BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of: DOCKET NO. 090007-EI

ENVIRONMENTAL COST RECOVERY CLAUSE.
______________________________/

VOLUME 1
Pages 1 through 188

ELECTRONIC VERSIONS OF THIS TRANSCRIPT ARE A CONVENIENCE COPY ONLY AND ARE NOT THE OFFICIAL TRANSCRIPT OF THE HEARING, THE .PDF VERSION INCLUDES PREFILED TESTIMONY.

PROCEEDINGS: HEARING

COMMISSIONERS PARTICIPATING:
CHAIRMAN MATTHEW M. CARTER, II
COMMISSIONER LISA POLAK EDGAR
COMMISSIONER NANCY ARGENZIANO
COMMISSIONER NATHAN A. SKOP
COMMISSIONER DAVID E. KLEMENT

PLACE:
Betty Easley Conference Center
Room 148
4075 Esplanade Way
Tallahassee, Florida

DATE: Monday, November 2, 2009

REPORTED BY:
LINDA BOLES, RPR, CRR
Official FPSC Reporter
(850) 413-6734

APPEARANCES:

LEE L. WILLIS, ESQUIRE, and JAMES D. BEASLEY, ESQUIRE, Ausley & McMullen, Post Office Box 391, Tallahassee, 32302, appearing on behalf of Tampa Electric Company.

JEFFREY STONE, ESQUIRE, RUSSELL A. BADDERS, ESQUIRE, and STEVEN GRIFFIN, ESQUIRE, Beggs & Lane, Post Office Box 12950, Pensacola, Florida 32591-2950, appearing on behalf of Gulf Power Company.

CAPTAIN ALLAN JUNGELS, USAF, c/o AFLSA/JACL-ULT 139 Barnes Drive, Suite 1, Tyndall AFB, Florida 32403-5319, appearing on behalf of Federal Executive Agencies.

JOHN W. McWHIRTER, JR., ESQUIRE, c/o McWhirter Law Firm, 400 North Tampa Street, Suite 2450, Tampa, Florida 33602, appearing on behalf of Florida Industrial Power Users Group.

JOHN T. BUTLER, ESQUIRE, and R. WADE LITCHFIELD, ESQUIRE, Florida Power & Light Company, 700 Universe Boulevard, Juno Beach, Florida 33408-0420, appearing on behalf of Florida Power & Light Company.

APPEARANCES (Continued):

JOHN T. BURNETT, ESQUIRE, Progress Energy Service Co., LLC, Post Office Box 14042, St. Petersburg, Florida 33733-4042, and GARY V. PERKO, ESQUIRE, Hopping Law Firm, Post Office Box 6526, Tallahassee, Florida 32314, appearing on behalf of Progress Energy and Progress Energy Service Company, LLC.

PATRICIA CHRISTENSEN, ESQUIRE, and CHARLES BECK, ESQUIRE, Office of Public Counsel, c/o The Florida Legislature, 111 West Madison Street, #812, Tallahassee, Florida 32399-1400, appearing on behalf of the Citizens of Florida.

CECILIA BRADLEY, ESQUIRE, Office of the Attorney General, The Capitol PL-01, Tallahassee, Florida 32399-1050, appearing on behalf of the Citizens of the State of Florida.

MARTHA BROWN, ESQUIRE, and ANNA WILLIAMS, ESQUIRE, ESQUIRE, FPSC General Counsel's Office, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, appearing on behalf of the Florida Public Service Commission Staff.

SAMANTHA CIBULA, ESQUIRE, FPSC General Counsel's Office, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, appearing as advisor to the Commission.

I N D E X

WITNESSES

EXHIBITS

NUMBER:	ID.	ADMTD.
1 through 34	55	55

(A detailed description of exhibits can be found on Comprehensive Exhibit List.)

P R O C E E D I N G S

* * * * *

CHAIRMAN CARTER: Staff, you're recognized for the 07 docket.

MS. BROWN: Yes, Mr. Chairman. There are also proposed stipulations on all issues in this docket and all witnesses have been excused.

CHAIRMAN CARTER: Okay.

MS. BENNETT: We ask that the prefiled testimony of all witnesses found on Page 4 of the Prehearing Order be inserted into the record as though read.

CHAIRMAN CARTER: The prefiled testimony of the witnesses will be inserted into the record as though read.

MS. BROWN: We have also prepared a Comprehensive Stipulated Exhibit List and we ask that this be moved into the record. The list itself is Exhibit 1 and all other exhibits on the list should be numbered as indicated, and we ask that that be entered into the record.

CHAIRMAN CARTER: Without objection, show it done.

(Exhibits 1 through 34 marked for identification and admitted into the record.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF TERRY J. KEITH

DOCKET NO. 090007-EI

APRIL 1, 2009

Q. Please state your name and address.

A. My name is Terry J. Keith, and my business address is 9250 West Flagler Street, Miami, Florida, 33174.

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

A. I am employed by Florida Power & Light Company (FPL) as Director, Cost Recovery Clauses in the Regulatory Affairs Department.

Q. Please state your education and business experience.

A. I graduated from North Carolina Agricultural & Technical State University with a Bachelor's degree in Accounting in 1977. I subsequently earned a Master of Business Administration degree from the University of Wisconsin in 1982. Prior to joining FPL in 1986, I held various accounting positions at Phillips Petroleum Company and later Centel Corporation. At FPL, I held positions of increasing responsibility in the Accounting Department, including various supervision assignments relating to accounting research, financial reporting, development and application of overhead rates, and property accounting. I spent ten years in the Regulatory Affairs Department as Principal Regulatory Coordinator and later as Regulatory Issues Manager primarily responsible for managing and coordinating regulatory accounting and finance dockets. In 2008, I assumed my current position as Director, Cost Recovery Clauses, where I am responsible for providing direction as to the appropriateness of cost recovery through a cost recovery clause and the overall preparation and filing of all cost recovery clause documents including testimony and discovery.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present for Commission review and approval the Environmental Cost Recovery (ECR) Clause true-up costs associated with FPL Environmental Compliance activities for the period January through December 2008.

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

A. Yes, I have. My Exhibit TJK-1 contained in Appendix I, consists of eight forms.

- Form 42-1A reflects the final true-up for the period January through December 2008.
- Form 42-2A consists of the final true-up calculation for the period.
- Form 42-3A consists of the calculation of the interest provision for the period.
- Form 42-4A reflects the calculation of variances between actual and estimated/actual costs for O&M Activities.
- Form 42-5A presents a summary of actual monthly costs for the

period for O&M Activities.

- Form 42-6A reflects the calculation of variances between actual and estimated/actual costs for Capital Investment Projects.
- Form 42-7A presents a summary of actual monthly costs for the period for Capital Investment Projects.
- Form 42-8A consists of the calculation of depreciation expense and return on capital investment. Form 42-8A, Pages 49 through 52 provide the beginning of period and end of period depreciable base by production plant name, unit or plant account and applicable depreciation rate or amortization period for each Capital Investment Project.

Q. What is the source of the actuals data which you present by way of testimony or exhibits in this proceeding?

A. Unless otherwise indicated, the actuals data are taken from the books and records of FPL. The books and records are kept in the regular course of FPL's business in accordance with generally accepted accounting principles and practices, and with the provisions of the Uniform System of Accounts as prescribed by this Commission.

Q. Please explain the calculation of the Net True-up Amount.

A. Form 42-1A, entitled "Calculation of the Final True-up" shows the calculation of the Net True-Up for the period January 2008 through December 2008, an over-recovery of $2,694,124, which I am requesting to be included in the calculation of the ECR factors for the January through December 2010 period.

The actual End-of-Period under-recovery for the period January through December 2008 of $3,034,452 (shown on Form 42-1A, line 3) adjusted for the estimated/actual End-of-Period under-recovery for the same period of $5,728,576 (shown on Form 42-1A, line 6) results in the Net True-Up over-recovery for the period January through December 2008 (shown on Form 42-1A, line 7) of $2,694,124.

Q. Have you provided a schedule showing the calculation of the End-of-Period true-up?

A. Yes. Form 42-2A, entitled "Calculation of Final True-up Amount," shows the calculation of the Environmental End of Period true-up for the period January through December 2008. The End of Period true-up shown on page 2 of 2, Lines 5 plus 6 is an under-recovery of $3,034,452. Additionally, Form 42-3A shows the calculation of the Interest Provision of $107,061 which is applicable to end of period true-up under-recovery of $3,141,513.

Q. Is the true-up calculation consistent with the true-up methodology used for the other cost recovery clauses?

A. Yes, it is. The calculation of the true-up amount follows the procedures established by the Commission as set forth on Commission Schedule A-2 “Calculation of the True-Up and Interest Provisions” for the Fuel Cost Recovery Clause.

Q. Are all costs listed in Forms 42-4A through 42-8A attributable to Environmental Compliance Projects approved by the Commission?

A. Yes, they are.

Q. How did actual expenditures for January through December 2008 compare with FPL's estimated/actual projections as presented in previous testimony and exhibits?

A. Form 42-4A shows that total O&M project costs were $3,625,159, or 22.1% lower than projected and Form 42-6A shows that total capital investment project costs were $433,470 or 1.3% lower than projected. Individual project variances are provided on Forms 42-4A and 42-6A. Return on Capital Investment, Depreciation and Taxes for each project for the actual period January through December 2008 are provided on Form 42-8A.

