a Nuclear Power Plant Cost Recovery
12 amount of \$258,979,772 to be recovered through the 2009 Capital Cost Recovery
13 Clause. These costs result from carrying charges associated with the 2008
14 Actual/Estimated and 2009 Projected construction costs for the Extended Uprate
15 Projects for Turkey Point Units 3 and 4 and St. Lucie Units 1 and 2, preconstruction and
16 carrying charges associated with 2007 Actual, 2008 Actual/Estimated and 2009
17 Projected costs for Turkey Point 7 and 8 and Site Selection costs and carrying charges
18 associated with Turkey Point 7 and 8.

19
20 **Q. PLEASE SUMMARIZE THE COSTS THAT PEF HAS REQUESTED**
21 **AUTHORITY TO COLLECT UNDER THE NUCLEAR COST RECOVERY**
22 **RULE.**

23 **A.** PEF has requested that the Commission approve a request for Nuclear Cost Recovery
24 for the Crystal River Unit 3 uprate projects of \$24.9 million. PEF has also requested

1 recovery of ***BEGIN CONFIDENTIAL SECTION*** [REDACTED] ***END
2 CONFIDENTIAL SECTION*** in 2009 for the Levy Nuclear Project.

3

4 **Q. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?**

5 A. First I will briefly describe the methodology used in my evaluation of the filings by FPL
6 and PEF. Next I will describe a policy issue that is common to both FPL and PEF.
7 Following this I will present the results of my evaluation of FPL’s request for
8 authorization to collect costs and then I will provide the results of my evaluation of
9 PEF’s request for authorization to collect costs.

10

11 **IV. Methodology**

12

13 **Q. PLEASE DESCRIBE THE METHODOLOGY THAT YOU USED TO REVIEW
14 AND EVALUATE THE REQUESTS FOR AUTHORIZATION TO COLLECT
15 COSTS SUBMITTED BY FPL AND PEF UNDER THE NUCLEAR COST
16 RECOVERY RULE.**

17 A. I first reviewed the Nuclear Cost Recovery Rule to gain an understanding of the process
18 and of the schedules included in the Companies’ filings. Next, I reviewed the
19 Companies’ filings in this docket. Working with counsel for OPC, I helped prepare
20 numerous interrogatories and requests for production of documents. Following an initial
21 review of the documents produced by the Companies, I assisted Office of Public
22 Counsel attorneys in deposing Company witnesses to further explore areas of interest.
23 Numerous late filed exhibits were requested during the depositions to provide additional
24 information relating to the Companies’ requests.

1

2 **Q. HOW DID YOU GAUGE THE REASONABLENESS OF THE COSTS FOR**
3 **WHICH THE COMPANIES REQUEST AUTHORITY TO BUILD INTO THE**
4 **2009 RECOVERY FACTOR?**

5 A. To control their costs, the Companies must employ effective contracting and project
6 management procedures and practices. The scope of work must be reasonable. The
7 Companies must employ competitive bidding or, if that is infeasible for some reason,
8 other methods such as comparisons with similar projects for which the cost is known.
9 The focus of my review was the procedures and processes utilized by the Companies to
10 solicit and evaluate the contracts underlying the claimed costs, and the methods used by
11 the Companies to determine that the costs were reasonable. In addition, I focused on the
12 scope of the work contained in the contracts to assure that the work scope was
13 reasonable. I also reviewed the project management procedures and practices that will
14 be used to manage the projects as they move into the implementation stage.

15

16 **Q. PLEASE DESCRIBE YOUR REVIEW OF THE CONTRACTING**
17 **PROCEDURES AND PRACTICES UTILIZED BY FPL AND PEF.**

18 A. I reviewed the full spectrum of contracting activities, including identification of the
19 project scope, development of the bid specification, development of the qualified vendor
20 list, preparation of the request for proposals, and the bid evaluation process. The review
21 encompassed both the procedures governing these activities and the implementation of
22 the procedures. I gave special attention to instances in which the utilities departed from
23 competitive bidding and used instead sole source or single source contracts. (A sole

1 source contract is one in which there is no alternative to the contractor. A single source
2 contract is one in which other potential sources of the services exist, but reasons compel
3 the choice of one without first soliciting competitive bids.) As I will discuss, the
4 decision by the utility to enter a contract without first seeking competitive bids in these
5 scenarios requires the utility to justify the departure from the bidding standard and to
6 demonstrate the resulting costs are reasonable.

7
8 **Q. PLEASE DESCRIBE YOUR REVIEW OF THE PROJECT MANAGEMENT**
9 **PROCEDURES AND PRACTICES UTILIZED BY FPL AND PEF.**

10 A. The current requests for cost recovery stem primarily from the contracting activities
11 discussed above. However, as the projects move into the implementation phase, proper
12 and effective project management will be essential to ensure that projects are completed
13 on schedule and within budget. The project management procedures and practices that I
14 reviewed include establishment of project budgets, monitoring of budget variances,
15 corrective actions for budget variances, establishment of project schedules, and
16 monitoring of project schedule variances and corrective action for schedule variances.
17 Activities in the project management area will be reviewed in more detail in the future
18 as the projects move into the implementation stage.

1 **V. Evaluation of Requests for Authorization to Collect Costs**

2

3 **Q. PLEASE DESCRIBE THE POLICY ISSUE YOU HAVE IDENTIFIED THAT IS**
4 **COMMON TO FPL AND PEF.**

5 A. This issue is related to the incremental nature of some EPU project costs. When the
6 operating license of a nuclear plant is extended by 20 years, many capital projects are
7 typically required to ensure reliable operation beyond the original 40 year operating life
8 of the plant. Typical projects would include replacement of Main Transformers,
9 Feedwater Heaters and other equipment that would likely need to be replaced during the
10 original 40 year operating life of the plant. These costs can amount to many millions of
11 dollars and would be recovered through normal base rate cost recovery mechanisms. As
12 I understand the Nuclear Plant Cost Recovery rule, it is not intended to apply to the
13 normal maintenance or replacement of equipment of existing nuclear units. Therefore,
14 where such items would have been necessary in the absence of an uprate project, I
15 believe that only the incremental costs required for the EPU projects—those over and
16 above what would have been spent anyway-- should be recoverable under the rule.

17

18 **Q. PLEASE PROVIDE AN EXAMPLE TO CLARIFY YOUR POSITION ON THIS**
19 **ISSUE.**

20 A. Certainly. Assume that when the operating license of a nuclear plant was extended for
21 an additional 20 years it was determined that the Main Generator Step-Up Transformer
22 would need to be replaced for the plant to operate reliably for an additional 20 years.
23 Subsequent to the relicensing of the plant, it was determined to increase the capacity of

1 the plant through an Extended Power Uprate. Analyses of the EPU determined that a
2 larger Main Generator Step-up Transformer would be required to handle the additional
3 output capacity of the plant. Since the original transformer was going to be replaced in
4 the normal course of business to ensure reliable plant operation, I believe that only the
5 incremental cost of the larger transformer needed for the EPU compared to the
6 replacement cost of the original transformer should be recoverable under the rule.

7
8 **Q. HAVE YOU IDENTIFIED AN EXAMPLE IN WHICH A MAJOR PLANT**
9 **COMPONENT IS BEING REPLACED TO IMPROVE PLANT RELIABILITY**
10 **AND PERFORMANCE THAT IS NOT BEING INCLUDED AS AN EPU COST?**

11 A. Yes, I have. The steam generators at Crystal River 3 are being replaced during an
12 upcoming refueling outage. The reason for the replacement is to ensure reliable plant
13 performance for the remainder of the extended operating life of the plant. During the
14 steam generator replacement outage, other projects will be accomplished that are related
15 to the EPU project. However, PEF has not requested that the cost of the steam generator
16 replacement project be recovered via the Nuclear Plant Cost Recovery mechanism of the
17 rule. In this example, if the replacement steam generators had been modified
18 specifically to support the EPU project, then I believe that only the incremental cost of
19 the modification to support the EPU project would have qualified for recovery through
20 the cost recovery clause, and the remainder of the costs would have been recovered
21 through normal base rate mechanisms.

1 **Q. HAVE FPL AND PEF IDENTIFIED IN THEIR SUBMISSIONS THE CAPITAL**
2 **REQUIREMENTS THAT WOULD BE COMMON TO BOTH THE LICENSE**
3 **RENEWALS AND THE UPRATE PROJECTS?**

4 A. Aside from the steam generator example, I have seen no attempt by either utility to
5 undertake such an analysis.

6

7 **Q. IN THE ABSENCE OF SUCH AN ANALYSIS, WHAT SHOULD THE**
8 **COMMISSION DO IN THIS PROCEEDING?**

9 A. The failure of the requesting utilities to address the potential for recovery of costs that
10 exceed the incremental effect of the uprate projects goes directly to the reasonableness
11 of their proposed recovery amounts. At a minimum, the Commission should declare
12 that its approval of amounts related to the uprate projects is conditional, and subject to a
13 thorough identification, in the next annual hearing cycle of this ongoing proceeding, of
14 the nature and costs of the capital items that would be associated with the license
15 renewal and longer operating life in the absence of an uprate. The utilities should be
16 required to compare those costs with the costs of the uprate project, for the purpose of
17 refunding any costs that are not attributable solely to the fact of the uprate projects.

