BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. **NOTIFIC** Submitted for filing: March 11, 2008

TESTIMONY OF JAVIER PORTUONDO ON BEHALF OF PROGRESS ENERGY FLORIDA

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FPSC-COMMISSION CLERK

IN RE: PETITION FOR DETERMINATION OF NEED FOR LEVY UNITS 1 AND 2 NUCLEAR POWER PLANTS

| FPSC DOCKET | NO. | |
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DIRECT TESTIMONY OF JAVIER PORTUONDO

I. INTRODUCTION AND QUALIFICATIONS 1 2 Q. Please state your name and business address. My name is Javier J. Portuondo. My business address is 410 South Wilmington Street, 3 A. 4 Raleigh, NC 27601. 5 By whom are you employed? 6 Q. I am employed by Progress Energy Service Company, LLC. 7 A. 8 9 Q. What is your position with Progress Energy Services Company? 10 A. I am the Director of Regulatory Planning. 11 Q. 12 Please describe your duties as Director of Regulatory Planning. 13 I am responsible for regulatory planning, cost recovery and pricing functions for both A. 14 Progress Energy Florida, Inc. ("PEF" or the "Company") and Progress Energy Carolinas, 15 Inc. ("PEC"). These responsibilities include: cost of service analysis; regulatory financial 16 reports; rate and tariff development and administration; analysis of state, federal and local 17 regulations and their impact on PEC and PEF; planning, coordination and execution of 18 general rate case proceedings as necessary; and consultant to business units of both 19 utilities on proper rate making and regulatory compliance.

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- Exhibit No. ___ (JP-1), which provides a summary of the estimated first 12 months base rate bill impact for Levy Unit 1, Levy Unit 2, and associated transmission facilities as they go in-service.
- Exhibit No. ___ (JP-2), which provides a summary of the estimated revenue requirements to be recovered through the CCRC for the period 2009-2017 per Rule 25-6.0423, F.A.C.
- Exhibit No. (JP-3), which provides an estimate of the expected costs associated with
 Site Selection & Preconstruction, Construction, and Carrying Costs for Levy Unit 1,
 Levy Unit 2, and the associated transmission facilities.
 These exhibits are true and accurate.

Q. Please summarize your testimony.

A. Levy Unit 1 is expected to go in service June 1, 2016 and has estimated revenue requirements of approximately \$1.1 billion for the first 12 months of operation. Levy Unit 2 is expected to go in service June 1, 2017 and has estimated revenue requirements of approximately \$805 million for the first 12 months of operation. The associated transmission assets have an estimated-final in service date of June 1, 2015 (but given the nature of Levy transmission projects, it is expected that we will have various commercial in-service dates throughout the construction phase), and have estimated revenue requirements of approximately \$324 million for the first 12 months of operation.

The current, non-binding, estimate of project costs includes approximately \$25 million of site selection costs, \$893 million of preconstruction costs, \$12 billion of construction costs, and \$3.9 billion of carrying costs exclusive of tax gross up and carrying cost associated with deferred taxes. The carrying cost PEF will collect from

customers through the CCRC prior to the units being placed commercially in-service will include a return on the construction costs as well as a return on any deferred tax asset that arises over the life of the project. The carrying costs will be calculated using PEF's pretax Allowance for Funds Used During Construction ("AFUDC") rate as provided in section (5)(b)2 of Rule 25-6.0423, F.A.C.. PEF will also seek recovery of incremental Operating and Maintenance ("O&M") costs throughout the construction of the plants consistent with the Rule.

The impact to customer bills when Levy Unit 1 and Levy Unit 2 go in service will

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be partially offset by associated reductions in the cost for fuel and environmental compliance as compared to operating without the added nuclear capacity. The CCRC rate will also decrease by the carrying cost associated with the Construction Work in Progress ("CWIP") balance once the plants go in service. For example, with Levy Unit 1 we estimate that the base retail revenue requirements for the first 12 months of service will be \$1.1 billion. A large portion of this revenue requirement is associated with the return on the construction capital investment that has been collected through the CCRC prior to the Unit being placed in-service. The retail revenue requirements associated with Unit 1 in 2015 (the last full year before Unit 1 is placed in service), it assumes a carrying cost of approximately \$693 million. Once the unit goes into service, this carrying cost will be part of the return portion of the base rate increase. This illustrates the point that although base revenue requirements will increase by approximately \$1.1 billion once Unit 1 goes in service, the total incremental rate impact will be significantly less due to the simultaneous decrease in the CCRC revenue requirements. We expect to see additional benefits to total rate impacts due to the displacement of fossil fuel and

purchased power with nuclear fuel as well as potential reductions in environmental compliance costs. We expect similar offsets for Unit 2. These offsets, along with the other recovery provisions in Rule 25-6.0423, F.A.C. will help reduce the rate increases as these plants go in service.