Q. Please explain the reasons for the significant variances in O&M Projects and Capital Investment Projects.

A. The variances in FPL's 2008 O&M expenses and capital expenditures primarily relate to the following projects:

1. Continuous Emission Monitoring Systems – O&M (Project 3a)

Project expenditures were $101,577 or 10.6% lower than previously projected. This variance occurred due to the following reasons:

- Replacement of the CEMS stack sampling tubing bundle at the Manatee site was not completed and invoiced until early 2009.
- Costs associated with the repair of CEMS equipment at the Ft. Lauderdale plant were lower than projected as a result of vendor improvements in monitoring system reliability.

- Emission Stack Testing group costs were lower than projected as a result of lower cost for the analysis of stack test samples and reductions in CEMS analytical gas used by the test group.

2. Maintenance of Stationary Above Ground Fuel – O&M (Project 5a)

Project expenditures were $254,259 or 16.8% higher than previously estimated. The variance is a result of project scope changes at the Martin and FT. Myers plants and Turkey Point Unit 1, which were not included in the original estimates. Roof corrosion was found on the light oil, metering and additive tanks at Martin Units 1 and 2, which needed to be painted and repaired for compliance. The coating of the light oil main storage tank at Martin Units 3 and 4 deteriorated sooner than expected so the tank was entirely painted. At the Ft. Myers plant, the roof of one of the two light oil main storage tanks that was originally estimated to be "touched up" was entirely coated due to the level of deterioration found. Coating to the bottom plate of the metering tank at Turkey Point Unit 1 was done in order to extend the tank's useful life.

3. Oil Spill Cleanup/Response Equipment – O&M (Project 8a)

Project expenditures were $36,017 or 13.0% higher than previously projected as a result of higher than expected costs from replacement of spill response consumable materials (sorbent boom, pads, blankets, degreasers, etc.) that were used in response to unplanned oil spills at the Canaveral, Fort Lauderdale, Martin, Riviera, and Turkey Point plants.

4. RCRA Corrective Action – O&M (Project 13)

Project expenditures were $13,919 or 21.4% lower than previously projected. Based upon a Florida Department of Environmental Protection (FDEP) evaluation report, Turkey Point did not require any further projected work resulting in lower actual costs.

5. Disposal of Noncontainerized Liquid Waste – O&M (Project 17a)

Project expenditures were $75,757 or 22.8% lower than previously projected due to less than projected cleaning activities at the Sanford, Martin, and Canaveral plants. As a result of FPL system dispatch generation needs, these facilities were not able to take their ash collection basins out of service to perform planned cleaning activities. In addition, lower than projected use of residual oil at the Martin and Cape Canaveral plants resulted in lower than anticipated costs from reduced ash concentration in the basins.

6. Substation Pollutant Discharge Prevention and Removal – Distribution – O&M (Project 19a)

Project expenditures were $592,509 or 36.3% lower than previously projected. The variance was due to difficulties in obtaining equipment clearances to perform equipment leak repair and regasketing work at substations due to weather related issues.

7. St. Lucie Turtle Net – O&M (Project 21)

Reported project expenditures were $4,352 versus a projection of zero. This is due to a misclassification of $4,352 associated with the St. Lucie Cooling Water System Inspection & Maintenance Project, which was inadvertently charged to the St. Lucie Turtle Net Project. These charges were subsequently removed from the St. Lucie Turtle Net Project and correctly charged to the St. Lucie Cooling Water System Inspection & Maintenance Project.

8. Pipeline Integrity Management – O&M (Project 22)

Project expenditures were $280,158 or 67.6% lower than previously projected. This variance is primarily due to the deferral of the pipeline inspection at the Martin Terminal. As a result of lower than projected residual oil use to meet FPL system dispatch generation needs, required available space within storage tanks was insufficient for recovery of oil during planned use of Pipeline Inspection Gauge (PIG) work. Pipeline PIG inspection work was deferred to 2009 when FPL anticipates sufficient tank space can be accommodated.

Additionally, pipeline inspection at the Manatee Terminal was not performed as planned as a result of changes to the inspection protocol that were identified. FPL deferred inspections to 2009 to utilize a new technology, Pipeline Current Mapping, which requires additional permitting that did not allow the job to be completed in 2008.

The remainder of the variance was related to the Martin Terminal 30" pipeline integrity project to maintain compliance with DOT requirements. Inspection of 2.9 miles of the Terminal pipeline identified that less than anticipated pipeline cover work and fill material would be required resulting in lower than originally projected costs for the project.

9. SPCC – Spill Prevention, Control and Countermeasures – O&M (Project 23)

Project expenditures were $51,167 or 6.8% lower than previously projected. The variance is primarily due to the shifting into 2009 of some of the development work on the FRP/SPCC plans due to the EPA's extension of the due date for updating the plans to November 20, 2009. Additionally, the overall actual contracted price for the required facility upgrades was less than originally budgeted.

10. Port Everglades ESP – O&M (Project 25)

Project expenditures were $511,370 or 25.7% lower than previously projected. Due to the relative cost of oil and gas, less oil and more gas was burned than originally expected at the plant, and as a result less O&M activities were needed for the ESPs. Consequently, less ash was created and the chemical injection system was not used. This resulted in lower costs of chemicals and ash disposal.

11. Lowest Quality Water Source – O&M (Project 27)

Project expenditures were $27,819 or 11.3% higher than previously projected. This variance is due to the process change made to monitoring and reporting LQWS usage in the third quarter 2008. Previously, LQWS calculations were based on a 90%/10% distribution. The process change was initiated to improve the monitoring and reporting of LQWS, which is part of FPL's compliance responsibility. The new calculation is now based on gallons consumed/used and tracked electronically with installed equipment. This technology has improved the way FPL measures and reports LQWS.

12. CWA 316(b) Phase II Rule – O&M (Project 28)

Project expenditures were $38,489 or 10% lower than previously projected. This variance is attributable to the suspension of the 316b rule, thereby extending the scheduled completion dates for the proposed work. In addition, the request for proposal and resulting budget were structured on a per facility basis. A single consultant was awarded all of the contracts for the FPL facilities, which resulted in several economies of scale. The most significant improvement was the ability to schedule simultaneous project meetings addressing multiple facilities instead of addressing each facility in separate meetings. This resulted in a decrease in costs associated with these meetings.

13. HBMP – O&M (Project 30)

Project expenditures were $5,758 or 28.8% higher than previously projected. The extended drought conditions resulted in additional data collected and analyzed due to extended time on emergency diversion curves.

14. St. Lucie Cooling Water System Inspection and Maintenance – O&M (Project 34)

Project expenditures were $2,318,958 or 46.4% lower than previously projected. The variance is primarily due to weather delays in the Fall of 2008 resulting in work being deferred to the Spring of 2009.

15. Low Level Radioactive Waste – O&M (Project 36)

Project expenditures were $119,384 or 99.3% lower than previously projected. FPL originally projected that it would make O&M expenditures prior to the development of the project schedule, plan and conceptual design for the facility, but these expenditures were not incurred.

16. CAIR Compliance – Capital (Project 31)

Project depreciation and return on investment were $234,524 or 2.9% lower than originally anticipated. Costs associated with Plant Scherer Unit 4 and FGD controls were less than originally projected. The lower costs were primarily due to delays in contractual agreements for engineering and construction of the controls. The project is expected to be placed in service in 2012 and total project estimates remain unchanged.

17. CAMR Compliance – Capital (Project 33)

Project depreciation and return on investment were $97,500 or 6.2% lower than anticipated. Costs for installation of the Plant Scherer Baghouse were less than originally projected, primarily as a result of delays in contractual agreements for procurement and engineering services. The project is expected to be placed in service in 2010 on schedule and total project estimates remain unchanged.

18. Martin Plant Drinking Water System Compliance – Capital (Project 35)

Project depreciation and return on investment were $0 compared to a projection of $9,930. The project was delayed due to FDEP requests for additional documentation and/or process explanation. Each request required review and professional engineer stamp in order to meet FDEP Drinking Water Section requirements. FDEP worked closely with FPL to meet all the requirements, however, the unanticipated requests delayed projected cash outlays. This project was placed in service January 2009.

19. DeSoto Next Generation Solar Energy Center – Capital (Project 37)

Project depreciation and return on investment were $16,569 or 56.9% lower than anticipated, primarily attributable to the Engineering, Procurement, Construction (EPC) contractor being behind plan for achieving engineering deliverable milestones in December 2008. The engineering deliverables were achieved by January 2009 and have not impacted the overall project costs or schedules.

20. Space Coast Next Generation Solar Energy Center – Capital (Project 38)

Project depreciation and return on investment were $27,738 or 592.6% higher than anticipated. This variance is due to the recognition of the land lease liability in 2008. The original projections assumed the land lease liability would be recognized in 2009 when the unit is placed in service.

21. Martin Next Generation Solar Energy Center – Capital (Project 39)

Project depreciation and return on investment were $48,195 or 58.9% lower than anticipated, primarily attributable to delays in procurement of major solar field equipment and better than expected payment terms. The 2008 projection included purchase order awards and payments for solar field mirrors, solar field tubes, heat exchangers, and the EPC contract. Due to the change in market conditions and increased market knowledge, mirrors and heat exchanger awards were postponed to 2009 (no schedule impact) while the tubes and the EPC purchase orders have payment terms less than projected.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF TERRY J. KEITH

DOCKET NO. 090007-EI

August 3, 2009

Q. Please state your name and address.

A. My name is Terry J. Keith and my business address is 9250 West Flagler Street, Miami, Florida, 33174.

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

A. I am employed by Florida Power & Light Company (FPL or the Company) as Director, Cost Recovery Clauses in the Regulatory Affairs Department.

Q. Have you previously testified in this docket?

A. Yes, I have.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to present for Commission review and approval the Estimated/Actual True-up associated with FPL's environmental compliance activities for the period January 2009 through December 2009.