18

19

20 **Q. PLEASE DESCRIBE FPL'S REQUEST FOR AUTHORIZATION TO COLLECT**
21 **COSTS FOR THE EXTENDED POWER UPRATE PROJECTS.**

22 A. FPL is requesting authorization to recover 2008 actual/estimated carrying costs of
23 \$3,746,731 and 2009 projected carrying costs of \$16,748,149 for the Turkey Point and
24 St. Lucie EPU projects.

1

2 **Q. PLEASE DESCRIBE FPL'S REQUEST FOR AUTHORIZATION TO COLLECT**
3 **COSTS FOR THE TURKEY POINT UNIT 6 AND 7 PROJECT.**

4 A. FPL is requesting authorization to recover actual preconstruction and carrying charges
5 of \$2,543,239 for 2007, actual/estimated preconstruction and carrying charges of
6 \$108,441,514 for 2008, and projected pre-construction and carrying charges of
7 \$119,696,175 for 2009.

8

9 **Q. PLEASE DESCRIBE FPL'S REQUEST FOR AUTHORIZATION TO COLLECT**
10 **COSTS FOR THE TURKEY POINT UNIT 6 AND 7 PROJECT SITE**
11 **SELECTION ACTIVITIES.**

12 A. FPL is requesting authorization to recover actual site selection and carrying charges of
13 \$6,533,498 for 2006-2007, actual/estimated site selection carrying charges of \$729,563
14 for 2008, and site selection carrying charges of \$535,351 for 2009.

15

16 **Q. DID YOU IDENTIFY ANY ISSUES OF CONCERN WITH FPL'S REQUEST**
17 **FOR AUTHORIZATION TO RECOVER COSTS?**

18 A. Yes, I did. My review of FPL's filings and documents provided indicate an extensive
19 use of sole and single source contracts. All of the contracts in excess of \$1 million
20 shown in Schedule AE-8 for the EPU were sole source contracts. Two of the three
21 contracts shown in Schedule AE-8 for the new Turkey Point Units were sole or single
22 source contracts, and the only contract for site selection activities is a single source
23 contract. In addition, many of the contracts for less than \$1 million were issued as sole

1 or single source contracts, even though FPL identified more firms than one that were
2 capable of performing the needed work.

3

4 **Q. DID YOU REVIEW FPL'S PROCEDURE THAT CONTROLS CONTRACTING**
5 **AND NUCLEAR RELATED PROCUREMENT ACTIVITIES?**

6 A. Yes, I reviewed FPL Nuclear Division Nuclear Policy NP-1100 Revision 15, dated
7 02/25/08. This procedure is entitled "Procurement Control." It specifically addresses the
8 requirements for issuing a sole or single source contract.

9

10 **Q. PLEASE DESCRIBE THE REQUIREMENTS OF NP-1100 RELATED TO SOLE**
11 **SOURCE OR SINGLE SOURCE CONTRACTS.**

12 A. NP-1100 clearly specifies that *****BEGIN CONFIDENTIAL SECTION***** [REDACTED]

13 [REDACTED]

14 [REDACTED]

15 [REDACTED]

25 [REDACTED]

26 [REDACTED]

27 [REDACTED]

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[REDACTED]

• [REDACTED]

[REDACTED]

[REDACTED] ***END CONFIDENTIAL SECTION***

Q. DID YOU FIND EXAMPLES OF SOLE OR SINGLE SOURCE JUSTIFICATIONS THAT DID NOT CONFORM TO THESE REQUIREMENTS?

A. Yes, I did. I found numerous examples in which it appears that ***BEGIN

CONFIDENTIAL SECTION*** [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] ***END CONFIDENTIAL

SECTION*** I also found single source justifications that did not provide adequate assurance that the cost of the contract was reasonable. The use of sole or single source contracts appears to be a routine occurrence, ***BEGIN CONFIDENTIAL

1 SECTION*** [REDACTED]

2 ***END CONFIDENTIAL SECTION*** The following excerpts are examples from

3 Single and Sole Source Justifications provided by FPL:

4 ***BEGIN CONFIDENTIAL SECTION***

5 [REDACTED]

6 [REDACTED]

7 [REDACTED]

8 [REDACTED]

9 [REDACTED]
10 [REDACTED]
11 [REDACTED]

12 [REDACTED]
13 [REDACTED]
14 [REDACTED]

15 [REDACTED]
16 [REDACTED]

17 [REDACTED]

18 [REDACTED]

19 [REDACTED]

20 [REDACTED]

21 [REDACTED]
22 [REDACTED]
23 [REDACTED]
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END CONFIDENTIAL SECTION

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As seen from the above examples, many of FPL’s single and sole source justifications rely on schedule pressure to justify the use of a sole or single source contract rather than a competitive bidding process required by FPL’s procurement procedure.

Q. HAS FPL DEMONSTRATED, EITHER WITHIN ITS SUBMISSION OR IN ITS RESPONSES TO DISCOVERY REQUESTS, THAT THE COSTS INCURRED IN THE SOLE SOURCE AND SINGLE SOURCE CONTRACTS ARE REASONABLE?

A. No, FPL has not. The best way to demonstrate that the cost of a contract is reasonable is through a competitive bidding process. Absent a competitive bidding process the Company must use cost comparisons, or benchmarking with similar work, or a detailed analysis of the work scope and labor rates to ensure that the cost of the contract is reasonable. Many of the single source justifications stated that the costs were reasonable based on FPL’s experience with similar projects. In another justification, the reasonableness of costs for a project costing more than***BEGIN CONFIDENTIAL SECTION*** [REDACTED] ***END CONFIDENTIAL SECTION*** was a back-of-the-envelope type analysis based on comparison data that was 5 years old.

Q. PLEASE DESCRIBE THE EXAMPLE YOU DISCUSSED ABOVE IN MORE DETAIL.

A. In response to Staff’s request for details of claimed benchmarking of costs by FPL, FPL provided a spreadsheet comparing various elements of uprate projects at the Company’s

1 cost comparison used by FPL to justify this project on a single source basis is at best
2 what I would call a back-of-the-envelope calculation, and in my opinion is insufficient
3 to justify that the cost for a project of this magnitude is reasonable.

4

5 **Q. DO YOU HAVE OTHER CONCERNS WITH FPL'S USE OF SOLE OR SINGLE**
6 **SOURCE CONTRACTS?**

7 A. Yes. From my review of the sole and single source justifications for many projects, it
8 appears that FPL is not rigorously following the requirements of NP-1100 ***BEGIN

9 CONFIDENTIAL SECTION *** [REDACTED]

10 [REDACTED] ***END

11 CONFIDENTIAL SECTION*** The language in many of these justifications is so
12 similar that it appears their preparation is a matter of rote rather than a specific,
13 individual analysis. For example, the sentence ***BEGIN CONFIDENTIAL

14 SECTION*** [REDACTED]

15 [REDACTED] ***END COFNIDENTIAL

16 SECTION***appears in several justifications. During discovery, we learned that at
17 times there has been a disconnect between the language of the justification
18 memorandum and the actual reason on which FPL relies.

19 ***BEGIN CONFIDENTIAL SECTION***

20 [REDACTED]

21 [REDACTED]

22 [REDACTED]

23 [REDACTED]

1 [REDACTED]
 2 [REDACTED]
 3 [REDACTED]
 4 [REDACTED]
 5 [REDACTED]
 6 [REDACTED]

7 ***END CONFIDENTIAL SECTION***

8 In sum, the number of sole or single source justifications, the similarity of language
 9 found in many justifications and the lack of specificity in some justifications leads me to
 10 believe that ***BEGIN CONFIDENTIAL SECTION*** [REDACTED]

11 [REDACTED]

12 [REDACTED] ***END

13 CONFIDENTIAL SECTION***

14
 15 **Q. PLEASE DESCRIBE PEF’S REQUEST FOR AUTHORIZATION TO COLLECT**
 16 **COSTS FOR THE CRYSTAL RIVER UNIT 3 MEASUREMENT**
 17 **UNCERTAINTY RECOVERY (MUR) AND EXTENDED POWER UPRATE**
 18 **PROJECTS.**

19 A. PEF is requesting authorization to recover a total of \$24,899,965 related to the Crystal
 20 River 3 MUR and EPU project through the NCRC beginning in 2009. This amount
 21 includes a true-up amount of \$928,895 for 2007, estimated revenue requirements of
 22 \$7,512,933 for 2008 and projected revenue requirements of \$16,458,136 for 2009.

