## 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:
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# SUPPLEMENTAL DIRECT TESTIMONY OF DALE OLIVER IN SUPPORT OF SITE SELECTION COSTS, ACTUAL/ESTIMATED AND PROJECTED COSTS

**ON BEHALF OF**
***PROGRESS ENERGY FLORIDA***

R. ALEXANDER GLENN
JOHN BURNETT
PROGRESS ENERGY SERVICE COMPANY, LLC
P.O. Box 14042
St. Petersburg, Florida 33733
Telephone: (727) 820-5180
Facsimile: (727) 820-5519

JAMES MICHAEL WALLS
Florida Bar No. 706272
DIANNE M. TRIPLETT
Florida Bar No. 0872431
CARLTON FIELDS, P.A.
Post Office Box 3239
Tampa, FL 33601
Telephone: (813) 223-7000
Telecopier: (813) 229-4133

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

**FPSC DOCKET NO. 080149**

**SUPPLEMENTAL DIRECT TESTIMONY OF DALE OLIVER IN SUPPORT OF SITE SELECTION COSTS, ACTUAL/ESTIMATED AND PROJECTED COSTS**

## I. INTRODUCTION AND SCOPE OF TESTIMONY

**Q. Please state your name.**

A. My name is Dale Oliver.

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

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

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

A. I am supplementing my direct testimony to provide additional information regarding the Company's site selection, actual/estimated, and projected costs in the Nuclear Filing Requirements ("NFRs") filed on May 1, 2008. Rather than filing two sets of supplemental testimonies, this one testimony will supplement both of my testimonies filed May 1. Because my May 1 actual/estimated and projected testimony provided information regarding the Company's transmission contracts, I will not be including information

as to those contracts in this testimony. I will also provide supplemental testimony regarding PEF's reasonable and prudent project management policies and procedures, designed to manage transmission project costs and maintain the project schedule.

## II. SITE SELECTION COSTS INCURRED PRIOR TO MARCH 11, 2008 FOR LEVY NUCLEAR PLANT

**Q. Has the Company incurred transmission-related site selection costs for the Levy Nuclear Plant?**

A. Yes, PEF incurred site selection costs for transmission in 2007 and 2008. As reflected in Schedule SS-6 of Ms. Cross' Exhibit LC-4, the 2007 site selection costs are broken down into three categories: Line Engineering $2 million ("M"); Substation Engineering $171 thousand ("K"); and Other $866K.

As reflected in Schedule SS-6 of Ms. Cross' Exhibit LC-5, the 2008 site selection costs are broken down into three categories: Line Engineering $222K; Substation Engineering $10K, and Other $685K.

**Q. For the Line Engineering costs you identified, please describe what these costs are and explain why the Company had to incur them.**

A. These costs include the conceptual engineering design costs of the transmission lines. This engineering work identified the size, type, and

general location of various options for the transmission lines necessary to incorporate the Levy nuclear power plants into the PEF transmission system and the state-wide electric grid. Identification of the size, type, and general location of various transmission line and facility options for the Levy nuclear project was necessary to perform a study to evaluate the cost, reliability, and other factors associated with selecting the most appropriate option to successfully and reliably add the Levy nuclear power plants to the PEF transmission system and the state-wide electric grid. This work also allowed the Company to determine the initial scope of the expected necessary new system lines and line upgrades to accommodate the additional power from Levy Units 1 and 2 on PEF's system.

These Line Engineering costs were incurred in 2007 and 2008 to maintain the project schedule for the 2016 in-service date of Levy Unit 1 and the 2017 in-service date of Levy Unit 2. Such work was and is necessary to identify and select the appropriate transmission corridor, and to prepare the necessary corridor and transmission line and facility information for the submission of the Combined Construction and Operating License Application ("COLA") to the Nuclear Regulatory Commission ("NRC") and the Site Certification Application ("SCA") to the Florida Department of Environmental Protection ("FDEP"). Both applications must address and generally describe the transmission corridors and the necessary transmission system facilities and upgrades for the Levy nuclear power plants. The Company submitted the SCA to

FDEP on June 2, 2008 and plans to submit the COLA to the NRC this year. The Company had to incur these costs at this time to ensure that these applications were completed and the schedule maintained so that the necessary transmission infrastructure is in place prior to the expected commercial in-service dates for the Levy units and the planned in-service dates for Levy Units 1 and 2 are met.