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

A. Yes, I have. My exhibit TJK-2 consists of eight forms, PSC Forms 42-1E through 42-8E, included in Appendix I. Form 42-1E provides a summary of the Estimated/Actual True-up amount for the period January 2009 through December 2009. Forms 42-2E and 42-3E reflect the calculation of the Estimated/Actual True-up amount for the period. Forms 42-4E and 42-6E reflect the Estimated/Actual O&M and Capital cost variances as compared to original projections for the period. Forms 42-5E and 42-7E reflect jurisdictional recoverable O&M and Capital project costs for the period. Form 42-8E (pages 13 through 72) reflects return on capital investments, depreciation, and taxes by project.

Q. Please explain the calculation of the ECRC Estimated/Actual True-up amount you are requesting this Commission to approve.

A. Forms 42-2E and 42-3E show the calculation of the ECRC Estimated/Actual True-up amount. The calculation for the Estimated/Actual True-up amount for the period January 2009 through December 2009 is an over-recovery, including interest, of $3,602,753 (Appendix I, Page 4, line 5 plus line 6). This Estimated/Actual True-up over-recovery of $3,602,753 consists of January through June 2009 actuals and revised estimates for July through December 2009, compared to original projections for the same period.

Q. Are all costs listed in Forms 42-1E through 42-8E attributable to environmental compliance projects previously approved by the Commission?

A. Yes, with the exception of the Turkey Point Cooling Canal Monitoring Plan, which is discussed and supported in the testimony of Randall LaBauve, and the Manatee Temporary Heating System Project, which is discussed and supported in the testimony of Randall LaBauve, which was filed on April 13, 2009.

Q. How do the Estimated/Actual project expenditures for January 2009 through December 2009 period compare with original projections?

A. Form 42-4E (Appendix I, Page 7) shows that total O&M project costs were $3,541,997 or 21.6% lower than projected and Form 42-6E (Appendix I, Page 10) shows that total capital investment project costs were $5,080,664 or 6.7% lower than projected. Below are variance explanations for those O&M Projects and Capital Investment Projects with significant variances. Individual project variances are provided on Forms 42-4E and 42-6E. Return on Capital Investment, Depreciation and Taxes for each project for the Estimated/Actual period are provided on Form 42-8E (Appendix I, Pages 13 through 72).

<u>O&M Project Variances</u>

1. Air Operating Permit Fees (Project No. 1) - O&M

O&M project expenditures are estimated to be $1,007,915 or 51.5% lower than originally projected, primarily due to Cape Canaveral, Riviera, Cutler, Port Everglades 1 and 2, and Sanford 3 being placed in reserve status, which will reduce emission totals for 2009. Reserve status is based on current system demand and operating needs and is subject to change at any time.

2. Maintenance of Stationary Above Ground Fuel Storage Tanks (Project No. 5a) - O&M

O&M project expenditures are estimated to be $323,924 or 30.3% higher than originally projected. The following project activities were identified after the filing of the original 2009 estimates:

1) After initial estimates and purchase orders were issued there was a scope change for Tank 801 located at the Port Everglades Terminal. Per the specification of the purchase order, loose paint was removed by high pressure water blasting. After the water blasting was complete, only a very thin coat of primer was left on the tank and FPL had to apply primer on the entire shell plate as opposed to spot priming which was in the original scope of work.

2) Due to increasing oil spill events, management decided to conduct a condition assessment of the fuel infrastructure system to identify any immediate concerns. The inspection found that the light oil piping and pipe supports of Port Everglades Plant Tanks 903 and 904 were corroded and needed to be repaired and replaced.

3) Tanks 2, 3, and 5 at the Fort Lauderdale Plant were developing severe corrosion. FPL decided to re-paint the tanks in an effort to effectively maintain the coating of the tanks, which prevents premature deterioration of the tank.

4) A painting project scheduled for 2010 for the Port Everglades Terminal Tank 901 was implemented in 2009 to interrupt on-going corrosion of the

tank. This was also done to effectively maintain the coating and prevent premature deterioration.

3. RCRA Corrective Action (Project No. 13) - O&M

O&M project expenditures are estimated to be $36,258 or 72.5% lower than originally projected. The RCRA project was established in anticipation of receiving a Florida Department of Environmental Protection (FDEP) Final Report in December 2008. Due to internal resource limitations at FDEP, as of June 20, 2009, a report has yet to be issued. No further actions are anticipated for the remainder of 2009.

4. Substation Pollutant Discharge Prevention & Removal – Distribution (Project No. 19a) - O&M

O&M project expenditures are estimated to be $196,392 or 7.3% higher than previously projected. This variance is primarily due to an increase in field support that resulted in an increase in leak repair/regasketing work conducted this year. In addition, to prevent impacts to the environment from leaking equipment, and to decrease soil remediation costs resulting from such impacts, FPL has aggressively increased its oil pad absorbent change-out program.

5. Pipeline Integrity Management – Distribution (Project No. 22) - O&M

O&M project expenditures are estimated to be $210,628 or 526.6% higher than originally projected. The variance is primarily due to the deferral to April 2009 of the In-Line Inspection (Smart Pigging) activities scheduled for the Martin Plant in December 2008. Due to lower than projected residual oil use to meet FPL system dispatch generation needs, required available space within storage tanks was insufficient for recovery of oil during planned use of Pipeline Inspection Gauge (PIG) work.

6. Spill Prevention, Control, and Countermeasures - SPCC (Project No. 23) - O&M

O&M project expenditures are estimated to be $176,252 or 25.6% higher than originally projected. This variance is primarily due to revisions made to the SPCC plans, which are required when oil-filled equipment is either relocated or removed or when new oil-filled equipment is installed at substations. In addition, FPL has increased substation inspections to provide more frequent information to better manage the oil pad absorbent change-out program stated in Project No. 19a. Finally, additional upgrade projects listed below were identified through the Fleet Request System requiring engineering and planning work in 2009.

- Port Everglades Units 1&2 - Add impervious bottoms to existing oil trap, and increase metering tank areas secondary containments.
- Port Everglades Units 3&4 - Add oil/water separator to replace two existing oil traps, and increase metering tank areas secondary containments.

- Port Everglades and Fort Lauderdale - Modify drainage at main transformers at the gas turbine power parks.
- Port Everglades Terminal - Repair secondary containment berm around the fuel oil tanks.
- Fort Myers - Add secondary containment at 12 gas turbines.

7. Port Everglades Electrostatic Precipitator – ESP (Project No. 25) - O&M

O&M project expenditures are estimated to be $226,484 or 9.9% lower than originally projected, primarily due to fewer running hours as a result of lower demand for generation. Also, lower natural gas prices resulted in more natural gas and less oil being burned than originally expected at the plant. Consequently, less ash was created with an associated reduction in use of the chemical injection system resulting in lower costs of chemicals and ash disposal.

8. Lowest Quality Water Source - LQWS (Project No. 27) – O&M

O&M project expenditures are estimated to be $46,192 or 17.9% higher than originally projected, primarily due to a process change made to monitoring and reporting LQWS usage in third quarter 2008, which has improved the way FPL measures and reports LQWS. Previously, LQWS calculations were based on a 90%/10% distribution of water consumed between Sanford Units 4 and 5 and Sanford Unit 3 respectively. Due to the minimal usage of Unit 3 and because most water, if not all, is being consumed by Units 4 and 5, FPL made the distribution according to operational hours. The new calculation is based on gallons consumed/used and is tracked electronically.

9. CWA 316(b) Phase II Rule (Project No. 28) – O&M

O&M project expenditures are estimated to be $837,121 or 137.9% lower than originally projected, primarily due to the following issues:

The Environmental Protection Agency (EPA) has initiated new Section 316(b) rulemaking consistent with the ruling of the U.S. Court of Appeals for the Second Circuit and a new rule has been delayed following the U.S. Supreme Court decision in early 2009. Therefore, the planned work under the EPA Clean Water Act 316(b) section has been delayed as a result of ongoing litigation concerning the appropriateness and application of the rule and EPA's efforts to rewrite the rule. Until the additional rulemaking by the EPA is complete, the 316(b) project will be on standby and work will resume following promulgation of the revised rule.

Additionally, an adjustment of $188,000 was made per Order No. PSC-04-0987-PAA-EI issued on October 11, 2004, for the netting of environmentally related study costs in base rates from actual costs incurred for 2008.

10. Selective Catalytic Reduction (SCR) Consumables (Project

No. 29) – O&M

O&M project expenditures are estimated to be $56,991 or 16.3% lower than originally projected primarily due to lower than projected generation from Manatee Unit 3 and Martin Unit 8 as a result of lower than originally projected system demand. Also, the direct correlation of ammonia prices to natural gas prices, due to the use of natural gas in ammonia, reduced the costs for purchase of anhydrous ammonia to lower levels than originally projected.

11. CAIR Compliance Project (Project No. 31) – O&M

O&M project expenditures are estimated to be $487,919 or 30.3% lower than originally projected. The following project activities were identified after the filing of the original 2009 estimates:

1) The planned outage at Martin 2, which impacts the 800MW Unit Cycling Project, changed from September to December 2009 thereby reducing planned activities for 2009.

2) At St. Johns River Power Park (SJRPP) Unit 2, lower than expected costs for purchase of anhydrous ammonia and additional under-runs occurred due to the in-service date of Unit 2 being postponed from its original in-service date of January 2009 to March 2009.

12. St. Lucie Cooling Water System Inspection & Maintenance (Project No. 34) – O&M

O&M project expenditures $1,323,040 or 73.5% lower than originally projected, due to the deferral to 2010 of pipe cleaning activities. Since these activities must be completed during a refueling outage, and unfavorable weather and ocean conditions have historically been an issue in completing planned activities, FPL has deferred these activities until the next refueling outage, which is planned for the Spring of 2010.