1

2

3

4 *****END CONFIDENTIAL SECTION***** Use of a sole or single source contract
5 eliminates competitive bidding as a means of ensuring reasonable costs. Without a
6 competitive bidding process, reasonable cost comparisons, benchmarks or analyses must
7 be provided to demonstrate the reasonableness of the costs of sole or single source
8 contracts.

9

10 **Q. PLEASE PROVIDE YOUR RECOMMENDATIONS REGARDING FPL'S**
11 **REQUEST FOR AUTHORIZATION TO COLLECT COSTS RELATED TO**
12 **SOLE SOURCE AND SINGLE SOURCE CONTRACTS.**

13 A. My observation applies to numerous sole and single source contracts, only several of
14 which I have described in my testimony. The contracts vary widely in terms of the
15 amounts of money they involve. Because of the materiality of the contract to which
16 Exhibits __ and __ (WRJ-7 and WRJ-8) apply, I suggest the Commission focus on this
17 item as the vehicle for communicating to FPL the importance of either adhering to a
18 competitive bidding standard or justifying thoroughly a departure from this standard. I
19 believe the Commission has several alternatives under the circumstances. My first
20 recommendation stems from the fact that FPL's obligation to demonstrate the costs of
21 the contract are reasonable is based on the need to apply its own standard as well as the
22 requirement that it satisfy the Commission on this point. I believe it would be
23 appropriate to disallow, and remove from the amount that flows through the cost

1 recovery clause, that portion of the carrying cost of the contract that represents the return
2 that FPL is seeking to earn on its equity investment in the capital asset.

3
4 Alternatively, the Commission could withhold a portion of the requested carrying
5 charges—I suggest 10% would be appropriate—and inform FPL that FPL will be
6 allowed to collect the withheld portion from customers only if FPL can demonstrate the
7 costs are reasonable in the next hearing cycle.

8
9 If the Commission considers this first round of hearings as uncharted territory, and
10 for that reason decides to allow FPL to collect the entire amount of carrying charges, it
11 should at a minimum place FPL on notice that on a going forward basis the Commission
12 intends to require a rigorous and detailed justification for any departure from
13 competitive bidding.

14
15 **Q. PLEASE PROVIDE YOUR RECOMMENDATIONS REGARDING RECOVERY**
16 **OF ONLY INCREMENTAL COSTS FOR THE EXTENDED POWER UPRATE**
17 **PROJECTS.**

18 A. I note that the NFRs developed to date do not require the type of analysis that I
19 advocate. I do not propose withholding any amounts from the utilities based on the
20 absence of analyses that would disclose any recovery beyond the incremental costs of
21 the EPU projects. However, I recommend that the Commission retain jurisdiction over
22 these amounts, and require PEF and FPL to conduct analyses to identify which EPU
23 costs are incremental to capital costs that would normally be expected during the

1 operational life of the nuclear power plants and present them during the hearing cycle
2 for the 2010 recovery factor. Only those incremental costs should be allowed to be
3 recovered through the Nuclear Cost Recovery Clause. The remainder of the costs, if any,
4 should be refunded to customers and recovered through normal base rate cost recovery
5 mechanisms.

6

7 **Q. DOES THAT CONCLUDE YOUR TESTIMONY?**

8 A. Yes, it does.

1 BY MR. BURGESS:

2 Q. Dr. Jacobs, if you would, would you provide a
3 very brief summary of that portion of your testimony
4 that pertains to Progress Energy?

5 A. Yes, I will. Again, I'm William R. Jacobs. I
6 was asked to assist the Florida Office of Public Counsel
7 in reviewing and evaluating requests by Progress Energy
8 and Florida Power & Light for authority to collect
9 historical and projected costs associated with the
10 nuclear power uprate projects at Crystal River Unit 3,
11 Turkey Point 3 and 4, and the St. Lucie Units 1 and 2,
12 and also historical and projected costs associated with
13 FLP's proposed Turkey Point 6 and 7 units through their
14 respective capacity cost recovery clauses. I was also
15 asked to review the preliminary costs submitted in the
16 discovery docket associated with PEF's plan to develop
17 and construct two new nuclear units in Levy County.

18 Addressing now my recommendations as they
19 apply to Progress Energy, one of the issues that I
20 identified during my review involves costs related to
21 the extended uprate projects that PEF wishes to collect
22 from customers under the nuclear cost recovery clause.
23 I believe that only costs that are incremental to costs
24 that would normally be incurred to ensure safe and
25 reliable operation of the nuclear plants in the absence

1 of an uprate project should be recovered under the NCRC.

2 For example, if a piece of equipment is
3 nearing the end of its operating life and needs to be
4 replaced to ensure future reliable operation, the cost
5 of replacing this equipment should be recovered through
6 normal ratemaking processes, not through the NCRC. If
7 the equipment needs to be upgraded to support the
8 uprate, then only the incremental costs of the upgrade
9 should be recovered through the NCRC.

10 In my view, the requesting utility should be
11 required to conduct the analysis needed to demonstrate
12 that only incremental costs are being requested and
13 provide that analysis at the outset of the proceeding.
14 My recommendation on this issue is to require PEF staff
15 and OPC to work together to develop additional Nuclear
16 Filing Requirements that will address this issue in
17 future filings.

18 That completes my summary as it relates to
19 PEF.

20 MR. BURGESS: Thank you. Mr. Chairman, we
21 would tender the witness.

22 CHAIRMAN CARTER: Now, that was South Korea;
23 right?

24 THE WITNESS: That was, yes, South Korea, the
25 Republic of Korea. They call it "The Rock."

1 CHAIRMAN CARTER: As opposed to -- what is it?
2 The Democratic Republic of --

3 THE WITNESS: The People's, yes, Democratic
4 Republic of North Korea.

5 CHAIRMAN CARTER: People's Democratic Republic
6 of North Korea.

7 THE WITNESS: Something like that. I never
8 made it there, so I'm not sure.

9 CHAIRMAN CARTER: I understand Elvis is
10 missing right now.

11 Ms. Triplett, you're recognized.

12 MS. TRIPLETT: We have no questions.

13 CHAIRMAN CARTER: Mr. Twomey.

14 MR. TWOMEY: No, sir.

15 MR. McWHIRTER: No questions.

16 MR. BREW: No, sir.

17 CHAIRMAN CARTER: Staff.

18 MS. BENNETT: No questions.

19 CHAIRMAN CARTER: Commissioner Skop.

20 COMMISSIONER SKOP: No questions, Mr. Chair,
21 but just a point of clarification. In my over 40
22 moment, I guess -- I asked Mr. Roderick, but I guess I
23 was able to find -- with respect to the land
24 acquisition, I guess Mr. Garrett's rebuttal testimony I
25 think on page 5 gives a good discussion of that. I

1 think he was excused. I knew I remembered seeing it
2 somewhere, but I just thought it might be Mr. Roderick,
3 so I stand corrected.

4 CHAIRMAN CARTER: Thank you. No problem.
5 Commissioners?

6 Dr. Jacobs, it was good to have you. I'm very
7 impressed with your resumé and your experience, and we
8 appreciate you being with us today. Thank you.

9 THE WITNESS: Thank you, sir. I'm glad to be
10 here.

11 CHAIRMAN CARTER: Mr. Burgess.

12 MR. BURGESS: Commissioner, we would ask that
13 Exhibit 1 --

14 CHAIRMAN CARTER: Fifteen?

15 MR. BURGESS: It's labeled as, yes, Exhibit
16 15, be entered into the record.

17 CHAIRMAN CARTER: Without objection, show it
18 done.

19 (Exhibit Number 15 was admitted into the
20 record.)

21 CHAIRMAN CARTER: Call your next witness.
22 Wait a minute. Staff, are you next?

23 MS. BENNETT: Yes, Chairman. Our next staff
24 witness is Jeffery Small. He has been excused. We
25 would ask that Jeffery Small's testimony be entered into

1 the record as read, as well as Exhibits 16, 17, and 18.

2 CHAIRMAN CARTER: Let's do the testimony
3 first. The prefiled testimony will be entered into the
4 record as though read. Now we'll go with the exhibits.

5 MS. BENNETT: Thank you. Exhibits 16, 17, and
6 18, we ask that they be entered the record.

7 CHAIRMAN CARTER: Any objections? Without
8 objection, show it done. Exhibits 16, 17, and 18 are
9 entered into the record.

10 (Exhibits Number 16, 17, and 18 were admitted
11 into the record.)