Q.

A.

III. TOTAL PROJECT COSTS AND REVENUE REQUIREMENTS

- What is the estimated total projected cost for both the nuclear generating facilities and the associated transmission facilities and what are the projected in-service dates?
- PEF is currently estimating to spend \$13 billion, before Carrying Cost/AFUDC, to construct the Levy nuclear power plants, including associated transmission facilities. This estimate includes approximately \$10.5 billion for Levy Units 1 and 2 nuclear generating plants, and approximately \$2.5 billion for the associated transmission facilities. Carrying Cost/AFUDC is expected to amount to approximately \$3.9 billion for both Units 1 and 2 and the associated transmission facilities. This amount represents the carrying cost before any gross up for taxes on a system basis associated with the CWIP balance. It does not include any return on deferred tax balances, incremental O&M, or other tax impacts. The projected in-service date for Levy Unit 1 is June 2016. The projected in-service date for Levy Unit 2 is June 2017. For estimated cost purposes, the projected in-service of associated transmission facilities is June 2015, but given the nature of this portion of the Levy project some assets are expected to be commercially in service at various times throughout the construction period.

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|--------------|------|----|--|
| - | 1 | Q. | Please provide the revenue requirements upon the commercial in-service date fo |
| | 2 | | each phase of the generation and transmission projects. |
| - | 3 | A. | Exhibit No(JP-1) shows the first 12 months estimated revenue requirements for Levy |
| - | 4 | | Unit 1, Levy Unit 2, and the associated transmission facilities as well as the estimated in- |
| | 5 | | service dates. For the purposes of estimating these revenue requirements it has been |
| • | 6 | | assumed that all assets associated with the transmission project go in-service in June |
| - | 7 | | 2015. As noted previously, given the nature of the transmission projects some assets are |
| | 8 | | expected to be commercially in service at various times throughout the construction |
| - | 9 | | period. This will result in more frequent increases in base rates than has been presented |
| - | 10 | | in Exhibit No(JP-1) consistent with Commission Rule 25-6.0423, F.A.C.(5)(c). |
| | 11 | | |
| - | 12 | | IV. IMPACT TO CUSTOMERS BILLS |
| _ | 13 | Q. | What are the total revenue requirements expected to be recovered through the |
| | 14 | | CCRC from 2009-2017 relating to the project? |
| - | 15 | A. | As can be seen in Exhibit JP-2, the total revenue requirements expected to be recovered |
| - | 16 . | | through CCRC from 2009-2017 are estimated to be approximately \$6.1 billion. Of this, |
| | 17 | | approximately \$5.3 billion are project carrying costs and approximately \$794 million are |
| - | 18 | | site selection/preconstruction costs. Once the assets are placed commercially in service |
| _ | 19 | | the establishment of the revenue requirements included in base rates will be consistent |
| | 20 | | with the provisions of Florida Statute Section 366.93 and Commission Rule 25-6.0423. |
| - | 21 | | |
| . | 22 | Q. | How were the carrying costs to be collected through the CCRC estimated? |

The carrying cost on CWIP was calculated by applying the approved carrying cost rate 1 A. per Rule 25-6.0423 to the estimated average balance in CWIP each year. The carrying 2 cost on the defered tax balance was calculated by applying the approved carrying cost 3 rate to the average deferred tax balance associated with the project by year. 4 5 Q. What will tend to impact the actual carrying cost that may differ from current 6 7 assumptions? There are several factors that will impact the actual carrying costs of the project. As with 8 A. 9 all projects, differences to current projections in timing or amount of expenditures will have a significant impact on the final carrying charges that are collected from the 10 11 customer. Differences between actual in service dates and estimated in service dates will also have an impact. As discussed in previous sections of this testimony, one area 12 13 where simplifying assumptions have been made is in the in-service dates of the 14 transmission projects. It is likely that there will be more than one in service date 15 associated with the transmission required for Levy. At this stage of the project PEF 16 doesn't have enough information to be able to segregate project components down with any level of accuracy. To the extent portions of the transmission project go in service 17 18 earlier than the assumed June 2015 date, carrying costs could decrease. This scenario 19 could also reduce the deferred tax balance faster than is currently being modeled which 20 would reduce the carrying cost associated with this part of the project 21 22 Q. What is your current estimate of the impact on an average residential customer bill 23 while the plants are under construction?

