BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

DAVID SORRICK

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 110007-EI

AUGUST 26, 2011

Q. Please state your name and business address.

A. My name is David Sorrick. My business address is 299 First Avenue North, St. Petersburg, FL 33701.

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

A. I am employed by Progress Energy Florida (PEF) in the capacity of Vice President Power Generation – Florida.

Q. Have you previously submitted testimony in this proceeding?

A. Yes.

Q. Have your responsibilities changed since you last submitted testimony in this proceeding?

A. No.

Q. What is the purpose of your testimony?

COM 5
APA 1
ECR 6
GCL 1
RAD 1
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A. The purpose of my testimony is to provide current estimates of costs that will be incurred in 2012 for environmental on-going capital and operation and maintenance (O&M) compliance costs associated with the Crystal River Units 4 and 5 (CR4 & CR5) air quality control assets in PEF's Integrated Clean Air Compliance Program (CAIR).

Q. Have you prepared or caused to be prepared under your direction, supervision or control any exhibits in this proceeding?

A. Yes. I am co-sponsoring the following portions of Exhibit No. __ (TGF-3) attached to Thomas G. Foster's testimony:

- 42-5P page 7 of 16 - Integrated Clean Air Compliance Plan (CAIR).

I am also sponsoring Exhibit No. __ (DS-1), which is an organizational chart associated with PEF's operation and maintenance of the CR 4 & CR5 CAIR assets.

Q. What O&M costs do you expect to incur in 2012 in connection with the operation of the air emission controls at Crystal River Unit 4 and 5 as part of the Integrated Clean Air Compliance Program (Project 7.4)?

A. PEF estimates that approximately $32.1 in O&M costs will be spent to support the operation and maintenance of the new air emissions controls that were installed at the Crystal River Energy Complex as outlined in the PEF Integrated Clean Air Compliance Plan. Labor costs are expected to be approximately $6.8 million. This estimate is based upon current staffing levels which were developed after review of similar operations outside of PEF as well as

comparison of similar units within the Company. Administrative and General (A&G) expenses are expected to be approximately $0.3 million for incremental positions that were created to support the Integrated Clean Air Compliance Program project. Contractor expenses are expected to be approximately $3.1 million for activities such as post-construction modifications not covered by warrantee, new chimney maintenance, limestone and gypsum handling, urea handling, cleaning of pond systems, additional security, gypsum sampler and sample analysis, truck scale maintenance and contracted equipment maintenance and repairs. Miscellaneous costs for tools and equipment, rental equipment and other employee costs are expected to be approximately $0.4 million, and parts and materials are expected to be approximately $1.7 million. CR5 outage costs are expected to be approximately $1.1 million. Expenses for miscellaneous projects are expected to be approximately $0.2 million for CAIR AR pump overhauls, dewatering system overhauls, and oxidation air blower overhauls. Reagent costs (net gypsum sales / disposal, limestone, urea / ammonia, and bottom / fly ash) are expected to total approximately $18.4 million.

Q. Are there any ongoing capital costs in 2012 associated with the implementation of the Integrated Clean Air Compliance Program (Project 7.4)?

A. Yes. PEF estimates that $27.9 in capital costs will be incurred as part of the Integrated Clean Air Compliance Program in 2012. Such costs include:

- Installation of sulfuric trioxide (SO3) probes which are necessary to ensure adequate control of sulfuric acid mist emissions.

- Purchase and installation of a third layer of catalyst for the SCR's which are necessary to maintain the removal efficiency of the SCR system.
- An alternative water project which is necessary to comply with terms of the Crystal River water use permit.
- Development and engineering of an alternative wastewater system for FGD blowdown treatment which is needed to comply with FDEP wastewater permit conditions.
- A lower chloride set point operation project that is necessary to allow operation of the FGD system at lower chloride levels to protect the internal materials and FGD equipment.
- Projects related to bottom and fly ash due to pH and ammonia impacts resulting from operation of the new SCR and FGD systems. Impacts due to ammonia are still be evaluated and could require either the installation of a hydrated lime injection system or the installation of a benefication system.