**Q. For the Substation Engineering costs you identified, please describe what these costs are and explain why the Company had to incur them.**

A. These costs include the conceptual engineering design for substations. This work was necessary to identify the number of substations, their general location, size, and equipment needs, required to incorporate the Levy nuclear power plants into the PEF transmission system and the state-wide electric grid under the various transmission option corridors considered.

These substation engineering costs were incurred in 2007 and 2008 to maintain the project schedule for the 2016 in-service date of Levy Unit 1 and the 2017 in-service date of Levy Unit 2. Such work was and is necessary to identify and select the appropriate substation sites, and to prepare the necessary transmission facility information for the submission of the COLA to the NRC and the SCA to the FDEP. As I explained above, both applications must address and generally describe the necessary transmission system facilities and upgrades for the Levy nuclear

power plants. The Company submitted the SCA to FDEP on June 2, 2008 and plans to submit the COLA to the NRC this year. The Company had to incur these costs at this time to ensure that these applications were timely completed and the schedule maintained so that the necessary transmission infrastructure is in place prior to the expected commercial in-service dates for the Levy units and the planned in-service dates for Levy Units 1 and 2 are met.

**Q. There are "Other" costs identified, can you please describe them and explain why the Company had to incur them?**

A. These costs include project management and related overhead and miscellaneous costs associated with planning and siting the transmission projects for the Levy Nuclear Project. To illustrate, these costs include PEF's costs under its contract with its corridor consultant to provide assistance with selecting a transmission corridor, public outreach, and obtaining necessary licensing from the NRC and the FDEP. These costs also include the work required to prepare the corridor study to identify the preferred corridors for the necessary new transmission lines. In preparing this corridor study the Company incurred costs to address and prepare findings on land use planning, design, environmental, system planning, and real estate acquisition issues. Also, the Company incurred costs working with the public and government agencies to incorporate their

comments into the corridor study and include their input in the selection of the preferred transmission corridors.

These costs were necessary to maintain the project schedule for the 2016 in-service date of Levy Unit 1 and the 2017 in-service date of Levy Unit 2. The Company has selected the transmission corridors needed to support the Levy nuclear project. Also, such costs were necessary for the transmission information that must be included in the COLA submitted to the NRC and the SCA submitted to the FDEP. As I explained above, both applications must address and generally describe the transmission corridors and the necessary transmission system facilities and upgrades for the Levy nuclear power plants. The Company had to incur these costs at this time to ensure that these applications were completed and that the schedule for the Levy nuclear project is maintained.

## III. TRANSMISSION PRECONSTRUCTION ACTIVITIES

**Q. What costs has PEF included in this filing for transmission preconstruction costs?**

A. PEF has filed actual/estimated 2008 and projected 2009 preconstruction costs for transmission for the Levy Nuclear Plant as of May 1, 2008. Schedule AE-6 of Exhibit LC-1 shows transmission preconstruction costs for 2008 actual/estimated in the following categories: Line Engineering $6M; Substation Engineering $6M; and Other, about $1M. Schedule P-6 of Exhibit LC-2 breaks down the 2009 projected transmission

preconstruction costs into the following categories: Line Engineering $13M; Substation Engineering $13M; Clearing $3M; and Other $3M.

**Q. Please describe what the projected preconstruction Line Engineering costs are and explain why the Company has to incur them.**

A. These costs include the continued conceptual and preliminary engineering design and engineering detail work for the transmission lines that will support the Levy Units and for other lines on PEF's system that must be enhanced to efficiently and effectively handle the additional power flow on the system as the result of the addition of the Levy Units. Examples of the costs are preliminary engineering work for route selection and route selection costs, including associated costs for engineering studies.