| 1 | Α. | The estimated impact on an average residential customer bill is expected to range from |
|---|----|--|
| 2 | | \$6.43 in 2009 to \$24.75 in 2015, per 1000 KWh. This estimated price impact assumes |
| 3 | | the recovery of the site selection and pre-construction costs while the plants are under |
| 4 | | construction, the carrying costs on the construction costs, as well as the carrying costs on |
| 5 | | the deferred tax asset. Exhibit No(JP-2) provides further details at the estimated |
| 6 | | customer impact on a yearly basis. |
| 7 | | |
| Q | _ | What is your current estimate of the impact on average residential customer has |

Q. What is your current estimate of the impact on average residential customer base rates once the plants are placed commercially in service?

A.

Exhibit No.__(JP-1) provides the estimated revenue requirements and the corresponding levelized base rate increase per 1000 KWh on the residential bill upon the in-service dates of the generation and transmission assets. By the time the plants are placed commercially in service, PEF will have already recovered the preconstruction and carrying costs on the construction balance, reducing the book basis that would have otherwise been recorded as a cost of construction for rate base setting purposes. This accelerated recovery will reduce the overall customer price impact once the plants are placed commercially in service. The total customer bill impact will also include offsets due to reduced fuel and environmental costs as compared to operating without the additional nuclear generating capacity. Additionally, as discussed previously, the component of return that was previously being recovered through the CCRC will move to base rates. This will result in decreases in the CCRC rate as the assets are brought online.

V. NUCLEAR COST RECOVERY RULE

- Q. Briefly explain the rule and process by which PEF will seek cost recovery for the costs associated with the Levy nuclear plants.
- A. Florida Statute Section 366.93 and Commission Rule 25-6.0423, F.A.C. establishes alternate recovery mechanisms for nuclear generation along with more frequent determinations of prudence associated with these expenditures. Annually, PEF will present actual costs for the prior year, actual and estimated costs for the current year, and projected costs for the subsequent year for review by the Commission and interveners. Prior to October 1st of each year the Commission will conduct a hearing and determine the prudence of actual costs as well as the reasonableness of projected costs. The provisions of the rule provide for recovery of preconstruction costs and the carrying costs on construction through the CCRC clause until the asset go into service. These costs will be recovered as provided for in Rule 25-6.0423, F.A.C. and as further described below. PEF is not requesting cost recovery as a part of this need determination, but it is providing information as to those costs for informational purposes.

Q. What types of costs will be included in site selection and pre-construction costs and what is the total estimated cost?

A. Section (2)(f) of Rule 25-6.0423 defines site selection and pre-construction costs as follows: "Site selection and preconstruction costs include, but are not limited to: any and all costs associated with preparing, reviewing, and defending a Combined Operating License (COL) application for a nuclear power plant; costs associated with site and technology selection; costs of engineering, designing, and permitting the nuclear power

plant; costs of clearing, grading, and excavation; and costs of on-site construction facilities (i.e. construction offices, warehouses, etc.)."

Site selection costs are further identified as those costs that meet the above definition and are expended prior to the selection of a site. Pursuant to section (2)(c) of Rule 25-6.0423, a site is deemed to be selected once a need petition is filed. PEF expects to incur approximately \$25 million in site selection costs. The majority of these costs are expected to be associated with COLA preparation and site studies.

Pre-construction costs are further identified as those costs that meet the definition above that are expended after selection of the site and up to the date site clearing is complete. PEF currently expects to incur approximately \$893 million in pre-construction costs. Some examples of costs we expect to be associated with pre-construction are: COLA preparation, engineering, surveying, site clearing, site grading, access roads, parking, and drainage costs.

Both site selection and pre-construction costs will include transmission costs associated with the Levy project. These will largely consist of engineering, survey, and road and right-of-way clearing costs. The estimated transmission site selection and pre-construction costs are included in the above numbers.

As discussed more fully in Mr. Danny Roderick's and Mr. Dale Oliver's testimony, these costs are estimates based on the best information available to the Company at the time of this filing.