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DIRECT TESTIMONY OF JEFFERY A. SMALL

1
2 **Q. Please state your name and business address.**

3 **A.** My name is Jeffery A. Small and my business address is 4950 West Kennedy Blvd,
4 Tampa, Florida, 33609.

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

7 **A.** I am employed by the Florida Public Service Commission as a Professional
8 Accountant Specialist in the Division of Regulatory Compliance.

9
10 **Q. How long have you been employed by the Commission?**

11 **A.** I have been employed by the Florida Public Service Commission (FPSC) since January
12 1994.

13
14 **Q. Briefly review your educational and professional background.**

15 **A.** I have a Bachelor of Science degree in Accounting from the University of South
16 Florida. I am also a Certified Public Accountant licensed in the State of Florida and I am a
17 member of the American and Florida Institutes of Certified Public Accountants.

18
19 **Q. Please describe your current responsibilities.**

20 **A.** Currently, I am a Professional Accountant Specialist with the responsibilities of
21 planning and directing the most complex investigative audits. Some of my past audits include
22 cross-subsidization issues, anti-competitive behavior, and predatory pricing. I also am
23 responsible for creating audit work programs to meet a specific audit purpose and integrating
24 EDP applications into these programs.

25

1 **Q. Have you presented expert testimony before this Commission or any other**
2 **regulatory agency?**

3 **A.** Yes. I testified in the Southern States Utilities, Inc. rate case, Docket No. 95 0495-WS,
4 the transfer application of Cypress Lakes Utilities, Inc., Docket No. 971220-WS, and the
5 Utilities, Inc. of Florida rate case, Docket No. 020071-WS.

6
7 **Q. What is the purpose of your testimony today?**

8 **A.** The purpose of my testimony is to sponsor the staff audit reports of Progress Energy
9 Florida, Inc. (PEF or Utility) which addresses the Utility's application for nuclear cost
10 recovery. We issued three audit reports on PEF in this docket. The first audit report was
11 issued May 30, 2008 to address the 2007 power uprate costs for the Crystal River Unit 3
12 nuclear power plant. This audit report is filed with my testimony and is identified as Exhibit
13 JAS-1. The second audit report was issued July 25, 2008 to address the pre-construction costs
14 as of December 31, 2007 for Levy County Units 1 & 2. This audit report is filed with my
15 testimony and is identified as Exhibit JAS-2. The third audit report was issued July 25, 2008
16 to address the site selection costs as of December 31, 2007 for Levy County Units 1 & 2. This
17 audit report is filed with my testimony and is identified as Exhibit JAS-3.

18

19 **Q. Were these audits prepared by you or under your direction?**

20 **A.** Yes, I was the audit manager in charge of all three audits.

21

22 **Q. Please describe the work you performed in these audits.**

23 **A.** For the uprate audit, we reconciled the company's filing to the general ledger and
24 verified that the costs incurred were posted to the proper account, as prescribed by
25 Commission rule 25-6.014, Florida Administrative Code. We reconciled and recalculated a

1 sample of the monthly revenue requirement accruals displayed on Schedule T-1 to the
2 supporting schedules in the company's 2007 Nuclear Cost Recovery Clause (NCRC) filing.
3 We also reconciled and recalculated a sample of the carrying cost accruals displayed on
4 Schedule T-3 to the supporting schedules in the company's 2006 and 2007 NCRC filing. We
5 recalculated a sample of the Allowance for Funds Used During Construction (AFUDC)
6 balances displayed as "Other Cost" in the filing and reconciled the rates applied by the
7 company to its approved AFUDC rates in Commission Order No. PSC-05-0945-FOF-EI,
8 issued September 28, 2005. We reconciled and recalculated a sample of the monthly deferred
9 tax carrying cost accruals displayed on Schedule T-3A to the supporting schedules in the
10 company's 2007 NCRC filing. We recalculated a sample of the monthly carrying cost
11 balances for deferred tax assets based on the equity and debt components established in
12 Commission Order No. PSC-05-0945-FOF-EI. We reconciled and recalculated a sample of the
13 monthly Consumer Price Index (CPI) accruals displayed on Schedule T-3B to the supporting
14 schedules in the company's 2006 and 2007 NCRC filing. We recalculated the company's CPI
15 rate and reconciled the component balances to the company's general ledger. We recalculated
16 a sample of monthly jurisdictional nuclear construction accruals displayed on Schedule T-6 of
17 the company's 2006 and 2007 NCRC filing. We sampled and verified the project management
18 and power block engineering accruals and traced the invoiced amounts to supporting
19 documentation. We sampled company salary expense accruals and the respective overhead the
20 company applied. We recalculated and verified the joint owner billings that reduced the
21 company's eligible carrying cost for the CR3 Uprate project. We reconciled the jurisdictional
22 factors applied by the company to the eligible carrying cost to the factors approved in
23 Commission Order No. PSC-06-0972-FOF-EI, issued November 22, 2006.

24 For the second audit report, to address the pre-construction costs as of December 31,
25 2007 for Levy County Units 1 & 2, we reconciled the company's filing to the general ledger

1 and verified that the costs incurred were posted to the proper account, as prescribed by
2 Commission rule 25-6.014, Florida Administrative Code. We reconciled and recalculated a
3 sample of the monthly revenue requirement accruals displayed on Schedule T-1 to the
4 supporting schedules in the company's 2007 NCRC filing. We reconciled and recalculated a
5 sample of the carrying cost accruals displayed on Schedule T-3 to the supporting schedules in
6 the company's 2007 NCRC filing. We recalculated a sample of the AFUDC balances
7 displayed as "Other Adjustments" in the filing and reconciled the rates applied by the
8 company to its approved AFUDC rates in Commission Order No. PSC-05-0945-FOF-EI,
9 issued September 28, 2005. We reconciled and recalculated a sample of the monthly deferred
10 tax carrying cost accruals displayed on Schedule T-3A to the supporting schedules in the
11 company's 2007 NCRC filing. We recalculated a sample of the monthly carrying cost
12 balances for deferred tax assets based on the equity and debt components established in Order
13 No. PSC-05-0945-FOF-EI. We reconciled and recalculated a sample of the monthly CPI
14 accruals displayed on Schedule T-3B to the supporting schedules in the company's 2007
15 NCRC filing. We recalculated the company's CPI rate and reconciled the component balances
16 to the company's general ledger. We recalculated a sample of monthly jurisdictional nuclear
17 construction expenditures displayed on Schedule T-6 of the company's 2007 NCRC filing. We
18 sampled and verified the construction and transmission cost expenditures and traced the
19 invoiced amounts to supporting documentation. We reconciled the jurisdictional factors
20 applied by the company to the eligible carrying cost to the factors approved in Order No. PSC-
21 06-0972-FOF-EI, issued November 22, 2006, in Docket No. 060007-EI.

22 For the third audit report, to address the site selection costs as of December 31, 2007
23 for Levy County Units 1 & 2, we reconciled the company's filing to the general ledger and
24 verified that the costs incurred were posted to the proper account, as prescribed by
25 Commission rule 25-6.014, Florida Administrative Code. We reconciled and recalculated a

1 sample of the monthly revenue requirement accruals displayed on Schedule SS-1 to the
2 supporting schedules in the company's 2006 and 2007 NCRC filing. We reconciled and
3 recalculated a sample of the monthly site selection expenditures displayed on Schedule SS-2
4 to the supporting schedules in the company's 2006 and 2007 NCRC filing. We recalculated a
5 sample of the AFUDC balances displayed in the filing and reconciled the rates applied by the
6 company to its approved AFUDC rates in Commission Order No. PSC-05-0945-FOF-EI,
7 issued September 28, 2005. We reconciled and recalculated a sample of the monthly deferred
8 tax carrying cost accruals displayed on Schedule SS-3A to the supporting schedules in the
9 company's 2007 NCRC filing. We recalculated a sample of the monthly carrying cost
10 balances for deferred tax assets based on the equity and debt components established in
11 Commission Order No. PSC-05-0945-FOF-EI. We recalculated a sample of the monthly
12 recoverable O&M expenditures displayed on Schedule SS-4 of the company's 2007 NCRC
13 filing. We sampled and verified the O&M cost accruals and traced the invoiced amounts to
14 supporting documentation. We verified company salary expense accruals and recalculated the
15 respective overhead the company applied. We reconciled the jurisdictional factors applied by
16 the company to the eligible carrying cost to the factors approved in Commission Order No.
17 PSC-06-0972-FOF-EI, issued November 22, 2006, in Docket No. 060007-EI. We
18 recalculated a sample of monthly jurisdictional nuclear construction accruals displayed on
19 Schedule SS-6 of the company's 2006 and 2007 NCRC filing. We sampled and verified the
20 generation and transmission cost accruals and traced the invoiced amounts to supporting
21 documentation. We verified company salary expense accruals and recalculated the respective
22 overhead burdens the company applied. We reconciled the jurisdictional factors applied by the
23 company to the eligible carrying cost to the factors approved in Commission Order No. PSC-
24 06-0972-FOF-EI, issued November 22, 2006, in Docket No. 060007-EI.

