

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

**In re: Petition to Establish
Discovery Docket Regarding
Actual and Projected Costs for
Levy Nuclear Project, by Progress
Energy Florida, Inc.**

DOCKET NO. 080149

Submitted for filing:
July 9, 2008

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

**ON BEHALF OF
PROGRESS ENERGY FLORIDA**

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**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**

DOCUMENT NUMBER-DATE

05911 JUL -9 8

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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.

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

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

Q. Does this conclude your testimony?

A. Yes, it does.