13. Low Level Radioactive Waste Project (Project No. 36) – O&M

O&M project expenditures are estimated to be 1,000,887 or 100.1% lower than originally projected. Original project estimates, which were determined during the initial development of the project schedule, plan and conceptual design of the facility, were classified as O&M. After review of internal procedures and completion of several cost analyses and estimates, FPL determined the construction of a Low Level Waste Interim Storage Facility at Port St. Lucie and Turkey Point qualifies as a capital project.

14. DeSoto Next Generation Solar Energy Center (Project No. 37) – O&M

O&M project expenditures are estimated to be $230,375 or 49.3% lower than originally projected. The variance is primarily due to a change in the estimated final completion date of the project from July 2009 to October 2009. Estimated O&M prior to the revised commercial in-service date of the plant were therefore significantly reduced.

15. Space Coast Next Generation Solar Energy Center (Project No. 38) – O&M

O&M project expenditures are estimated to be $10,240 or 51.2% higher than originally projected. Original O&M cost estimates were based on the construction of a 500 KW site as compared to the current plan for a 900 KW site.

16. Greenhouse Gas Reduction Program (Project No. 40) – O&M

O&M project expenditures are estimated to be $50,000 or 100% lower than originally projected. The variance is primarily due to the delay in the FDEP promulgating a final rule providing guidance to utilities regarding the required date to join The Climate Registry as well as the delay of the EPA proposal for the establishment of a national mandatory greenhouse gas reporting requirement. FPL is proposing to delay implementation of the Greenhouse Gas Reduction Program until either the FDEP promulgates a final rule providing guidance to utilities for participation in The Climate Registry or the EPA promulgates a final rule requiring the mandatory reporting of Greenhouse Gases.

17. Manatee Temporary Heating System (Project No. 41) – O&M

This project was not anticipated when original estimates for 2009 were filed on August 29, 2008. O&M expenditures are estimated to be $12,500. Please see Randall LaBauve's testimony filed on April 13, 2009.

18. Turkey Point Cooling Canal Monitoring Plan (Project No. 42) – O&M

This project was not anticipated when original estimates for 2009 were filed on August 29, 2008. O&M expenditures are estimated to be $200,000. Please see Randall LaBauve's testimony in this filing.

19. Amortization of Gains on Sales of Emissions Allowances – O&M

Gains are estimated to be $638,787 or 65% lower than originally projected, primarily due to the dollar value per SO_2 allowance changing significantly from 2008 to 2009. In 2008, the 125,000 auctioned allowances sold at $380 per allowance compared to 2009 where the value dropped to $62 per allowance. Allowance values have been dropping due to regulation uncertainty on the future of the CAIR and Acid Rain program as well as the abundance of the number of allowances in circulation.

Capital Project Variances

20. St. Lucie Turtle Net (Project No. 21) – Capital

Project depreciation and return on investment are estimated to be $23,293 or 16.9% lower than originally projected, primarily due to lower than projected costs of the turtle net. In addition, the project was completed earlier than estimated in the 2009 projections.

21. Pipeline Integrity Management (Project No. 22) - Capital

Project depreciation and return on investment are estimated to be $6,395 or 100% lower than originally projected. The installation of leak detection devices at the Martin 30" pipeline has been postponed due to the continuation of analyses on other technology options.

22. Clean Air Interstate Rule (CAIR) Compliance (Project No. 31) – Capital

Project depreciation and return on investment are estimated to be $910,830 or 3.9% lower than originally projected, due to revising the Martin Plant Fall outage schedule from September to December 2009. The revised outage schedule will result in the deferral of certain 2009 capital activities and expenditures associated with the 800 MW cycling project. Secondly, costs associated with FGD controls at Plant Scherer Unit 4 were less than originally projected. This was primarily due to delays in contractual agreement for engineering, construction and procurement of the controls. The project is expected to be placed in service in 2012 and total project estimates remain unchanged.

23. Clean Air Mercury Rule (CAMR) Compliance (Project No. 33) – Capital

Project depreciation and return on investment are estimated to be $661,242 or 11.1% higher than originally projected, primarily due to contract progress payments for engineered materials occurring earlier than originally forecasted. Additionally, site common construction activities associated with foundation and pilings were completed earlier than estimated. The CAMR controls are on schedule to be completed in 2010 and total project estimates remain unchanged.

24. St. Lucie Cooling Water System Inspection & Maintenance (Project No. 34) – Capital

Project depreciation and return on investment are estimated to be $19,518 or 100% lower than originally projected, primarily due to delays in engineering and testing activities associated with the installation of the turtle excluders, which has postponed the in-service date of the project from December 2009 to December 2010.

25. DeSoto Next Generation Solar Energy Center (Project No. 37) – Capital

Project depreciation and return on investment are estimated to be $353,819 or 3.2% lower than originally projected, primarily due to lower than projected site preparation costs. Original estimates were prepared prior to final site surveys and plans. Additionally, costs associated with the construction of a facility wind wall have been removed from estimates, as the wind wall was not required to comply with Florida Building Codes.

26. Space Coast Next Generation Solar Energy Center (Project No. 38) – Capital

Project depreciation and return on investment are estimated to be $150,585 or 10% lower than originally projected due to excluding the lease cost from depreciation to reflect a depreciation period consistent with FPL's in-service date of the entire solar project. Additionally, changes in the timing of capital expenditures lowered the net average investment.

27. Martin Next Generation Solar Energy Center (Project No. 39) – Capital

Project depreciation and return on investment are estimated to be $4,305,455 or 36.5% lower than originally projected due to the timing of procurement of major solar field equipment. This included awarding purchase orders and payments for solar field mirrors, solar field tubes, heat exchangers, and the engineering, procurement, construction (EPC) contract. Due to lower commodity prices and increased market knowledge, mirrors and heat exchanger awards were postponed into 2009, which led to the cumulative average net investment being significantly lower than originally expected.

28. Manatee Temporary Heating System Project (Project No. 41) – Capital

This project was not anticipated when original estimates for 2009 were filed on August 29, 2008. Project depreciation and return on investment are estimated to be $22,849. Please see Randall LaBauve's testimony filed on April 13, 2009.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF TERRY J. KEITH

DOCKET NO. 090007-EI

AUGUST 28, 2009

Q. Please state your name and address.

A. My name is Terry J. Keith and my business address is 9250 West Flagler Street, Miami, Florida, 33174.

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

A. I am employed by Florida Power & Light Company (FPL or the Company) as Director, Cost Recovery Clauses in the Regulatory Affairs Department.

Q. Have you previously testified in this docket?

A. Yes, I have.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to present for Commission review FPL's Environmental Cost Recovery Clause (ECRC) projections for the January 2010 through December 2010 period.

Q. Is this filing by FPL in compliance with Order No. PSC-93-1580-FOF-EI, issued in Docket No. 930661-EI?

A. Yes. The costs being submitted for the projected period are consistent with that order.

Q. Have you prepared or caused to be prepared under your direction,

supervision or control an exhibit in this proceeding?

A. Yes. Exhibit TJK-3 consists of seven documents, PSC Forms 42-1P through 42-7P provided in Appendix I. Form 42-1P summarizes the costs being presented at this time. Form 42-2P reflects the total jurisdictional costs for O&M activities. Form 42-3P reflects the total jurisdictional costs for capital investment projects. Form 42-4P consists of the calculation of depreciation expense and return on capital investment for each project. Form 42-5P gives the description and progress of environmental compliance activities and projects for the projected period. Form 42-6P reflects the calculation of the energy and demand allocation percentages by rate class. Form 42-7P reflects the calculation of the 2010 ECRC factors.

Q. Please describe Form 42-1P.

A. Form 42-1P (Appendix I, Page 2) provides a summary of projected environmental costs being presented for the period January 2010 through December 2010. Total environmental costs, adjusted for revenue taxes, amount to $168,558,816 (Appendix I, Page 2, Line 5) and include $174,734,516 of environmental project costs (Appendix I, Page 2, Line 1c) decreased by the estimated/actual true-up over-recovery of $3,602,753 for the January 2009 - December 2009 period (Appendix I, Page 2, Line 2), and by the final true-up over-recovery of $2,694,222 for the January 2008 – December 2008 period (Appendix I, Page 2, Line 3).

Q. Please describe Forms 42-2P and 42-3P.

A. Form 42-2P (Appendix I, Pages 3 and 4) presents the environmental project O&M costs for the projected period along with the calculation of total jurisdictional costs for these projects, classified by energy and demand. Form 42-3P (Appendix I, Pages 5 and 6) presents the environmental project capital investment costs for the projected period. Form 42-3P also provides the calculation of total jurisdictional costs for these projects, classified by energy and demand.

The method of classifying costs presented in Forms 42-2P and 42-3P is consistent with Order No. PSC-94-0393-FOF-EI for all projects.

Q. Please describe Form 42-4P.

A. Form 42-4P (Appendix I, Pages 7 through 65) presents the calculation of depreciation expense and return on capital investment for each project for the projected period.

Q. Please describe Form 42-5P.

A. Form 42-5P (Appendix I, Pages 66 through 123) provides the description and progress of environmental projects included in the projected period.

Q. Please describe Form 42-6P.

A. Form 42-6P (Appendix I, Page 124) calculates the allocation factors for demand and energy at generation. The demand allocation factors are calculated by determining the percentage each rate class contributes to the monthly system peaks. The energy allocators are calculated by determining the percentage each rate contributes to total kWh sales, as adjusted for losses, for each rate class.