Q. How will the costs of this project be recovered?

A. The method of recovery will be consistent with sections (4) and (5) of Commission Rule 25-6.0423.

- Q. What is the appropriate rate to use in estimating the carrying costs on the project?
- A. As stated in section (5)(b)1. of Rule 25-6.0423, "For nuclear power plant need petitions submitted on or before December 31, 2010, the associated carrying costs shall be computed based on the pretax AFUDC rate in effect on June 19, 2006." PEF will estimate the carrying costs using the annual pretax allowance for funds used during construction (AFUDC) rate of 13.13%, based on the aftertax AFUDC rate of 8.848% which was approved in Docket No. 050078-EI, Order No. PSC-05-0945-S-EI.

A.

- Q. What are the income tax costs associated with the nuclear cost recovery rule?
 - For tax purposes, all revenue collected from the customer for site selection and preconstruction will be included in taxable income when it is received. Primarily all of the expenses for site selection and preconstruction will be capitalized as part of the cost of the plant and will then be deducted for tax purposes as depreciation expense over the tax life of the plant. For tax purposes, the Company is also required to capitalize the interest associated with the construction as part of the cost of the plant and this will be deducted for tax purposes as depreciation expense over the life of the plant. These timing differences will create a deferred tax asset on the Company's books. In other words, the Company will have paid taxes for which it is entitled to a future tax deduction. As the carrying costs on these taxes will be part of the cost of construction, the Company is entitled to recover these carrying costs through the Nuclear Cost Recovery mechanism.

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| | 2 | Q. | How will the Company recover the carrying costs on any deferred taxes that results |
| • | 3 | | from the early recovery of the preconstruction expenses and the carrying costs on |
| - | 4 | | construction? |
| _ | 5 | A. | Consistent with the intent of the legislation to afford timely cost recovery, PEF will |
| | 6 | | include recovery of the carrying charge on the deferred tax balance through the CCRC |
| - | 7 | | construction phase of the Levy nuclear project. PEF will have a deferred tax asset that |
| | 8 | | will be long term in nature and will require capital funding for which PEF is not being |
| - | 9 | | compensated in base rates. |
| | 10 | | |
| _ | 11 | | VI. CONCLUSION |
| _ | 12 | Q. | Does this conclude your direct testimony? |
| - | 13 | A. | Yes. |
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Levy Nuclear Project

In-service Estimated Base Rate Retail Revenue Requirement and Residential Bill Impacts (1st 12 Months)

| r en la companya da sa Ayun ada da da da sa | \$100 to | Levy Unit 1 | gregoria. | |
|--|----------|--------------|-------------------------|-----------|
| Estimated in | -serv | ice date | Jun | e 1, 2016 |
| | Re | tall Revenue | | |
| | Re | | lential Rate act/MWh | |
| Base Rate | \$ | 1,134,645 | \$ | 26.17 |

| Estimated i | in-serv | ice date | Jun | e 1, 2017 |
|-------------|---------|--------------------------------------|-----|------------------------|
| | | all Revenue quirements (000's) | | ential Rate act/MWh |
| Base Rate | \$ | 804,513 | \$ | 18.11 |

| | | Transmissio | 11、100万里克里克 | Sec. 22-7-72 |
|--------------|---------|--------------------------------------|-------------|--------------|
| Estimated in | n-servi | ice date | June | 1, 2015 |
| | Rec | ail Revenue juirements (000's) | | ential Rate |
| Base Rate | \$ | 323,625 | \$ | 7.64 |

Notes:

(2) Jurisdictional factors based on commission order PSC- 05-0945-S-EI, in docket 050078-EI

⁽¹⁾ It is expected that there will be more than one in-service date associated with the transmission project and possibly the plants as well. At this time a simplifying assumption is being made that all assets go in-service together due to the early stage of the project and lack of more definitive information being available at this time.



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Levy Nuclear Project
Estimated Revenue Requirements Recoverable Through CCRC (000's)
Years 2009-2017