These preconstruction Line Engineering costs are necessary to complete the work for the transmission information included in the COLA and the SCA for the Levy Nuclear Project. These preconstruction costs are also necessary to maintain the project schedule, which currently calls for all transmission facilities to be designed, constructed, and operational in time for the expected commercial in-service of Levy Unit 1 in June 2016.

**Q. Please describe what the preconstruction Substation Engineering costs are and explain why the Company has to incur them.**

A. These costs include the continued conceptual and preliminary engineering design and engineering detail work for the substations required to support the Levy Units. These Substation Engineering preconstruction costs are necessary to complete the work for the transmission information included in the COLA and the SCA for the Levy Nuclear Project. These preconstruction costs are also necessary to maintain the project schedule, which currently calls for all transmission facilities to be designed, constructed, and operational in time for the expected commercial in-service of Levy Unit 1 in June 2016.

**Q. Please describe the Clearing costs and explain why the Company needs to incur them.**

A. These costs include costs associated with clearing acquired rights of way ("ROW") for the construction of the transmission lines required to support the Levy Units and the costs associated with clearing the ROWs to ensure access for transmission construction. These Clearing costs are necessary to complete the work to prepare the ROWs and easements for the transmission facilities required to support the Levy Units. These preconstruction costs are also necessary to maintain the project schedule, which currently calls for all transmission facilities to be designed, constructed, and operational in time for the expected commercial in-service of Levy Unit 1 in June 2016.

**Q. Please describe what the Other category of preconstruction costs include and explain why the Company needs to incur them.**

A. These costs include project management and related overhead and miscellaneous costs associated with planning and siting the transmission projects for the Levy Nuclear Project. Such costs include public outreach, project scheduling, and development of contracting strategies. All of these other preconstruction costs are necessary to complete the work for the transmission information included in the COLA and the SCA for the Levy Nuclear Project. These costs are also necessary to maintain the project schedule.

**Q. Please describe briefly how the transmission preconstruction cost estimates were prepared.**

A. PEF developed these Line Engineering, Substation Engineering, Clearing, and Other preconstruction cost estimates on a reasonable engineering basis, using the best available engineering and utility market information at the time, consistent with utility industry and PEF practice. These cost estimates used preliminary transmission project plans and project schedules to determine what transmission preconstruction work will be done and when it will be done to achieve the necessary project milestones and maintain the expected in-service dates for the Levy Units. The estimates in the May 1, 2008 NFRs were prepared early in the process for the Levy Nuclear Project and, as a result, they include levels of

uncertainty and are subject to change as the transmission projects and work on those projects become more developed, corridors or project sites are selected, the location of facilities within corridors and on sites are determined, clearing work is better defined, engineering work is refined, and construction begins. The preconstruction transmission cost estimates are, therefore, changing for these reasons.

## IV. TRANSMISSION CONSTRUCTION ACTIVITIES

**Q. What costs has PEF included in this filing for transmission construction costs?**

A. PEF has actual/estimated 2008 and projected 2009 Construction costs for transmission for the Levy Nuclear Plant as of May 1, 2008. Schedule AE-6 of Exhibit LC-1 shows transmission construction costs for 2008 actual/estimated in the following categories: Substation Engineering $2M; Real Estate Acquisition $3M; Substation Construction $2M; and Other $837K. Schedule P-6 of Exhibit LC-2 breaks down the 2009 projected transmission construction costs into the following categories: Line Engineering $4M; Substation Engineering $29M; Real Estate Acquisition $54M; Line Construction $7M; Substation Construction $32M; and Other $13M.

**Q. Please describe the Line Engineering construction costs and explain why the Company needs to incur them.**

A. These construction costs include the necessary engineering supervision and engineering support for the actual construction work to install transmission lines and transmission line upgrades necessary for the addition of the Levy Units to PEF's transmission system. These costs are necessary to ensure that the transmission lines and transmission line upgrades required to support the Levy Units on PEF's transmission system are installed when needed to maintain the project schedule for the 2016 in-service date of Levy 1.