1 **Q. Please review the audit findings in the first audit report, JAS-1, which addresses**
2 **the 2007 power uprate costs for the Crystal River Unit 3 nuclear power plant.**

3 **A. Audit Finding No. 1**

4 Audit Finding No. 1 discusses joint owner billings. The company's 2006 and 2007
5 filings included \$189,019 and \$3,133,543, respectively, for joint owner billings by Progress
6 Energy Florida, Inc. (PEF) for the Crystal River Unit 3 (CR3) Uprate project costs. The above
7 amounts were calculated based on the joint ownership percentage times the total monthly
8 construction cost accruals for the CR3 Uprate project. The joint owners retain an 8.219
9 percent ownership of the CR3 unit.

10 Our audit procedures included an analysis and recalculation of the joint owner billing
11 cost displayed in the company's filings. We discovered a discrepancy in the December 2007
12 joint owner billing calculation. The company stated that the difference is the result of a
13 December 2007 correcting journal entry that reclassified indirect overhead cost from Levy
14 Units 1 & 2 to the CR3 Uprate project. The company's Power Plant System, where
15 construction costs are initially posted before being uploaded to the general ledger,
16 automatically calculates the joint owner billing when an amount is posted to a CR3 project.
17 The adjustment described above did not include the "trigger" that would have calculated the
18 corresponding joint owner billing that is required. This error results in an additional \$32,645
19 that should be billed to the joint owners. The company stated that it would correct and true-up
20 the December 2007 error and all subsequent similar errors discovered in the 2008 period in its
21 2008 filing.

22
23 **Q. Please review the audit findings in the second audit report, JAS-2, which**
24 **addresses the pre-construction costs as of December 31, 2007 for Levy County Units 1 &**
25 **2.**

1 **A. Audit Finding No. 1**

2 Audit Finding No. 1 discusses the utility's valuation of the land and land rights. This
3 is discussed in greater detail in Exhibit JAS-2, Finding No. 1.

4
5 **Q. Please review the audit findings in the third audit report, JAS-3, which addresses**
6 **the site selection costs as of December 31, 2007 for Levy County Units 1 & 2.**

7 **A. Audit Finding No. 1**

8 Audit Finding No. 1 discusses the deferred tax carrying cost. The Company's filing
9 includes a calculation error. Schedule SS-3A, Line 8, as of December 31, 2007 reflects a
10 credit balance of \$6,170. This should be a credit balance of \$2,739. This error is carried
11 forward into Schedule SS-1 of the company's filing which understates the company's total
12 period revenue requirement by \$2,739. Our recalculation is shown as Attachment 1 to the
13 audit report.

14
15 **Q. Does this conclude your testimony?**

16 **A. Yes, it does.**

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1 CHAIRMAN CARTER: You're recognized.

2 MR. YOUNG: Mr. Chairman, at this time, we
3 would call -- staff would call Carl Vinson and Lynn
4 Fisher to the stand.

5 CHAIRMAN CARTER: Okay. I'm guessing, and I
6 believe that I see that everyone for Progress has
7 already been sworn in. I'm looking, and the faces look
8 familiar to me. So everyone has already been sworn in
9 for today for Progress; correct? Right? Thank you.

10 Staff, you're recognized. I guess I should
11 have asked that earlier, huh?

12 Thereupon,

13 CARL VINSON and ROBERT LYNN FISHER
14 were called as witnesses on behalf of the FPSC Staff
15 and, having been first duly sworn, were examined and
16 testified as follows:

17 DIRECT EXAMINATION

18 BY MR. YOUNG:

19 Q. Good afternoon, gentlemen.

20 A. (By Mr. Fisher) Good afternoon.

21 Q. Have you been sworn?

22 A. (By Mr. Vinson) Yes, we have.

23 A. (By Mr. Fisher) Yes, we have.

24 Q. Can you please state your name and business
25 address for the record?

1 A. (By Mr. Vinson) Carl Vinson, 2540 Shumard Oak
2 Boulevard, Tallahassee, Florida.

3 A. (By Mr. Fisher) Robert Lynn Fisher, 2540
4 Shumard Oak Boulevard, Tallahassee, Florida.

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

7 A. (By Mr. Vinson) I'm employed by this
8 Commission as a Public Utilities Supervisor.

9 A. (By Mr. Fisher) I'm employed by the Florida
10 Public Service Commission as a Government Analyst II.

11 Q. Okay. Have you jointly prefiled testimony
12 consisting of five pages in this case?

13 A. (By Mr. Vinson) Yes, we have.

14 A. (By Mr. Fisher) Yes, we have.

15 Q. Do you have any changes or corrections to that
16 testimony?

17 A. (By Mr. Vinson) Yes, I do. On page 2 of our
18 testimony, the first full paragraph that begins on line
19 4, looking down to the final sentence of that paragraph
20 at line 9, there's a sentence that begins, "In each
21 case, the assignments required." I would like to delete
22 the words "in each case" and the comma, so that the
23 sentence --

24 CHAIRMAN CARTER: I'm sorry. Could you start
25 over? I had some technical difficulties with my book

1 here.

2 WITNESS VINSON: Okay. I'm looking at line 9
3 on page 2.

4 CHAIRMAN CARTER: Give me the page, please. I
5 mean, start at the beginning, the page and line, so I
6 can follow you.

7 WITNESS VINSON: Okay. On page 2, line 9, the
8 sentence that begins, "In each case, the assignments
9 required," I want to strike the words "in each case" and
10 the comma, so that the sentence would begin with the
11 words "the assignments required."

12 CHAIRMAN CARTER: Okay.

13 WITNESS VINSON: That's the only change.

14 BY MR. YOUNG:

15 Q. With that change, if I were to ask you the
16 same questions today as in your joint prefiled
17 testimony, would your answers be the same?

18 A. (By Mr. Vinson) Yes, they would.

19 A. (By Mr. Fisher) Yes, they would.

20 MR. YOUNG: Mr. Chairman, at this time, I ask
21 that the joint prefiled testimony of Mr. Carl Vinson and
22 Mr. Robert Lynn Fisher be entered into the record as
23 though read.

24 CHAIRMAN CARTER: The joint prefiled testimony
25 witnesses Vinson and Fisher will be entered into the

1 record as though read.

2 MR. YOUNG: Pardon me, sir? Okay.

3 BY MR. YOUNG:

4 Q. Did you have one exhibit attached to your
5 testimony as it relates to Progress Energy Florida,
6 which is the project management internal controls
7 relating to Progress Energy Florida's nuclear plant
8 uprate and construction projects?

9 A. (By Mr. Fisher) Yes.

10 A. (By Mr. Vinson) Yes.

11 Q. Do you have any changes or correction to that
12 exhibit?

13 A. (By Mr. Vinson) No.

14 MR. YOUNG: And that Exhibit, Mr. Chairman, is
15 marked as VF-1 and is Number 19 on the comprehensive
16 exhibit list.

17 CHAIRMAN CARTER: Thank you.

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1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **COMMISSION STAFF**

3 **DIRECT TESTIMONY OF CARL VINSON AND ROBERT LYNN FISHER**

4 **DOCKET NO. 080009-EI**

5 **AUGUST 6, 2008**

6

7 **Q. Mr. Vinson, please state your name and business address.**

8 A. My name is Carl Vinson. My business address is 2540 Shumard Oak Boulevard,
9 Tallahassee, Florida 32399-0850.

10

11 **Q. By whom are you employed?**

12 A. I am employed by the Florida Public Service Commission as a Public Utilities
13 Supervisor.

14

15 **Q. What are your current duties and responsibilities?**

16 A. I supervise a section of management auditors in the Bureau of Performance Analysis of
17 the Division of Regulatory Compliance. My group performs reviews and investigations of
18 Commission-regulated electric, telephone, gas and water utilities, usually focusing on the
19 effectiveness of management and company practices, adherence to company procedures and
20 the adequacy of internal controls. Written audit reports such as the ones attached to this
21 testimony are prepared by the auditors under my direction and supervision.

22

23 **Q. Please describe your educational and relevant experience.**

24 A. I earned a Bachelor of Business Administration degree in Finance from Stetson
25 University in 1980. From 1980 to 1984 I worked as a bank loan officer, and from 1985 to

1 1989 I worked as a research analyst for Ben Johnson Associates, a consulting firm specializing
2 in utility regulation.