Q. Please describe Form 42-7P.

A. Form 42-7P (Appendix I, Page 125) presents the calculation of the proposed 2010 ECRC factors by rate class.

Q. Is FPL proposing any adjustments in its base rate proceeding (Docket No. 080677-EI) that impact the ECRC?

A. Yes. In the testimonies of Kim Ousdahl and Marlene Santos filed in Docket No. 080677-EI, FPL discusses several adjustments to move items between base rates and clause recovery. One adjustment impacting the ECRC is to recover bad debt expense associated with clause revenues through the related cost recovery clause instead of base rates.

Q. Has FPL included this proposed adjustment in the calculation of its 2010 ECRC factors?

A. No, however FPL has quantified the impact of this adjustment on the ECRC and will revise its 2010 ECRC factors to be consistent with the Commission's decision in Docket No. 080677-EI.

If approved in Docket No. 080677-EI, the bad debt expense associated with ECRC revenues for 2010 will be $496,753. This amount does not result in an increase to the ECRC portion of the 2010 Residential 1,000 kWh bill.

Q. Are all costs listed in Forms 42-1P through 42-7P attributable to Environmental Compliance projects previously approved by the Commission?

A. Yes, with the exception the National Emission Standard for Hazardous Air Pollutants (NESHAP) Information Collection Request Project, the Turkey

Point Cooling Canal Monitoring Plan, and the Manatee Temporary Heating System Project, which are discussed and supported in the testimony of Randall R. LaBauve.

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

A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF RANDALL R. LABAUVE

DOCKET NO. 090007-EI

April 13, 2009

Q. Please state your name and address.

A. My name is Randall R. LaBauve and my business address is 700 Universe Boulevard, Juno Beach, Florida 33408.

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

A. I am employed by Florida Power & Light Company (FPL) as Vice President of Environmental Services.

Q. Have you previously testified in predecessors to this docket?

A. Yes, I have.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to present for Commission review and approval FPL's plans for a new environmental compliance project, the Manatee Temporary Heating System Project (the "MTHS Project").

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

A. Yes, I am sponsoring the following exhibits:

- Exhibit RRL-1 – Manatee Heating System Conceptual Location of Pumps and Heater.

- Exhibit RRL-2 - Florida Department of Environmental Protection (FDEP) Industrial Wastewater Facility Permit Number FL00001546 for Plant Riviera (PRV).
- Exhibit RRL-3 – PRV Manatee Protection Plan (MPP).
- Exhibit RRL-4 – U.S. Fish and Wildlife Service letter to FPL.

Q. Please briefly describe FPL's proposed project.

A. In September 2008, FPL received a determination of need from this Commission to undertake a major modernization project at PRV, which will convert the existing conventional steam units into a highly efficient, clean-burning, gas-fired combined cycle unit (the "Modernization Project") to be named the Riviera Beach Next Generation Clean Energy Center (RBEC). The proposed activity under the MTHS Project is to install an electric heating system in 2009, in order to provide a temporary "manatee refuge" by discharging warm water when necessary into the manatee embayment area until the PRV is converted to the RBEC. Primary activities integral to the MTHS Project include installing the pipes, pumps, and heater, interconnection to the FPL power system, and testing and operating the system. A conceptual location of the temporary heating system is included as Exhibit RRL-1.

Q. Please describe the environmental law or regulation requiring the project.

A. FPL is proposing the MTHS Project in order to help ensure that we can comply with FPL's PRV MPP, which is Specific Condition 13 to the

Industrial Wastewater Facility (IWWF) Permit Number FL00001546, issued by the FDEP for the PRV on February 10, 2004. Specific Condition 13 to the IWWF permit states that "the permittee shall continue compliance with the facility's Manatee Protection Plan approved by the Department on December 21, 2000." The IWWF permit containing Specific Condition 13 is attached as Exhibit RRL-2. FPL's Manatee Protection Plan is attached as Exhibit RRL-3. Note that the Manatee Protection Plan refers to "Specific Condition 12," which has been renumbered as Specific Condition 13 in the current IWWF permit.

Additionally, the Lake Worth Lagoon is considered by the United States Fish and Wildlife Service ("FWS") as Critical Habitat for the manatee (42 FR 47840). The manatee is also protected by the Marine Mammal Protection Act of 1972 (16 U.S.C. 1361, et. seq.), and the Endangered Species Act of 1973 (16 U.S.C. 1531, et. seq.). On June 24, 2008, the FWS provided comments in a letter to FPL regarding the Modernization Project. In those comments, the FWS noted that the Marine Mammal Protection Act and the Endangered Species Act do not permit incidental takes. The FWS indicated that measures would be necessary to protect the manatees from cold water impacts during the transition period of the Modernization Project. A copy of the FWS letter to FPL is attached as Exhibit RRL-4.

Q. How has FPL complied with Specific Condition 13 to the IWWF Permit in the past?

A. Historically, FPL has provided warm water to the manatee embayment area by discharging a portion of the once-through cooling water discharge into the manatee embayment area. The remainder of the once-through cooling water is discharged approximately 1900 feet from the plant into the Lake Worth Lagoon.

Q. What is a manatee embayment area?

A. The term "manatee embayment" refers to the discharge area previously used for PRV Units 1 and 2 (retired in 1983 and 1991, respectively) and now used to discharge a portion of the once-through cooling water discharge from Units 3 and 4. The embayment opens directly into the Lake Worth Lagoon.

Q. What is the significance of FPL providing warm water to the embayment area?

A. The Florida manatee, a subspecies of the West Indian manatee found only in the southeastern United States, is listed as endangered under both the U.S. Endangered Species Act and Florida state law. Most manatees congregate at confined warm-water refuges when coastal water temperatures begin to fall below 68°F. The exact thresholds at which manatees succumb to cold and die are uncertain and can vary between individuals. However, when extremely cold winter temperatures occur, large numbers of manatees may die or have their health impaired. Many of the natural warm water habitats historically used by manatees are no longer available to them. The outflows from power plants, like the PRV, have provided a valuable substitute for these lost natural resources.

The entire Lake Worth Lagoon is considered by the United States Fish and Wildlife Service as Critical Habitat for the manatee (42 FR 47840). Manatees are known to inhabit the Lake Worth Lagoon year-round and they congregate at the PRV embayment area during colder temperatures because of the warm water discharged from the plant.

Q. How many manatees can be found in Lake Worth Lagoon and the embayment area?

A. During a survey conducted by the Florida Fish and Wildlife Conservation Commission in February 2007, 237 manatees were observed gathered near the existing PRV (PBCERM, 2008).

Aerial surveys for manatees were conducted by Mote Marine Laboratory on behalf of FPL in February 2007. On February 7, 2007, 288 manatees were observed in the vicinity of PRV, including 25 calves. On February 17, 2007, 141 manatees were observed, including 11 calves.

In the winter of 2008-2009, Mote Marine Laboratory conducted three surveys at PRV. On January 18, 2009, 183 manatees were observed, on January 24, 2009, 454 manatees were observed and on February 6, 2009, 388 manatees were observed.

Q. Why does FPL now need a different heating source for PRV?

A. Implementing the Modernization Project will require that the existing units be dismantled and substantially rebuilt. During this construction period, the units will not be available to provide warm water for compliance with the MPP. The current schedule for the Modernization Project requires that the existing conventional steam units be taken out of service no later than 2011 to begin the conversion.

Q. Please describe the temporary heating system.

A. The temporary heating system will include a 30-million Btu per hour electric heater along with pumps, piping, and electrical equipment. The intake piping and pumps for the system will be installed in the existing Units 1 and 2 intake structure located approximately 500 feet north of the system discharge. Seawater will be pumped through the electric heater and discharged into the manatee embayment area when the ambient water temperature falls below 61°F. The water depth in this area is approximately 4 to 6 feet. The temporary heating system is predicted to provide approximately 0.9 acres of water at or above 68°F during conditions under which the present MPP requires that FPL endeavor to provide heated water for manatee protection.

Q. How did FPL determine the size of the electric heater?

A. To determine the size of the heater required to comply with the MPP obligation, FPL retained an environmental services firm to build a computer model to calculate the minimum thermal outputs required.

Q. Why does the temporary heating system need to be installed in 2009?

A. While the existing units would not have to be taken out of service until 2011, FPL has projected that it can save approximately $10 million in O&M costs for PRV during 2009 and 2010 by keeping the existing units in inactive reserve status until they are dismantled for the Modernization Project. FPL's rate case Minimum Filing Requirements (MFRs) reflect these projected savings. Inactive reserve status would allow the units to be returned to service if major unit outages, changes in load growth or other factors indicated a greater than expected need for them to meet reserve requirements, but the units could not be returned to service quickly enough to respond to a sudden cold-weather event that required warming water in the manatee embayment area.

In short, the Modernization Project dictates that FPL have an alternative heating source at PRV by 2011, but the cost savings of keeping the existing units in inactive reserve status can be achieved only if an alternative heating source is put in place in 2009, in time for the Winter of 2009-2010, which may require that the embayment area be warmed. The MTHS Project will help to avoid potential adverse impacts from cold water to manatees congregating at PRV's manatee embayment area during the annual period from November 15 to March 31.

Q. Please explain why FPL decided to put PRV into inactive reserve status.

A. The current economic slowdown has resulted in FPL projecting lower electric load demands and lower electricity sales. FPL reviewed its generation operating fleet and decided to temporarily place some of its older, less efficient units, including PRV, into inactive reserve status as a cost-savings measure. This means FPL will be reducing daily staffing at, and operations and maintenance expenses for, these units, while still keeping them ready with adequate notice to respond to significant changes in projected demand increases, as well as to return PRV to normal operations when needed to satisfy future load growth. FPL will perform the required normal maintenance at the inactive reserve units over a longer time horizon, thereby reducing costs while at the same time ensuring that the plant can resume operations efficiently when needed.