**Q. Please describe what the Substation Engineering construction costs are and explain why the Company needs to incur them.**

A. These costs include the necessary engineering supervision and engineering support for the actual substation construction work required for the addition of the Levy Units to PEF's transmission system. These costs are necessary to ensure that the transmission substations required to support the Levy Units on PEF's transmission system are installed when needed to maintain the project schedule for the 2016 in-service date of Levy 1.

**Q. Please describe the Real Estate Acquisition costs and explain why the Company needs to incur them.**

A. These costs include the estimated land and ROW acquisition costs necessary for the transmission facilities to support the addition of the Levy Units to PEF's system. These costs include the siting, survey, appraisal,

title commitments, permitting, legal and related costs, ordinance review, and actual purchase costs for the land and easements necessary for the transmission facilities for the Levy Nuclear Project. These costs are necessary to ensure that the ROWs and other land upon which the transmission facilities will be located are available when needed to maintain the project schedule for the 2016 in-service date of Levy 1.

**Q. Please describe the Line Construction costs and explain why the Company needs to incur them.**

A. These costs include the contracted construction labor, the transmission poles, structures, and other material costs, equipment, and all other costs associated with actual construction of the transmission lines and transmission line upgrades. These costs are necessary to begin construction of the actual transmission lines and transmission line upgrades that are necessary to support the addition of the Levy Nuclear Units to PEF's system.

**Q. Please describe the Substation Construction costs and explain why the Company needs to incur them.**

A. These costs include construction labor, substation structures and other substation materials, substation equipment, and all other costs associated with substation, protection, and control (relay) construction. These costs are necessary to begin construction of the actual transmission substations

that are necessary to support the addition of the Levy Nuclear Units to PEF's system.

**Q. Please describe what the Other costs are and explain why the Company needs to incur them.**

A. These costs include the project management and related overhead and miscellaneous costs associated with the transmission projects for the Levy Nuclear Project. Such costs include public outreach, project scheduling, and development of contracting strategies. These other construction costs are necessary to maintain the project schedule, which currently calls for all transmission facilities to be designed, constructed, and operational in time for the expected commercial in-service of Levy Unit 1 in June 2016.

**Q. Please describe briefly how the transmission construction cost estimates were prepared.**

A. PEF developed these Line Engineering, Substation Engineering, Real Estate Acquisition, Line Construction, Substation Construction, and Other transmission construction cost estimates on a reasonable engineering basis, using the best available construction and utility market information at the time, consistent with utility industry and PEF practice. These estimates used preliminary transmission project plans and project schedules to determine what transmission construction work will be done and when it will be done to achieve the necessary project milestones and

maintain the expected in-service dates for the Levy Units. The estimates in the May 1, 2008 NFRs were prepared early in the process for the Levy Nuclear Project and, as a result, they include levels of uncertainty and are subject to change as the transmission projects and transmission work on those projects become more developed, corridors or project sites are selected, the location of facilities within corridors and on sites are determined, engineering work becomes more detailed, and construction commences. For the above reasons, the project costs will continue to change throughout the project. PEF will keep the Commission informed of these changes through the annual NFR filing process.

## V. PROJECT MANAGEMENT AND COST CONTROL OVERSIGHT

**Q. Has the Company implemented any project management or cost control oversight mechanisms for the transmission portion of the Levy Nuclear project?**

A. Yes. The Company is using numerous existing policies and procedures to ensure that the transmission costs for the Levy Nuclear project are prudently incurred and that the project remains on schedule. The transmission projects associated with the Levy Nuclear Project are subject to the same overall Company management as the generation side of the Levy Nuclear Project that is discussed in the testimony of Mr. Roderick. This is accomplished through the Company's Integrated Project Plan for the Levy Nuclear Project. Consequently, the Company's Project

Evaluation and Authorization Process, Project Governance Policy, and Project Manual apply to the transmission projects required to support the addition of the Levy nuclear units to PEF's system under the Levy Nuclear Project.