3
4 At Ben Johnson Associates, I participated in regulatory proceedings and dockets in
5 several states, including two nuclear unit prudence proceedings in Texas. From 1987 through
6 1989, I assisted in the analysis of prudence issues regarding the South Texas Project and the
7 Palo Verde Nuclear Generating Station. In both instances, the inclusion of construction costs
8 in rate base was contested due to schedule delays and project management problems that led to
9 substantial cost overruns. ~~In each case,~~ The assignments required extensive research into the
10 owning utilities' processes for decision-making, contractor selection, oversight of project
11 contractors, project status reporting, and project cost tracking.

12
13 I joined the Commission staff in 1989 as a management auditor and served in that
14 capacity until 1999 when I became the section supervisor. The audits I have performed and
15 overseen have covered a wide range of issues and industries. During my time with the
16 Commission, my work related to nuclear prudence issues included participation in a docket
17 examining the causes and costs of an extended maintenance outage during 1997 at Progress
18 Energy-Florida's Crystal River 3 unit. These issues were resolved via a settlement among the
19 parties, and no audit report was necessary.

20
21 **Q. Mr. Fisher, please state your name and business address.**

22 A. My name is Robert Lynn Fisher. My business address is 2540 Shumard Oak
23 Boulevard, Tallahassee, Florida 32399-0850.

24

25

1 **Q. By whom are you employed?**

2 A. I am employed by the Florida Public Service Commission, as a Government Analyst
3 II, for the Bureau of Performance Analysis in the Division of Regulatory Compliance.

4
5 **Q. What are your current duties and responsibilities?**

6 A. I perform reviews and investigations of Commission-regulated utilities, usually
7 focusing on the effectiveness of management and company practices, adherence to company
8 procedures and the adequacy of internal controls. I assisted Mr. Vinson in conducting reviews
9 of project management internal controls of nuclear plant uprate and new construction projects
10 underway at Florida Power & Light Company and Progress Energy of Florida.

11

12 **Q. Please describe your educational and relevant experience.**

13 A. In 1972, I graduated from Florida State University with a Bachelor of Science degree
14 in Marketing. My relevant background includes approximately nineteen years with the
15 Florida Public Service Commission in management auditing, utility investigation, and
16 complaint resolution. Prior to joining the Commission in 1989, my experience included more
17 than twelve years of experience within the telephone industry, in both regulated and non-
18 regulated environments, where I have managed multi-state marketing operations for a large
19 independent telephone company, assisted with implementing corporate level training
20 programs, and conducted operations reviews as a member of the corporate Market Planning
21 Staff. Since joining the Commission, I have participated in numerous reviews of utility
22 operations, processes, systems and controls.

23

24 **Q. Please describe the purpose of your testimony in this docket.**

25 A. Our testimony primarily consists of the attached audit reports entitled *Review of*

1 *Progress Energy – Florida’s Project Management Internal Controls for Nuclear Plant*
2 *Uprate and Construction Projects* (Exhibit VF-1) and *Florida Power & Light’s Project*
3 *Management Internal Controls for Nuclear Plant Uprate and Construction Projects*
4 (Exhibit VF-2). These reviews were requested by the Commission’s Division of Economic
5 Regulation to assist with the evaluations of nuclear cost recovery filings. The reports present
6 evaluations of the project management internal controls to be employed by Progress Energy-
7 Florida, Inc. and Florida Power & Light Company in managing both their uprate projects and
8 new nuclear plant construction projects. The reports present our observations regarding the
9 reasonableness and adequacy of the internal controls in place at this time.

10

11 **Q. Are you sponsoring any exhibits?**

12 A. Yes, our audit reports are attached as Exhibit Numbers VF-1 and VF-2.

13

14 **Q. Are there any additional topics to be addressed in your testimony?**

15 A. Yes. We have some observations on the Commission’s nuclear cost recovery review
16 process under Rule 25-6.0423. Since this is the first nuclear cost recovery proceeding, we
17 believe it is appropriate to examine the process that has evolved this far and to determine how
18 it can more efficiently and effectively serve its purpose. The relatively tight timetable of
19 annual filings requires an efficient process that will allow timely but thorough cost recovery
20 determinations.

21

22 Participating in these initial reviews of the uprate projects and the new unit
23 construction projects for both Progress Energy-Florida, Inc. and Florida Power & Light
24 Company has led us to conclude that improvements to the current process are needed. We
25 believe that the companies should present significantly more affirmative support for the

1 reasonableness and prudence of their cost recovery requests.

2

3 We note that Progress Energy-Florida, Inc. witness Roderick and Florida Power &
4 Light Company witness Reed did prefile testimony that is somewhat similar to what we are
5 describing. However, we believe that even more extensive and detailed and examinations of
6 internal controls and project management controls should be performed to fully substantiate
7 their adequacy and effectiveness. In addition to this testimony, each company could provide
8 an internal audit report describing a complete review of the adequacy and effectiveness of
9 internal controls and project management controls.

10

11 Thorough prefiled testimony on the controls would help to establish a firm basis for
12 each company's position that adequate oversight and controls exist to prevent imprudent or
13 unreasonable expenditures. Internal audit results would serve to familiarize the parties with
14 the relevant project management issues that arose during the preceding year and provide
15 insight into how management corrected any problems noted. These vehicles would provide a
16 starting point upon which the parties to the proceeding could build to develop a thorough
17 assessment of the reasonableness and prudence of the costs requested for recovery.

18

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

20 A. Yes.

21

22

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24

25

1 BY MR. YOUNG:

2 Q. Could you please summarize your testimony as
3 it relates to Progress Energy Florida, please?

4 A. (By Mr. Vinson) Yes. Our testimony presents,
5 as we established, the audit report, which is a
6 management audit as distinguished from a financial
7 audit, our audit report on our review of the project
8 management internal controls that Progress Energy is
9 using in managing the Crystal River nuclear unit uprate
10 and then construction of the two new Levy County units.

11 Our testimony also provides some comments on
12 the nuclear cost recovery process that the Commission is
13 using.

14 MR. YOUNG: With that, Mr. Chairman, we tender
15 Mr. Vinson and Mr. Fisher for cross.

16 CHAIRMAN CARTER: Thank you. Ms. Triplett.

17 MS. TRIPLETT: No questions.

18 CHAIRMAN CARTER: Mr. Burgess.

19 MR. BURGESS: No questions.

20 CHAIRMAN CARTER: Mr. McWhirter.

21 MR. McWHIRTER: No, sir.

22 CHAIRMAN CARTER: Mr. Brew, you're recognized,
23 sir.

24 MR. BREW: Thank you.

25

CROSS-EXAMINATION

1
2 BY MR. BREW:

3 Q. Good afternoon, gentlemen.

4 A. (By Mr. Vinson) Good afternoon.

5 Q. I would just like to talk for a minute about
6 your recommendations on page 5 of your testimony. Do
7 you see it?

8 A. Uh-huh.

9 Q. And beginning at line 5, you say that you
10 believe that even more extensive and detailed
11 examinations of internal controls and project management
12 controls should be performed. Do you see that?

13 A. Yes.

14 Q. Now, in making that recommendation, did you
15 take into account or -- let me strike that. Are you
16 familiar with the requirements of the nuclear cost
17 recovery rule?

18 A. Yes.

19 Q. Okay. And in making your recommendations
20 here, did you take into account the requirements of the
21 nuclear cost recovery rule?

22 A. Yes.

23 Q. Okay. And would you agree with me that under
24 that rule, once the Commission has made a prudence
25 determination, that you can't subsequently go back and

1 relook at those costs; is that right?

2 A. That is my understanding.

3 Q. Okay. And in your recommendations that begin
4 at line 11, for example, you say beginning at line 13,
5 "Internal audit results would serve to familiarize the
6 parties with the relevant project management issues that
7 arose during the preceding year." Do you see that?

8 A. Yes.

9 Q. Would you agree that all active parties should
10 have an opportunity for -- an adequate opportunity to
11 review those materials?

12 A. I'm sorry. I missed part of your question.

13 Q. Would you agree that all parties, as you've
14 referenced there, should have an adequate opportunity to
15 review those materials in order to make their
16 presentations in these dockets?

17 A. Yes.

18 Q. Okay. Would you agree that the issues that
19 are presented there may be relatively complicated?

20 A. Which issues are those?

21 Q. Any. Management controls, let's say.

22 A. Yes.

23 Q. Okay. And would you agree that problems that
24 may be encountered there could lead to rate impacts that
25 could be significant?

1 A. Problems encountered by?

2 Q. In the project related to project controls,
3 costs, and schedule.

4 A. Right.

5 Q. Could lead to rate impacts that could be
6 significant?

7 A. Yes.

8 MR. BREW: That's all I have.

9 CHAIRMAN CARTER: Thank you, Mr. Brew.
10 Commissioners? Commissioner Argenziano,
11 you're recognized.

12 COMMISSIONER ARGENZIANO: Thank you,
13 Mr. Chair. I had some of the same questions, and they
14 were answered, so I'll just skip and move forward,
15 because if people are watching at home too, I'm really
16 trying to give them a little bit more information that
17 we have in front of us that they may not.