Q. Why can't the PRV units be returned from inactive reserve status quickly enough to meet MPP requirements during 2009-2010?

A. FPL's Power Generation Division experts estimate that to return PRV to an operating condition requires at least thirty (30) days. Furthermore, an extended period of plant inactivity at the aged PRV could increase the difficulties required to bring it to an active status for purposes of warming the water.

With the PRV units in inactive reserve status, FPL cannot depend on them to meet the obligation to provide a warm water refuge for manatees. Even with advanced notice of inclement weather, there would not be enough time to bring the PRV units back online in time to provide warm water. Furthermore, the cost of trying to accelerate the return of the units to service from inactive reserve status could be substantial.

Q. Could FPL return PRV to active service status and run it during the winter of 2009 to provide warm water for manatees instead of *installing the temporary heating system in 2009?*

A. Yes. FPL could prepare PRV at the start of the winter season to be available for operation on short notice, but this would involve a significant cost for personnel and maintenance. Keep in mind that FPL inevitably must purchase a temporary heating system when the existing PRV units are dismantled to implement the Modernization Project. Therefore, by incurring the costs necessary to make PRV available during wintertime, FPL would only be deferring the cost of the temporary heating system for a couple of years, not avoiding those costs. The annual costs for the temporary heating system in years 2009 and 2010 are much lower than the staffing and maintenance expenditures that would be necessary to keep the units available just for manatee heating during these winters.

Q. What conclusions did FPL reach regarding the alternatives for providing warm water to manatees at PRV?

A. As I discussed earlier, FPL will eventually need a temporary heating system at PRV because there will be no other viable source of warm water for manatees during the construction of the Modernization Project. Accelerating the installation of the heating system, however, will allow FPL and its customers to enjoy approximately $10 million in savings by keeping the existing units in inactive reserve, which is a savings of more than double the entire cost of the temporary heater. Additionally, the temporary heating system is less costly to operate in comparison to operating PRV out of economic dispatch just for water heating. It can thus be reasonably concluded that the temporary heating system is the better alternative for FPL to pursue, resulting in the most cost effective means to produce warm water for the manatees and the least burdensome on FPL's customers.

Also, other impacts support the decision to install the temporary heating system. From an environmental impact basis, installing the temporary heating system allows FPL to respond quicker to weather threats to manatees since the heating system is as close to pushing a button for an immediate response as possible. From a resource impact basis, operating the temporary heating system requires less fuel and lower O&M costs to accomplish the same objective as operating PRV.

Analysis of these alternatives supports a conclusion that the prudent course of action is to allow PRV to remain in inactive reserve status and to install a heating system for use during the five winter seasons between now and the expected RBEC commercial operation date of June 2014.

Q. How did FPL calculate the approximate $10 million cost saving from placing PRV into inactive reserve status?

A. FPL calculated PRV's average annual total base O&M expense from 2000 to 2007 to be approximately $7.1 million. The cost of maintaining the plant in inactive reserve status is approximately $2.7 million and $1.5 million in 2009 and 2010, respectively. Thus, savings of $4.4 million in 2009 and $5.6 million in 2010 accrue to FPL's customers.

Q. When will FPL begin the MTHS Project?

A. Due to the prescribed annual period for providing warm water and the time required to design, purchase, and install the heating system and perform integral activities such as making the interconnection to the FPL power system, the MTHS Project will begin immediately. Upon the commercial operation of the RBEC (scheduled for 2014), the heating system will be dismantled and removed because it will no longer be needed. The modernized combined cycle unit will provide a regular source of warm water to comply with the MPP.

Q. Has FPL estimated the cost of the proposed MTHS Project?

A. Estimated capital costs for the temporary heating system in 2009 are $4.7 million. These estimates include expenditures for the equipment, design and engineering of the system, labor for installation, and interconnection to the FPL power system. Because FPL does not expect to need the temporary heating system once the modernized combined cycle unit goes into service and plans to dismantle the system at that time, FPL proposes to amortize the system over 56 months (i.e., from November 2009 through June 2014). FPL will incur removal costs for the temporary heating system in 2014, which will be offset by any salvage value that FPL is able to obtain for the system. Because FPL cannot accurately predict either the removal costs or the salvage value at this time, we have assumed that they net to zero for the purpose of the current cost projections and will true up the projections later as better information becomes available. Of course, any surplus of salvage value over removal costs would be returned to customers via the Environmental Cost Recovery Clause (ECRC).

After installation and commissioning is complete, FPL expects to incur O&M costs associated with materials and supplies necessary to maintain the heating system. FPL's annual O&M estimates for 2010 through 2014 are $50,000. These projected O&M costs do not include the energy costs to operate the temporary heating system. FPL cannot predict how often the system will operate, however, the energy costs will not be significant nor will they be recovered through the ECRC process.

Q. Has FPL estimated its 2009 ECRC recovery amount for the MTHS Project?

A. FPL plans to place the temporary heating system into service by early November 2009. Based on that in-service date, FPL has projected approximately $234,000 in amortization expense and return on investment associated with the temporary heating system during the remainder of 2009.

Q. Please describe the measures FPL has taken to ensure that costs of the MTHS Project have been minimized.

A. FPL's Engineering and Construction Division has retained an engineering firm to perform a study to identify the most cost-effective approach to providing a temporary heating system. Using a performance specification for the recommended equipment, FPL's Integrated Supply Chain (ISC) group, participating in the MTHS Project, will solicit bids from multiple suppliers to determine the source providing the overall best value. The ISC group provides enterprise-wide leadership, direction, and operation of a fully integrated supply chain supporting the procurement, materials management, and logistic needs of FPL and the MTHS Project. ISC's objective is to drive down costs to FPL and ensure the delivery of the highest quality goods and services. Well-established corporate policies and procedures dictate that for the MTHS Project, the materials supply contract and the construction contract will be competitively bid.

FPL's Project Controls group has established a scope, budget, and schedule to meet the needs of the MTHS Project. Project Controls is also responsible for tracking all MTHS Project costs through various approval processes, procedures, and databases.

Q. **Is FPL also considering a temporary heating system at the Cape Canaveral Plant?**

A. Yes. The permits for the Cape Canaveral Plant have similar requirements for maintaining water temperatures to protect manatees. FPL expects to make a decision on how to provide temporary water heating at the Cape Canaveral Plant this Fall and, if a temporary heating system is required, may petition to amend the MTHS Project to include the costs for that system as well.

Q. **Is FPL recovering through any other mechanism the costs for the MTHS Project for which it is petitioning for ECRC recovery?**

A. No.

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

A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF RANDALL R. LABAUVE

DOCKET NO. 090007-EI

August 3, 2009

(REVISED SEPTEMBER 25, 2009)

Q. Please state your name and address.

A. My name is Randall R. LaBauve and my business address is 700 Universe Boulevard, Juno Beach, Florida 33408.

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

A. I am employed by Florida Power & Light Company (FPL) as Vice President of Environmental Services.

Q. Have you previously testified in predecessors to this docket?

A. Yes, I have.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to present for Commission review and approval FPL's plans for a new environmental compliance project, the Turkey Point Cooling Canal Monitoring Plan (the "CCM Plan").

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

A. Yes, I am sponsoring the following exhibits:

- RRL-5 – Florida Department of Environmental Protection (FDEP) Conditions of Certification (PA 03-45A2) Special Conditions IX and X.
- RRL-6 - DRAFT Turkey Point Plant Groundwater, Surface Water, and Ecological Monitoring Plan, dated July 16, 2009
- RRL-7 - CCM Plan Objectives and Strategies

Q, **Please describe the cooling canal system at the Turkey Point Plant.**

A. The cooling canal system is a 5,900-acre closed cycle system that is used by Turkey Point Units 1 through 4 for condenser and auxiliary equipment cooling and by Unit 5 to discharge cooling tower blowdown. This closed cycle system does not have a point source discharge directly into Biscayne Bay, and cooling water is constantly recycled through the plant. Some water is lost via evaporation and seepage. Make-up water principally consists of inflows from groundwater beneath the cooling canals and rainwater. As a result of the natural evaporation process, water in the cooling canal system is hypersaline, meaning that it has a high salt content. The cooling canal system is a permitted industrial wastewater facility.

Q. **Please describe current monitoring efforts at the Turkey Point Plant.**

A. In 1972, FPL and the South Florida Water Management District (SFWMD) (previously known as the Central and Southern Florida Flood Control) entered into an agreement that defined the current monitoring efforts for the cooling canal system. Monitoring efforts originally utilized up to 87 monitoring wells. These wells monitored the water in the vicinity of Biscayne Bay and to the west of the cooling canal for temperature and conductivity. Monitoring efforts were scaled back over the years as data being produced and reviewed by regulatory agencies indicated that the operation of the cooling canal system was having no significant impact on the regional environment. The current version of the agreement is the Fourth Supplemental Agreement between FPL and the SFWMD, dated July 15, 1983. Currently, only four groundwater monitoring wells are required to be sampled at quarterly intervals for salinity, temperature and water level.

FPL also monitors surface water elevations along five transects that measure water levels in the westernmost feeder canal in the cooling canal system, the Interceptor Ditch (ID) and the L-31E Canal as part of the Interceptor Ditch Operations Plan within the Turkey Point Plant. These water levels provide input to the operation of the ID to restrict inland movement of cooling canal water.

In addition to these monitoring efforts required by the current agreement, other related but independent monitoring efforts are also ongoing. As part of radiological monitoring requirements for the Nuclear Regulatory Commission, the Florida Department of Health Services conducts quarterly to semi-annual monitoring of direct radiation, air particulates, surface water, sediment, fish, crustaceans, groundwater and leafy vegetation. To date, no evidence has been found of any radiological levels of concern.