Also, the transmission projects and work for the Levy Nuclear Project comply with the Project Assurance Program Policy and the Project Assurance Program Manual, which implement procedures to identify and document key project decisions. Similarly, the Document Management System for Generation & Transmission Construction Department is used to manage the documents associated with the transmission work for the Levy Nuclear Project.

To maintain control over the transmission projects and related work, a detailed schedule is maintained and regularly updated. The schedule defines the transmission task order, specific time frame allocated to the task, and the task start and finish dates. The schedule is used to provide management with timely information necessary to make decisions related to the transmission work for the Levy Nuclear Project. The schedule also allows the Company to coordinate transmission work for the Levy Nuclear Project with internal Company departments such as engineering, construction, Energy Control, and the generating stations, among others. The schedule further serves as a link between the Company and the Company's contractors and a management tool with the outside contractors. Various levels of supporting schedules are also developed

and used throughout the course of the transmission projects for the Levy Nuclear Project.

Other corporate tools will support the management of the transmission work for the Levy Nuclear Project. The Oracle Financial Systems/Business Objects reporting tool provides monthly corporate budget comparisons to actual cost information, as well as detailed transaction information. This information, along with other financial accounting data, will allow us to regularly monitor the costs of the transmission work compared to the budget and make decisions accordingly to see to it that the costs incurred are reasonable and prudent for the work obtained. Similarly, we will use the PassPort system under the Contract Development and Administration Policy to manage contracts for transmission work on the Levy Nuclear Project. This system routes contracts for approval, including contract amendments and work authorizations, and facilitates routing and approval of contractor invoices and payments.

**Q. What procedures are used by PEF to ensure the reasonable and prudent selection of contractors and vendors for the transmission projects for the Levy Units?**

A. PEF typically uses bidding procedures, through Requests for Proposals ("RFP"), to ensure that the chosen contractors and vendors provide the best value for PEF's customers. RFPs cannot always be used, however, to

obtain services or materials. When deciding to use a sole source contractor or vendor, PEF provides sole source justifications for not doing an RFP for the particular work or material. When PEF contracts with sole source contractors or vendors PEF further ensures that the contracts contain reasonable and prudent contract terms with adequate pricing provisions (including fixed price and/or firm price escalated according to indexes, where possible).

Sole source contractor or vendor relationships are sometimes necessary to provide the services or materials at all or at the most reasonable cost under the circumstance. To illustrate, in some instances, the particular contractor or vendor has particular experience with the plant or the work required, thus making it advantageous for that vendor to accomplish the work.

**Q. Does PEF have any mechanisms in place to ensure that the policies and procedures described above are effective?**

A. Yes, PEF uses internal auditing to verify that its program management and cost oversight controls are effective. These internal audits occur regularly for large projects like the Levy transmission projects. Recommendations and results from Internal Audit reviews are provided to management as well as members of the project team for continuous improvement.

Also, the Levy Integrated Nuclear Committee ("LINC") reviews key milestones, cost and emergent issue information related to both the

Generation and Transmission portions of the project on a regular basis. This Committee was chartered by Senior Management and the PEF Board to manage all aspects of planning and execution of the Levy Nuclear Project, with clear accountability in functional areas along each phase from design to commercial operation. The LINC serves as a means to ensure proper coordination and appropriate documentation of activities that cross multiple organizational boundaries.

Additionally, monthly summary report information is provided to members of Progress Energy Senior Management that highlights financial, schedule, and current issue information. This information is provided in summary format to the Company's Board of Directors on a quarterly basis.

On-going funding and project review for the transmission projects in the Levy Nuclear Project is prepared on a periodic basis for members of Senior Management and presented as an Integrated Project Plan ("IPP") in accordance with the Company's Capital Projects guidance. Detailed project cost and schedule information is monitored regularly by the project management and cost management personnel within the functional department, and monthly reviews of the project status are presented to the Department Vice President. Finally, project assurance support personnel assigned specifically to the project are involved in all key meetings and decision-making discussions.

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

**A.** Yes, it does.