BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

PATRICIA Q. WEST

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 060007-EI

SEPTEMBER 1, 2006

Q. Please state your name and business address.

A. My name is Patricia Q. West. My business address is 100 Central Avenue, St. Petersburg, Florida, 33701.

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

A. I am employed by the Environmental Services Section of Progress Energy Service Company, LLC. ("Progress Energy" or "Company") as Manager of Competitive Commercial Operations / Energy Supply Florida. In that position I have responsibility to ensure support for the implementation of compliance strategies pertaining to regulatory requirements for power generation facilities in Florida.

Q. Have you previously filed testimony before this Commission in connection with Progress Energy Florida's Environmental Cost Recovery Clause?

A. Yes, I have.

Q. Have your duties and responsibilities remained the same since you last filed testimony in this proceeding?

A. Yes.

Q. What is the purpose of your testimony?

A. This testimony provides estimates of the costs that will be incurred in the year 2007 for environmental programs that fall within the scope of my responsibilities to support Progress Energy's power operations group. These programs include the Pipeline Integrity Management Program (Project 3), Aboveground Storage Tanks Secondary Containment Program (Project 4), Phase II Cooling Water Intake 316(b) Program (Project 6), the Integrated Air Compliance Program for the new Clean Air Interstate Rule (CAIR) and the Clean Air Mercury Rule (CAMR) (Project 7), Arsenic Groundwater Standard Program (Project 8), Underground Storage Tank Program (Project 10), as well as the Modular Cooling Tower Program (Project 11) for which the Company requested approval this year under Docket No. 060162-EI.

Q. Please identify the additional programs within your responsibility for which the Company is seeking approval.

A. In February 2006, the Company filed a petition in Docket No. 060162-EI requesting approval for the Modular Cooling Tower Program (Project 11). A revised petition was filed on July 13, 2006 seeking approval under this docket. The Modular Cooling Tower Program will allow compliance with

environmental permit requirements that limit the temperature of cooling water discharged from the Crystal River plant.

Q. What costs do you expect to incur in 2007 in connection with the Pipeline Integrity Management Program (Project 3)?

A. For 2007, we estimate that Progress Energy will incur a total $277,000 in O&M and $50,000 in capital expenditures to comply with the Pipeline Integrity Management ("PIM") regulations (49 CFR Part 195) and the Company's PIM Plan. PEF is projecting to spend $237,000 in O&M on PIM Program Administration, which includes program auditing, risk model updating, GIS development, and procedure development. In addition, we are projecting O&M costs of $40,000 and capital expenditures of $50,000 for integrity risk reduction projects. The integrity risk reduction projects include items such as: corrosion repairs, inadequate cover restoration, and pressure control upgrades.

Q. What steps is the Company taking to ensure that the level of expenditures for the Pipeline Integrity Management Program is reasonable and prudent?

A. As additional work is identified to comply with the PIM regulations, Progress Energy Florida will identify qualified suppliers of the necessary services through a competitive bidding process.

Q. What costs do you expect to incur in 2007 in connection with the Aboveground Storage Tank Secondary Containment Program (Project 4)?

A. Progress Energy is projecting to spend $1,043,360 in capital expenditures in 2007. These costs are for the double-bottoming of storage tanks and installation of some double-walled piping at the Suwannee and Bayboro Combustion Turbine sites.

Q. What steps is the Company taking to ensure that the level of expenditures for the Aboveground Storage Tank Secondary Containment Program is reasonable and prudent?

A. As additional work is identified to comply with the Aboveground Storage Tank regulations, Progress Energy Florida will identify qualified suppliers of the necessary services through a competitive bidding process.

Q. What costs do you expect to incur in 2007 in connection with the Phase II Cooling Water Intake Program (Project 6)?

A. Progress Energy is projecting to spend $1,409,057 in O&M expenditures in 2007. These costs are associated with the Comprehensive Demonstration Studies (CDS) that will be performed at the Anclote, Crystal River, and Suwannee sites. The scope of the CDS work includes: technical evaluation of study results, as well as engineering studies that will consider design, construction, installation and operational issues associated with selected compliance options.

Q. What steps is the Company taking to ensure that the level of expenditures for the Phase II Cooling Water Intake Program is reasonable and prudent?

A. As additional work is identified to comply with the Phase II Cooling Water Intake Program, Progress Energy Florida will identify qualified suppliers of the necessary services through a competitive bidding process.

Q. What costs do you expect to incur in 2007 in connection with the CAIR / CAMR Program (Project 7)?

A. PEF is projecting to spend approximately $197 Million on CAIR/CAMR compliance projects at the Crystal River and Anclote generating facilities in the year 2007. The $196 Million projected to be spent on Crystal River activities has no bearing on the ECRC recoverable balance because it is accruing AFUDC. These projects include the following:

- Anclote Unit 1 NOx Reduction Projects: Additional analysis of NOx reduction technologies is required to determine which technologies are appropriate for the Anclote units. This analysis is currently in progress, with approximately $127,000 currently budgeted to be spent in 2007 for this purpose. Installation of any technologies at Anclote Unit 1 would be expected to occur in the fall of 2008.
- Crystal River Units 4 and 5 SCR System: PEF is projecting to spend approximately $70 Million on Crystal River Unit 4 and $24 Million on Crystal River Unit 5. We will complete the design and engineering of the SCR system and its auxiliary systems. In addition, we will continue with procurement of materials and equipment and commence construction of the SCR with an expected

completion date of November 2008 for Crystal River Unit 4 and May 2009 for Crystal River Unit 5.