Q. Please describe the environmental law or regulation requiring the CCM Plan.

A. On January 18, 2008, FPL submitted an application for power plant site certification under the Florida Electrical Power Plant Siting Act ("PPSA"), section 403.501 et seq, Florida Statutes for the Turkey Point Uprate Project in Homestead, Florida. On October 29, 2008, the FDEP Siting Office issued the Conditions of Certification (PA 03-45A2). Conditions of Certification IX and X require FPL to develop a monitoring plan for the cooling canal system and the areas surrounding the cooling canal system. Conditions of Certification IX and X are included as Exhibit RRL-5.

Condition IX, "Biscayne Bay Surface Water Monitoring", which is imposed by the FDEP, requires FPL to submit a monitoring plan within 180 days following certification of Units 3 and 4, which will include:

- specific conductivity (salinity) and temperature monitoring within the surface waters of Biscayne Bay, including the Biscayne Bay Aquatic Preserve;
- a minimum of five monitoring stations located near shore in the vicinity of the Turkey Point Plant; and

- specific monitoring locations, sampling frequencies and methods and specific parameters to be monitored.

Condition X, "Surface Water, Ground Water, and Ecological Monitoring" sets the framework for new monitoring and, as may be needed, abatement or mitigation measures for approval of FPL's Turkey Point Units 3 and 4 Uprate Application. This condition is imposed by the SFWMD, Miami-Dade Department of Environmental Resources Management (DERM), and the FDEP and requires the establishment of relevant baseline conditions, determination of the extent and effect of the cooling canal system on the surface water, groundwater, and nearby ecological communities, and detection of changes that may occur as a result of the Uprate Project.

The Conditions of Certification require that the CCM Plan be incorporated into the Fifth Supplemental Agreement and include an assessment of potential impacts to the surface water and groundwater including wetlands, as needed, in the vicinity of the cooling canal system.

The CCM Plan will collect relevant data which will enable a reasonable assessment of the effects of the cooling canal system and the Uprate Project. The resources where the effects are of highest interest include:

- fresh groundwater to the west of the cooling canal system, where groundwater supplies are withdrawn;
- surface water in Biscayne Bay and littoral zone;
- surface water in adjacent freshwater canals;
- freshwater wetlands immediately to the west of the cooling canal system; and
- coastal wetlands (mangroves) immediately east of the cooling canal system.

Q. Please describe the newly required CCM Plan.

A. On February 18, 2009, pursuant to Conditions IX and X of the FDEP October 29, 2008 Final Order Approving Site Certification, FPL submitted its initial draft of the proposed CCM Plan associated with FPL's Turkey Point Uprate Project to SFWMD. This CCM Plan requires an assessment of baseline conditions to provide information on the vertical and horizontal extent of the hypersaline groundwater plume and the extent and effect of that plume on groundwater and surface water quality, if any. Comments, concerns and requests for revisions or action items have been received from the SFWMD as well as the FDEP, DERM and incorporated into the current draft of the proposed monitoring plan, dated July 16, 2009. The draft CCM Plan is included as Exhibit RRL-6.

The CCM Plan has not yet been finalized or agreed upon by FPL and the agencies and is therefore subject to change based on input from the agencies. FPL expects the CCM Plan to be approved by mid September 2009.

The objective of FPL's CCM Plan is to implement the Conditions of Certification IX and X, which state that "the Revised Plan shall be designed to be in concurrence with other existing and ongoing monitoring efforts in the area and shall include but not necessarily be limited to surface water, groundwater and water quality monitoring, and ecological monitoring to:

- delineate the vertical and horizontal extent of the hypersaline plume that originates from the cooling canal system and to characterize the water quality including salinity and temperature impacts of this plume for the baseline condition;
- determine the extent and effect of the groundwater plume on surface water quality as a baseline condition; and
- detect changes in the quantity and quality of surface and groundwater over time due to the cooling canal system associated with the Uprate Project. The Revised Plan shall include installation and monitoring of an appropriate network of wells and surface water stations."

Q. Please describe the proposed activities associated with the CCM Plan.

A. The CCM Plan will provide information to determine the extent and effects of the hypersaline cooling canal system water on both surface and groundwater and its potential impacts on Biscayne Bay and the multi-jurisdictional lands around the Turkey Point Plant. The CCM Plan includes monitoring of surface water, groundwater, and ecological conditions prior to implementation of Uprate modifications and after implementation of the Uprate Project. Prior to the start-up of the Uprate Project and following implementation of the Uprate Project, data will be collected using monitoring that addresses ground and surface water levels, salinity, temperature, tracer components, tidal influences, preferential groundwater flow paths, surface and ground water quality, rainfall, and associated ecological conditions.

Q. Please describe the strategy that FPL will implement to meet the objectives of the CCM Plan.

A. The CCM Plan has been designed to focus on the objectives as they relate to the cooling canal system and the Uprate Project and those resources that may be affected adjacent to the cooling canal system. Exhibit RRL-7 provides the objectives of the CCM Plan and the strategy FPL will implement to meet the objectives.

Q. Please describe the adaptive approach that will be used in the CCM Plan.

A. To effectively build on the information gained as the monitoring effort progresses, an adaptive approach will be utilized. The intent of the adaptive approach is to facilitate the addition or elimination of sampling so that the most relevant information is collected and analyzed. By remaining flexible, the objectives of the CCM Plan can be more effectively met in a reasonable manner while being fully protective of the environmental resources.

Q. How will results of the CCM Plan be reported?

A. Comprehensive monitoring reports will be submitted for documentation of site conditions and activities. The reports will include a summary of the cooling canal system operations and operational changes that result in changes in physical or chemical characteristics of cooling water effluent or flow rates. A description of monitoring activities, station modifications and station operational summaries, and results of surface and groundwater data collection for the period will be included. The reports will also provide analyses of the key findings from the cooling canal system, including any additional characterization and testing, and the surrounding areas as related to the surface, groundwater, and ecological monitoring efforts. The reports will include a completeness evaluation of specific plan objectives and recommendations for adjustments (additions or deletions) to the monitoring program along with rationales. An updated monitoring schedule will be included in the report.

The reports will be submitted every six months during the pre Uprate period and initially during the post Uprate period. The frequency of report submittals may be allowed to decrease over time pending evaluation of the data and approval by the lead agency.

The semi-annual reports will typically include four to six months of new data that is assessed in conjunction with previous findings. The annual reports will typically have 10 to 12 months of new data.

To facilitate communication and keep the applicable agencies apprised of the monitoring efforts and any significant findings, quarterly meetings will be held. Issues of concern or suggested improvements in the monitoring effort commensurate with focused objectives of the Conditions of Certification should be discussed.

Q. **When will FPL begin the CCM Plan?**

A. The original date set for completion of negotiations was July 31, 2009, but because the parties were not able to come to an agreement, the completion date has been extended to October 16, 2009. The parties expect to have an approved plan by mid-September; therefore the earliest start date is the middle of September, 2009.

Q. **Has FPL estimated the cost of the proposed CCM Plan?**

A. Yes. O&M and Capital estimates for the total project are $7.2 million and $2.7 million, respectively.

Q. **Has FPL estimated its 2009 ECRC recovery amount for the CCM Plan?**

A. O&M and Capital estimates for 2009 are $200,000 and $800,000, respectively. These costs are associated with the purchase of probes, wiring calibrations, flow meters, solar panels and batteries, as well as creating transects for ecological monitoring and a bathymetric survey.

These activities may be modified per the approval of the final CCM Plan expected in September, 2009.

Q. Has FPL estimated its 2010 ECRC recovery amount for the CCM Plan?

A. O&M and Capital estimates for 2010 are $3,400,000 and $1,800,000 respectively. These costs are associated with project management, electronic data set-up and management, installation of well clusters, conducting ecological monitoring, instrument maintenance and preparing reports. As mentioned above, required activities may be modified per the approval of the final CCM Plan expected in September, 2009.

Q. How will FPL ensure that the costs incurred are prudent and reasonable?

A. FPL will use competitive bidding for this project. FPL maintains a strong market presence allowing it to leverage corporate-wide procurement activities to the specific benefit of individual project procurement activities. Maintaining a relationship with a range of service providers, when available, offers the opportunity to assess capabilities, respond to changing resource loads and remain knowledgeable of current market trends and cost of service.

Q. How is the current monitoring effort at FPL's Turkey Point Plant being recovered?

A. Costs associated with the current monitoring efforts at the Turkey Point Plant are being recovered through FPL's current base rates.

Costs associated with the current interceptor ditch operation and monitoring of the four remaining wells are approximately $50,000 per year. The current draft of the CCM Plan calls for the installation of several more monitoring wells and monitoring equipment at various locations in and around the Turkey Point Plant, as well as data collection and reporting. These activities will be incremental to FPL's current monitoring efforts.

Q. Is FPL recovering through any other mechanism the costs for the CCM Plan for which it is petitioning for ECRC recovery?

A. No. FPL is only requesting recovery of incremental activities associated the CCM Plan. The costs associated with the current monitoring efforts are not included in FPL's estimates for the CCM Plan.