18 And I guess -- and I don't want to put words
19 in your mouth, but in doing what you did for the reasons
20 that, obviously, I think were to help the Commission and
21 also to help protect the ratepayer, is that correct, to
22 make sure these reports are done with reasonable -- let
23 me see the words. Reasonableness and adequacy of the
24 internal controls in place at the time; right?

25 WITNESS VINSON: Yes.

1 COMMISSIONER ARGENZIANO: Okay. So that's
2 correct. But now, since we've brought those
3 recommendations out and the things that you pointed out
4 in your testimony, let me ask you, what is it that you
5 will do in the future as we move forward to make sure
6 that these things have been put into place?

7 WITNESS VINSON: I take your question to mean
8 what will we do in --

9 COMMISSIONER ARGENZIANO: What would we do,
10 yes.

11 WITNESS VINSON: That hasn't been fully
12 decided at this point. I assume that after this
13 proceeding is completed, staff will need to rethink what
14 is needed next year. Of course, this lays a baseline
15 down. We understand some of the basic controls and have
16 gotten some good, solid initial understanding. There
17 may be a need in next year's proceeding and potentially
18 thereafter to revisit these issues and to update the
19 information we've presented, but that decision, as I
20 understand, has not been made yet.

21 COMMISSIONER ARGENZIANO: But -- can I
22 elaborate on that for my own self?

23 CHAIRMAN CARTER: Go ahead.

24 COMMISSIONER ARGENZIANO: If you've indicated
25 that there needs to be -- let me see if I can put it in

1 your words. "In addition to this testimony, each
2 company could provide an internal audit report
3 describing a complete review of the adequacy and
4 effectiveness of internal controls," and then going back
5 to line 13 on page 5, "Internal audit results will serve
6 to familiarize the parties with the relevant project
7 management issues that arose during the preceding year
8 and provide insight to how management corrected any
9 problems noted."

10 So if we don't decide to do anything, how
11 would we know if management corrected the problems? I
12 guess that's what I'm trying to get out to anybody or
13 even one person who may be watching from home.

14 WITNESS VINSON: Well, I believe the thoughts
15 that we were expressing here were that that needs to be
16 done. Just a minute ago, I was specifically answering
17 would my work unit be doing it or would we be doing it
18 in the same way that we did. That may very well be a
19 good course to pursue.

20 If, as I suggested, the companies provide
21 additional information, that could perform part of the
22 function we performed. But, yes, it definitely does
23 need to be done. Just the actual mechanism and who does
24 that is to be decided.

25 COMMISSIONER ARGENZIANO: Okay. Thank you.

1 CHAIRMAN CARTER: And the context of that is
2 that these audits are necessary and helpful for staff to
3 make a recommendation in terms what actions the
4 Commission should take further; correct?

5 WITNESS VINSON: Yes, that was the intent.

6 CHAIRMAN CARTER: Thank you. Commissioner
7 Skop, you're recognized.

8 COMMISSIONER SKOP: Thank you, Mr. Chairman.
9 And to Commissioner Argenziano and Chairman Carter's
10 point, I just wanted to make sure that in your opinion,
11 staff's opinion, that based upon the report that was
12 prepared, that in staff's opinion, they feel that
13 adequate project management and internal controls are
14 currently in place to move forward.

15 WITNESS VINSON: Yes.

16 COMMISSIONER SKOP: Subject to further fine
17 tuning and monitoring and auditing.

18 WITNESS VINSON: Yes.

19 COMMISSIONER SKOP: All right. Thank you.

20 CHAIRMAN CARTER: Thank you. Anything further
21 from the bench?

22 Staff?

23 MR. YOUNG: No redirect.

24 CHAIRMAN CARTER: Okay. Then we have Exhibit
25 19. Any objection? Without objection, show it done.

1 Exhibit 19 moved into the record. The witnesses may be
2 excused.

3 (Exhibit Number 19 was admitted into the
4 record.)

5 CHAIRMAN CARTER: Call your next witness,
6 staff. Wait a minute. I think that's it for staff.

7 MR. YOUNG: Yes, Mr. Chairman.

8 CHAIRMAN CARTER: Is that correct?

9 MR. YOUNG: But Mr. Fisher and Mr. Vinson will
10 be back for FP&L.

11 CHAIRMAN CARTER: Well, don't leave the
12 building, guys. I tried to get you out of here.

13 Ms. Triplett, you're recognized.

14 MS. TRIPLETT: Thank you. I misunderstood.
15 When I called Mr. Roderick to the stand, among all those
16 testimonies, I also included the rebuttal testimony, but
17 I could --

18 CHAIRMAN CARTER: Let me ask the parties.
19 Mr. -- I'm struggling here. Mr. Burgess, on rebuttal
20 for Mr. Roderick, Ms. Triplett said that she had
21 presented both his direct and rebuttal at that time.

22 MR. BURGESS: We had no questions, and we
23 would have no questions if he came back up exclusively
24 for rebuttal.

25 MR. McWHIRTER: No questions.

1 MR. BREW: No questions.

2 CHAIRMAN CARTER: Staff?

3 MR. YOUNG: No questions.

4 CHAIRMAN CARTER: Commissioners, anything
5 further for witness Roderick?

6 Thank you.

7 MS. TRIPLETT: Thank you.

8 CHAIRMAN CARTER: You may call your next
9 witness.

10 MS. TRIPLETT: I don't think there's anyone
11 else.

12 CHAIRMAN CARTER: You don't have anybody left;
13 right?

14 MS. BENNETT: We do have -- Mr. Chairman,
15 Mr. Garrett, I don't know if -- he had rebuttal
16 testimony. You may have moved that in at the same time.

17 MS. TRIPLETT: No, I did not.

18 CHAIRMAN CARTER: Okay. Well, let's do that,
19 then.

20 MS. TRIPLETT: Thank you, Ms. Bennett. At
21 this time, we would ask for the rebuttal testimony of
22 Mr. Will Garrett to be read into record as though --
23 inserted into the record as though read. He did not
24 have any exhibits.

25 CHAIRMAN CARTER: The testimony of the witness

1 will be entered into the record as though read, and no
2 exhibits. Okay. And this witness was excused?

3 MS. TRIPLETT: Yes, sir.
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**IN RE: NUCLEAR COST RECOVERY CLAUSE
BY PROGRESS ENERGY FLORIDA
FPSC DOCKET NO. 080009
REBUTTAL TESTIMONY OF WILL GARRETT**

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I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your name.

A. My name is Will Garrett.

Q. Did you file Direct Testimony on April 22, 2008 in this docket?

A. Yes, I filed direct testimony in support of PEF’s actual costs for the Levy Nuclear Project. This testimony was originally filed in Docket 080149, but I understand that it will be transferred to this nuclear cost recovery docket.

Q. Have you reviewed the testimony of Jeffrey A. Small, filed on behalf of the Public Service Commission Staff?

A. Yes, I have read Mr. Small’s testimony.

Q. What is the purpose of your rebuttal testimony?

A. The purpose of my rebuttal testimony is to respond to Mr. Small’s audit finding regarding the Company’s valuation method for the portion of the Lybass property purchased for the Levy project that will be held for future use.

1 **Q. Does Mr. Small contend in his audit report that PEF’s decision to allocate a**
2 **portion of the property to Land Held for Future Use or PEF’s valuation of**
3 **that portion of the Levy property was incorrect or imprudent?**

4 **A.** No. Mr. Small does not conclude that PEF was incorrect or imprudent. He
5 simply refers to two alternatives to PEF’s valuation method that PEF considered
6 and rejected and notes that there are different ways to value the land. However,
7 he does not conclude that either of these alternative methods was more
8 appropriate than the valuation method PEF used.

9
10 **Q. What did the Company decide to do with respect to the Lybass property?**

11 **A.** As explained in my direct testimony, filed April 22, 2008, the Company
12 purchased the Lybass property because part of it was needed for the Levy
13 project. This was about 314 acres. The remainder (1,845 acres) is being
14 held for future use. The land will provide an access road from SR 19 to the
15 nuclear units and access to the barge canal (94 acres), provide transmission
16 right of way (220 acres) and the remainder will be Held for Future Use
17 (1,845 acres). Pursuant to applicable Code of Federal Regulation (CFR)
18 requirements, the Company is required to place a value on the Lybass
19 property to be Held for Future Use and allocate the appropriate portion to
20 the Levy project.