Q. What steps is the Company taking to ensure that the level of expenditures for the operation of the Crystal River 4 and 5 controls is reasonable and prudent?

A. Plant management monitors and controls costs by several methods. Work is scheduled and conducted proactively and efficiently. Expenditures are reviewed and approved by the appropriate level of management per existing Company policies. All expenditures are monitored on a monthly basis, and budget variances are analyzed for accuracy and appropriateness.

Q. Please discuss the organization being used to operate and maintain the CAIR equipment?

A. The Company has established a dedicated unit to manage, operate and maintain the CAIR equipment. An organization chart is attached in Exhibit No.__ (DS-1). This unit consists of 54 employees and reports to the Crystal River plant manager. There are 8 managers, 25 operations employees and 21 maintenance employees. The operators work rotating shifts in order to staff the operations of the facility 24 hours per day. The maintenance employees primarily work days but are available for emergent work after normal hours. In an effort to keep regular staffing levels lower, contractors are used for specialized or lower-skilled work. This minimizes overall operations and maintenance costs.

Q. Are there policies and procedures in place to efficiently operate and maintain these assets?

A. Yes, there are several different policies and procedures the plant uses to efficiently operate and maintain the CAIR equipment. First and foremost, the plant follows all OSHA and Progress Energy safety-related policies and procedures. It also uses operating procedures to efficiently operate equipment during startups, shut downs, steady state situations and transient scenarios. All employees are trained to respond effectively to many different operating scenarios as part of these procedures. In addition, equipment is maintained using equipment-specific preventive maintenance procedures. The operating and maintenance procedures were developed during construction and startup,

and will continue to be revised as more experience and expertise is gained with the equipment.

The plant also uses existing corporate-wide policies and procedures to efficiently conduct business such as human resources (hiring, compensation, performance management), supply chain management (purchasing, contracting, inventory), and information technology (NERC Critical Infrastructure Protection, cell phones, computers).

Q. Are personnel operating and maintaining this equipment trained in these policies and procedures?

A. The personnel selected to operate and maintain CAIR equipment have to meet specific job-related qualifications in order to qualify for the positions they are selected to perform. Some employees are hired from outside companies and came to Progress Energy with previous experience operating this type equipment at other utilities. Other operations employees are selected to participate in an apprentice program. These employees must complete a 2 to 4 year training program before they are fully qualified workers. This training includes a mix of classroom and hands-on training that helps the employee progress through different levels of task proficiency. Maintenance employees are selected based on their skills and experience.

Equipment-specific training was accomplished during the construction and start-up phase of the project. This training included equipment walk-downs,

discussions with vendor representatives, and hands-on operating and maintenance work performed under the supervision of qualified individuals. From a business process standpoint, CAIR employees are trained on these policies and procedures using several different training methods that include reading and review of the policies and procedures, small group discussions, one-on-one discussions with subject matter experts, computer based training (CBT) and on the job training.

Q. Does the company have controls in place to ensure these policies and procedures are followed?

A. The Company ensures compliance with policies and procedures through management controls, self-checks, use of checklists, procedure sign-offs and audits. The level of controls is based on the particular policy or procedure.

Q. Are there any other mechanisms in place to ensure proper operation and maintenance of these assets?

A. Along with the above-mentioned methods, prudent engineering judgment and industry standards are used to ensure proper operations and maintenance of CAIR equipment.

Routine maintenance is performed on a regular and on-going basis. In addition, specialized inspection and maintenance work is conducted during scheduled unit and equipment outages. These specialized work activities are identified and refined as the Company gains more operational experience with this equipment.

Q. Does this conclude your testimony?

A. Yes.

Witness: D. Sorrick
Exhibit_(DS-1)