| Levy Unit 1 Retail Revenue Requirements | | 2009 | | 2010 | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | Total |
|--|-----------|---------|----|---------|---------------|------|---------|----|---------|----|-----------|-------|------------------|----|--------------------|----|---------|-----------|------------------------|
| Site Selection & Pre-construction | | 149,062 | | 209,121 | 152,142 | | | | - | | | | - | | - | | | | 510,325 |
| Carrying Costs (Note 1) | | 66,529 | | 98,899 | 195,465 | | 318,726 | | 455,540 | | 591,530 | | 692,996 | | 309,903 309,903 | | | | 2,729,587 3,239,912 |
| Total Levy Unit 1 | | 215,591 | | 308,019 | 347,607 | | 318,726 | | 455,540 | | 591,530 | ***** | 692,996 | | 309,903 | | | | 0,200,012 |
| Levy Unit 2 Retail Revenue Requirements | | | | | | | | | | | | | | | | | | | |
| • | | 2009 | | 2010 | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | |
| Site Selection & Pre-construction | | • | | 296 | 74,167 | | 6,198 | | 1,764 | | | | <u>.</u> | | - | | | | 82,425 |
| Carrying Costs (Note 1) | | 13,409 | | 45,626 | 92,232 | | 159,713 | | 257,114 | | 356,556 | | 436,308 | | 492,770 | | 158,133 | | 2,011,861 |
| Total Levy Unit 2 | <u>\$</u> | 13,409 | \$ | 45,923 | \$ 166,399 | \$ | 165,911 | \$ | 258,878 | \$ | 356,556 | \$ | 436,308 | -5 | 492,770 | \$ | 158,133 | <u> </u> | 2,094,286 |
| Transmission Retail Revenue Requirements | | | | | | | | | **** | | | | | | | | 0047 | | |
| | | 2009 | | 2010 | 2011 | | 2012 | | 2013 | | 2014 | | 2015 | | 2016 | | 2017 | | 200,853 |
| Site Selection & Pre-construction | | 33,174 | | 19,646 | 71,748 | | 19,826 | | 36,373 | | 17,124 | | 2,963 | | | | | | 569,470 |
| Carrying Costs (Note 1) | _ | 10,515 | _ | 23,892 | 52,927 | _ | 94,065 | • | 136,296 | _ | 168,263 | • | 83,513 86,475 | \$ | | • | | • | 770,323 |
| Total Transmission | Ş | 43,689 | \$ | 43,537 | \$ 124,675 | Þ | 113,890 | 3 | 172,669 | \$ | 185,387 | \$ | 00,473 | φ. | | Ψ | | Ψ | 770,323 |
| | | | | | | | | | | | | | | | | | | | |
| Site Selection & Pre-construction | | 182,236 | | 229,063 | 298.057 | | 26,023 | | 38,137 | | 17,124 | | 2,963 | | _ | | | | 793,603 |
| Carrying Costs (Note 1) | | 90,452 | | 168,417 | 340,624 | | 572,504 | | 848,950 | | 1,116,349 | | 1,212,817 | | 802,672 | | 158,133 | | 5,310,918 |
| Total Estimated Retail Revenue | | | | | | | | | | | | | | | | | | | |
| Requirements Recoverable Through | | | | | | | | | | | | | | _ | | _ | | _ | |
| CCRC | \$ | 272,688 | \$ | 397,479 | \$ 638,682 | _\$_ | 598,527 | \$ | 887,087 | \$ | 1,133,473 | \$_ | 1,215,779 | \$ | 802,672 | 3 | 158,133 | \$ | 6,104,521 |
| Total Estimated Retail Rate Impact | S | 6.43 | \$ | 9.16 | 14,33 | \$ | 13.09 | | | \$ | 23.61 | | 24.75 | | 15.98 | | 3,07 | | |

Note 1: Carrying Costs include the estimated carrying costs on construction balance as well as the carrying costs on the deferred tax balance.



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Levy Nuclear Project Estimated Cost Summary (System) (000's)

| | 4. | Site Selection & Preconstruction | Sonstruction | 4.0 TX: 1.0 数1.7 | AFUDG (1) | ricini. National | an a | Tota | Project Costs |
|--------------|----|----------------------------------|------------------|---------------------|-----------|---------------------|--|------|---------------|
| Levy Unit 1 | \$ | 544,347 | \$ 5,795,080 | \$ | 1,813,742 | \$ | 162,000 | \$ | 8,315,169 |
| Levy Unit 2 | \$ | 87,920 | \$ 4,088,750 | \$ | 1,431,335 | \$ | 165,000 | \$ | 5,773,005 |
| Transmission | \$ | 284,506 | \$ 2,162,335 | \$ | 631,159 | \$ | - | \$ | 3,078,000 |
| Total | \$ | 916,773 | \$ 12,046,165 | \$ | 3,876,236 | \$ | 327,000 | \$ | 17,166,174 |

Notes:

(1) AFUDC includes amounts collected from the retail ratepayer before tax gross up (part of carrying cost) as well as the wholesale portion of AFUDC.