21
22 **Q. What method did the Company utilize to make this valuation and allocation**
23 **and why?**

1 A. The purchase price for the Lybass property is \$39.1 million (\$18,103/acre) plus
2 closing costs for a total of \$40.4 million. The FERC, Code of Federal Regulation
3 (CFR) Electric Plant Instruction No. 7 Land and Land Rights (G), requires
4 “When the purchase of land for electric operations requires the purchase of more
5 land than needed for such purposes, the charge to the specific land account shall
6 be based upon the cost of the land purchased, less the fair market value of that
7 portion of the land which is not to be used in utility operations. The portion of
8 the cost measured by the fair market value of the land not to be used shall be
9 included in account 105, Electric Plant Held for Future Use, or account 121,
10 Nonutility Property, as appropriate.” Based on this guidance, the portion of the
11 acquisition costs to be assigned to land held for future use is based on the fair
12 market value of that portion of the land which is not used in utility operations. In
13 this case the acreage of the land acquired that will not be used for the Levy
14 nuclear project was determined to be 1,845 acres of 2,159 acres. The fair value
15 of this land was based on several considerations including:

- 16 • The fair value of the recently acquired Greenfield site (the Rayonier
17 property) in September of 2007;
- 18 • Recognition that the fair value of the land acquired after the acquisition of
19 the Rayonier property was influenced by our announced intentions to
20 consider this area for site development for potential nuclear plant
21 construction; and
- 22 • The assessment of the likely outcome of condemnation proceedings to
23 acquire only the land needed to support the Levy project.

24 Ultimately we considered the use of the acquisition costs of the recently acquired
25 Rayonier property to be the most appropriate for valuing the land acquired that
26 would be held for future use. When acquiring the Rayonier property, PEF
27 maintained its anonymity by utilizing a third-party representative, who acted on
28 PEF’s behalf. Because of our approach to acquire the Rayonier property, the
29 value was not influenced by an announced intended use for the site, as was the
30 Lybass land acquisition. Using the Rayonier price would more properly assign

1 the impact of the costs of acquiring the Lybass land after the Rayonier property
2 to the Levy project. Furthermore, the use of this value would result in an
3 allocation of costs to the Levy project that would be consistent with the likely
4 expected outcome of a condemnation proceeding to acquire just the land to be
5 used for the Levy project, estimated to be between \$[REDACTED]. The use
6 of the Rayonier property as a basis for the fair value of the land held for future
7 use resulted in an allocation of \$27.7M to land held for future use and \$12.7M
8 allocated to the Levy project. I consider this method appropriate under the
9 circumstances and consistent with the CFR guidance on land cost allocations.

10
11 **Q. Did PEF consider alternative methods of valuing the Lybass land?**

12 **A.** Yes, PEF considered each of the two alternatives raised by Mr. Small in his
13 audit. Based on these alternatives, the Levy project would have been charged
14 \$7.0 million or \$10.4 million, respectively (see table illustrated below).
15 However, based on sound accounting principles, PEF rejected the use of these
16 alternatives.

1

TABLE SUMMARIZING METHODOLOGIES

(\$-amounts in millions, except per acre amounts)

	PEF Preferred Approach	Alternative 1	Alternative 2
Property	Rayonier	Lybass	Combined
Fair value	\$ 46.6	\$ 39.1	\$ 85.7
Acreage purchased	3,105	2,159	5,264
(a) Fair value per acre (before closing costs)	\$ 15,000	\$ 18,103	\$ 16,274
(b) Acreage of Land held for Future use	1,845	1,845	1,845
(a) X (b) Land Held For Future Use	\$ 27.7	\$ 33.4	\$ 30.0
Levy project – (314 acres) (1)	\$ 12.7	\$ 7.0	\$ 10.4
Purchase Price – Lybass land (2,159 acres)	\$ 40.4	\$ 40.4	\$ 40.4

(1) The Company's assessment of the value of the land to be used as part of the Levy project resulting from a condemnation proceeding was a range of \$ [REDACTED] million

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4

Q. What is the first alternative method for valuation?

5

A. The first alternative method for valuation considered was to assign value on a prorata basis based on the purchase price of the Lybass land. Accordingly, Land Held for Future Use would be valued by multiplying the acreage to be held for future use of 1,845 times the average cost per acre of the Lybass property of \$18,103 (excluding closing costs). The result using this method would be to assign \$33.4 million to Land Held for Future Use. This value is subtracted from the total Lybass purchase price of \$40.4 million to result in a value assigned to the Levy project of \$7.0 million.

10

11

12

1 **Q. Why was this methodology rejected?**

2 **A.** This method was rejected for several reasons. First, it does not take into
3 consideration the market value of the most recently purchased Greenfield site,
4 the Rayonier site. As such this method overstates the fair value of the land held
5 for future use as it makes no adjustment to the fair value for any impact of the
6 timing of the acquisition of the Rayonier property or our announced intentions to
7 consider this area for site development for potential nuclear plant construction.
8 Additionally, the value ultimately assigned by this method to Levy was below
9 the range of our assessment of possible outcomes of the condemnation process,
10 should PEF have chosen this path to acquire the land.

11
12 **Q. What is the second alternative method for valuation?**

13 **A.** The second alternative method for valuation considered was to utilize an
14 average of the combined purchase price of the Rayonier and Lybass properties.
15 This method sums the purchase price excluding closing costs of the Rayonier
16 (\$46.6M) and Lybass purchases (\$39.1M) divided by the total acreage
17 purchased of 5,264 (3,105 Rayonier + 2,159 Lybass) resulting in a value of
18 \$16,274 per acre. Accordingly, Land Held For Future use would be valued by
19 multiplying the acreage to be held for future use of 1,845 times the average cost
20 per acre of the combined Rayonier and Lybass property of \$16,274. The result
21 using this method would be to assign \$30 million to Land Held for Future Use.
22 This value is subtracted from the total Lybass purchase price of \$40.4 million to
23 result in a value assigned to the Levy project of \$10.4 million.

24

1 **Q. Why was this methodology rejected?**

2 **A.** This method was rejected for several reasons. First this method overstates the
3 fair value of the land held for future use. While it makes some adjustment to the
4 fair value for impact of the timing of the acquisition of the Rayonier property or
5 our announced intentions to consider this area for site development for potential
6 nuclear plant construction, it does not fully reflect the impact as the use of the
7 Rayonier property value. Additionally, the value ultimately assigned by this
8 method to Levy was at approximately [REDACTED]
9 [REDACTED], should PEF
10 have chosen this path to acquire the land. We considered it more likely the
11 expected outcome of a condemnation proceeding would be [REDACTED]

12 [REDACTED]
13
14 **Q. Does anything Mr. Small mentions in his audit finding cause PEF to**
15 **reconsider the prudence of its decision to allocate the Lybass land in the**
16 **manner it chose?**

17 **A.** No. In fact, Mr. Small simply pointed out alternatives that PEF considered and
18 rejected, as described above, when evaluating how to make this allocation.
19 PEF's method is the fair and prudent method to make this valuation under the
20 circumstances, pursuant to the applicable accounting regulations.

21
22 **Q. Does this conclude your testimony?**

23 **A.** Yes, it does.
24

1 CHAIRMAN CARTER: Okay. Thank you.

2 Ms. Bennett?

3 MS. BENNETT: I believe that concludes the
4 case of Progress Energy Florida, and we would be ready
5 to begin with Florida Power & Light when the Commission
6 is ready to do so.

7 CHAIRMAN CARTER: Let's do this. Let's
8 give --

9 COMMISSIONER EDGAR: Can we take a break?

10 CHAIRMAN CARTER: Oh, one second.

11 Commissioner Edgar.

12 COMMISSIONER EDGAR: I'm sorry, Mr. Chairman.
13 This moved a little quicker than I was expecting, and I
14 left some of my documents for the FPL case up in my
15 office. Would it possible to take a five-minute break
16 before we move into the next --

17 CHAIRMAN CARTER: Yes. We're going to need --
18 staff is going to need to change out too, so let's make
19 it -- let's come back at 20 of by this clock to my
20 right. That's this one over here. They're not exactly
21 on the same time. That way, we'll give staff time to
22 change out, give the court reporter a break, and give
23 the parties an opportunity to change.

24 Thank you. We are adjourned on the Progress
25 Energy case.

1 (Short recess.)

2 (Transcript continues in sequence in

3 Volume 3.)

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CERTIFICATE OF REPORTER

STATE OF FLORIDA:

COUNTY OF LEON:

I, MARY ALLEN NEEL, Registered Professional Reporter, do hereby certify that the foregoing proceedings were taken before me at the time and place therein designated; that my shorthand notes were thereafter translated under my supervision; and the foregoing pages numbered 167 through 368 are a true and correct record of the aforesaid proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor relative or employee of such attorney or counsel, or financially interested in the foregoing action.

DATED THIS 12th day of September, 2008.


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