- Crystal River Units 4 and 5 FGD System: PEF is projecting to spend approximately $28 Million on Crystal River Unit 4 and $73 Million on Crystal River Unit 5. We will complete the design and engineering of the FGD system, its auxiliary systems, and the plant infrastructure modifications necessary to incorporate FGD operations into the existing plant. In addition, we will continue with procurement of materials and equipment, and commence construction of the FGD system and the infrastructure modifications with an expected completion date of November 2009 for Crystal River Unit 4 and May 2009 for Crystal River Unit 5.

Other projects that are required for compliance with these new rules include the following:

- Combustion Turbine Projects: To be in compliance with CAIR 44 emission sources associated with 31 of PEF's combustion turbine units must install new Predictive Emission Monitoring Systems. In 2007, computer software upgrades will be performed, along with required testing and certification of the new systems. The capital cost for this work is estimated to be $1,000,944.

- Mercury Continuous Emissions Monitoring Systems (CEMS): PEF is projecting to spend $250,000 in O&M to install mercury monitoring ports on the stacks of Crystal River Units 1, 2, and 5.

These ports are necessary for the future installation of the mercury monitoring probes. The work will be performed during planned outages.

Q. What steps is the Company taking to ensure that the level of expenditures for the CAIR / CAMR Program is reasonable and prudent?

A. An initial screening of technology and fuel choice options was performed by the Company's Construction Department when the preliminary CAIR and CAMR rules were announced in 2004. Subsequent to this initial screening and the March 2005 issuance of the final CAIR and CAMR, a more detailed series of analyses were performed and a plan was developed (the "Progress Energy Florida Integrated Clean Air Compliance Plan", submitted on March 31, 2006) to demonstrate that the selected technologies and fuel choice options were the most cost effective ways for PEF to comply with the CAIR and CAMR at Crystal River and Anclote.

With the recent increase in activity in the construction of both air pollution control equipment as the result of CAIR and CAMR and in new plant development, PEF recognized that along with increases in basic materials such as steel and concrete, construction costs were increasing rapidly throughout the industry. In order to reduce the risk of construction cost increases during the duration of these projects, PEF has initiated a competitive bidding process to establish an Engineering, Procurement and Construction ("EPC") contract with a major construction firm. This contract is being developed to include the entire

scope of work for the FGD and SCR systems for procuring all equipment that has not already been purchased and for providing construction services (labor, schedule coordination, project management, etc.) for the projects at a fixed price.

As various design options are developed, they are evaluated using an internally developed cost evaluation program, which takes into account capital costs, operations and maintenance costs, fuel costs, capacity changes, availability changes, etc. to evaluate the least cost option with the best Net Present Value. These analyses have been performed to determine the least cost options for selecting different types of equipment and for determining the optimum layout of major equipment within the existing facility.

As additional work is identified for the combustion turbine and CEMS projects, PEF will identify qualified suppliers of the necessary services through the competitive bidding process. Bulk procurement will also be utilized as appropriate.

Q. What costs do you expect to incur in 2007 in connection with the Arsenic Groundwater Standard Program (Project 8)?

A. Progress Energy is currently working with the Florida Department of Environmental Protection to renew the industrial wastewater permit for the Crystal River Energy Complex. Based upon preliminary discussions, PEF is projecting O&M expenditures of $77,669. These costs will include: preparation

of new a groundwater monitoring plan, installation of new groundwater monitoring wells, as well as analytical testing of groundwater.

Q. What steps is the Company taking to ensure that the level of expenditures for the Arsenic Groundwater Standard Program is reasonable and prudent?

A. As additional work is identified to comply with the new Arsenic standard, Progress Energy Florida will identify qualified suppliers of the necessary services through a competitive bidding process.

Q. What costs do you expect to incur in 2007 in connection with the Underground Storage Tanks Program (Project 10)?

A. Progress Energy is not anticipating any costs to be incurred in 2007. All projects are scheduled for completion by the end of 2006.

Q. Please describe the Modular Cooling Tower Program for which you are seeking recovery.

A. The purpose of the project is to enable PEF to comply with the permit limit on the temperature of cooling water discharges from the Crystal River plant in a manner that minimizes "de-rates" of Crystal River Units 1 and 2 (CR-1 and CR-2). A "de-rate" is a temporary reduction in the output of a generating unit. Because CR-1 and CR-2 are base-load coal units, whenever those units are de-rated PEF must replace the lost generation by using more expensive oil or gas-fired units, or by purchasing higher-cost power on the open market. The Project

involves installation and operation of modular cooling towers in the summer months (mid-May through mid-September) in order to reduce the discharge canal temperature. This will enable PEF to reduce the number and extent of de-rates and thereby reduce replacement fuel and purchase power costs.

Q. What costs do you expect to incur in 2007 in connection with the Modular Cooling Tower Program (Project 11)?

A. PEF is projecting to spend approximately $3.4 million in O&M expenditures in 2007. Project costs are expected to include O&M expenses for rental fees.

Q. What steps is the Company taking to ensure that the level of expenditures for the Modular Cooling Tower Program is reasonable and prudent?

A. PEF will evaluate the prudency and cost effectiveness of the cooling towers annually as discussed more fully in Thomas Lawery's testimony.

Q. Does this conclude your testimony?

A. Yes it does.