Q. What are the next steps after the data is gathered and the reports are written?

A. If the FDEP, in consultation with SFWMD and DERM, determines that the pre- and post-Uprate monitoring data: (1) is insufficient to evaluate changes as a result of this project; (2) indicates harm or potential harm to the waters of the State including ecological resources; (3) exceeds State or County water quality standards; or (4) is inconsistent with the goals and objectives of the CERP Biscayne Bay Coastal Wetlands Project, then additional measures may be required to evaluate or to abate such impacts. The potential additional measures that might be required include but are not limited to:

- the development and application of a 3-dimensional coupled surface and groundwater model (density dependent) to further assess impacts of the Uprate Project on ground and surface waters; such model shall be calibrated and verified using the data collection during the monitoring period;
- mitigation measures to offset such impacts of the Uprate Project necessary to comply with State and local water quality standards, which may include methods and features to reduce and mitigate salinity increases in groundwater including the use of highly treated reuse water for recharge of the Biscayne aquifer or wetlands rehydration;
- operational changes in the cooling canal system to reduce any such impacts; and/or
- other measures to abate impacts as may be described in the revised plan.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF RANDALL R. LABAUVE

DOCKET NO. 090007-EI

AUGUST 28, 2009

(REVISED SEPTEMBER 25, 2009)

Q. Please state your name and address.

A. My name is Randall R. LaBauve and my business address is 700 Universe Boulevard, Juno Beach, Florida 33408.

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

A. I am employed by Florida Power & Light Company (FPL) as Vice President of Environmental Services.

Q. Have you previously testified in this docket?

A. Yes, I have.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to present for Commission review and approval a new environmental project – The National Emission Standards for Hazardous Air Pollutants (NESHAP) Information Collection Request (ICR) Compliance Project. Additionally, my testimony discusses the expansion of the Manatee Temporary Heating System (MTHS) Project originally filed in this docket on April 13, 2009, to cover the Cape Canaveral Plant (PCC). Finally, my testimony provides a brief update on the St. Lucie Cooling Water System Inspection and Maintenance Project, approved in Docket No. 070007-EI, Order No. PSC-07-0922-FOF-EI, issued on November 16, 2007.

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

A. Yes. I am sponsoring the following exhibits:

- RRL-8 – NESHAP ICR Public Notice
- RRL-9 – Electric Utility Steam Generating Unit Hazardous Air Pollutant Information Collection Effort Burden Statement - Part B
- RRL-10 – Florida Department of Environmental Protection (FDEP) Industrial Wastewater Facility (IWWF) Permit Number FL0001473 for Plant Cape Canaveral (PCC)
- RRL-11 - PCC Manatee Protection Plan (MPP)
- RRL-12 – U.S. Fish and Wildlife Service (USFWS) letter to FPL
- RRL-13 – Florida Fish and Wildlife Conservation Commission's (FWC) "FWC Staff Report For Florida Power and Light Company – Cape Canaveral Energy Center (CCEC)"
- RRL-14 – Manatee Heating System Conceptual Location of Pumps and Heater

<u>NESHAP ICR Compliance Project</u>

Q. Please describe the law or regulation requiring the NESHAP ICR Compliance Project.

A. The Environmental Protection Agency (EPA) regulates Hazardous Air Pollutants (HAPs) through authority granted to the agency under Section 112 of the Clean Air Act (CAA). EPA promulgates NESHAP emission standards under 40 CFR Part 63 for stationary source categories. In setting HAP emission limitations and performance standards for source categories EPA reviews available information and where additional information is needed EPA issues an ICR to affected sources under authority granted to it by Section 114 of the CAA.

The ICR for NESHAP for coal and oil-fired utility steam generating units was proposed by the EPA and noticed in the Federal Register on July 2, 2009. The NESHAP ICR Public Notice is included as Exhibit RRL-8. EPA has proposed to require survey information, fuel analyses, and emission stack testing to determine whether coal and oil-fired electric utility steam generating units emit HAPs listed under CAA section 112(b). FPL anticipates that the final ICR will be published in the Federal Register by December of 2009. To comply with the EPA deadlines, FPL will need to complete all required activities within six months of issuance of the final ICR. To comply with the March 13, 2007 D.C. Circuit Court of Appeals decision on Maximum Achievable Control Technology standards and the court's vacatur of the Clean Air Mercury Rule, EPA has proposed the NESHAP ICR to collect sufficient information to identify HAP emission standards for the best performing sources for coal and oil-fired utility steam generating units.

Q. Why has FPL proposed the NESHAP ICR project prior to EPA publishing a final ICR?

A. FPL anticipates that EPA will propose a final ICR for coal and oil-fired utility steam generating units this year as a result of the U.S. Court of Appeals decision, which requires that EPA gather sufficient data prior to setting a new standard and also as a result of the Court's vacatur of the Clean Air Mercury Rule, which requires that EPA establish standards for mercury and nickel emissions from coal and oil-fired steam electric generating units. As I've stated earlier, the proposed ICR would require emission testing and fuel analyses to be completed within six months of the final ICR at 471 plants across the U.S. for which there exists a limited number of companies that have demonstrated expertise in the analyses specified by EPA. FPL believes it must begin its plan to respond to a final ICR due to the near certainty that the ICR will be issued, due to the short time frame in which FPL would be required to respond, and also due to the limited availability of contractors needed for emission testing and fuel analyses.

Q. Does FPL plan to file comments with EPA regarding the ICR?

A. Yes. FPL will file specific comments related to several aspects of the proposal including the scope of the information request and extensive proposed testing, the requirement to test sources which will be replaced, and the relatively short proposed timelines for compliance with the ICR.

Q. How will the NESHAP ICR affect FPL?

A. FPL currently owns and operates 17 oil-fired electric utility steam generating units and owns a portion of 3 coal-fired electric utility steam generating units that are the subject of the proposed ICR. EPA's proposed ICR requires that FPL provide historical baseline operating and fuel quality data for all of its existing coal and oil-fired electric utility steam generating units for its survey and also provide additional data obtained through fuel sampling and stack emission testing for a portion of the affected units. For its co-owned coal-fired units FPL will require the operators of those units to complete reporting requirements and to arrange for fuel and emission testing where required by the ICR under the terms of its operating agreements. FPL would be responsible for its share of costs for compliance with the ICR.

Q. Please describe the activities FPL will initiate as a result of this project.

A. The information collection for this ICR consists of two components: 1) the preparation, submittal, and quality assurance check of data from all coal- and oil-fired units and 2) the emission stack testing, fuel testing, and quality assurance of data for units and facilities identified in the ICR Statement of Burden – Part B, which is included as Exhibit RRL-9.

As to the first component, EPA has proposed to collect the data required for all affected units through use of an electronic survey. FPL is currently evaluating resource needs associated with the required data collection, submittal and quality assurance. FPL has identified that it will need contractor services to assist in the collection and submittal of the first component of the ICR to comply with the EPA required submittal of survey results within 3 months of the published date of the final ICR.

For the second component of the ICR, FPL will use outside consulting firms for emission stack testing activities, required coal and oil testing for HAPs identified in the ICR, and for the data entry and quality assurance of test data submitted to EPA for the ICR. Results of stack testing and fuel analyses must be submitted to EPA within 6 months of the final published date of the ICR.

Q. **What are the compliance dates for this project?**

A. Comments on the proposed ICR must be filed by August 31, 2009. Based on promulgation of previous EPA ICRs, FPL anticipates that the EPA's proposed NESHAP ICR will be approved by the Office of Management and Budget and published in the Federal Register by November or December of 2009. Compliance deadlines for submittal of information would likely be February or March of 2010 for submittal of survey information and May or June of 2010 for stack emission testing and fuel analyses.

Q. **Is FPL recovering through any other mechanism the costs for NESHAP ICR Project for which it is petitioning for ECRC recovery?**

A. No. FPL is only requesting recovery of incremental activities associated with NESHAP ICR Project compliance with EPA requirements. Costs associated with similar activities required to comply with existing state and federal regulations are not included in FPL's estimates for this project.

Q. Has FPL estimated the cost of the NESHAP ICR Project?

A. The total cost of the project will depend on the requirements established in the final NESHAP ICR published in the Federal Register. To estimate the project costs for the NESHAP ICR, FPL has preliminarily relied upon the EPA estimates from the ICR Statement of Burden- Part B for those activities which FPL anticipates will be performed by outside firms. Costs for activities identified in the ICR which FPL expects to be completed by in-house resources have not been included in estimates and FPL does not plan to recover those costs through the ECRC NESHAP ICR Project. Specific details related to EPA's estimates for costs are provided in the ICR Statement of Burden – Part B. FPL has estimated a preliminary ECRC NESHAP ICR project cost of approximately $3.3 million for contractor and professional services required by the project. Because of EPA's tight compliance deadlines in the proposed rule, FPL anticipates that all of the costs associated with the ICR Project will be incurred in 2010.

Q. How will FPL ensure that the costs incurred are prudent and reasonable?

A. Consistent with our standard practice for all contractor services procurements, FPL proposes to competitively bid stack emission testing, fuel analyses, and quality assurance activities to ensure costs for activities performed by outside firms are prudently incurred. FPL will revise project estimates as specific costs become available through contractor specific bids and costs.

<u>Manatee Temporary Heating System Project – Cape Canaveral Plant</u>

Q. Please briefly describe FPL's filing dated April 13, 2009, requesting approval of the MTHS Project.

A. On April 13, 2009, FPL petitioned and I filed testimony in this docket requesting recovery of the MTHS Project, for the installation of an electric heating system at the Riviera Plant (PRV) in 2009, in order to provide a "manatee refuge" by discharging warm water when necessary into the manatee embayment area until PRV is converted to the Riviera Beach Next Generation Clean Energy Center. The MTHS Project will ensure that FPL complies with its PRV MPP, which is required by Specific Condition 9 (originally numbered 13) to the IWWF Permit Number FL00001546, issued by the FDEP for PRV on February 10, 2004.

Primary activities integral to the MTHS Project at PRV include installing the pipes, pumps, and heater, interconnection to the FPL power system, and testing and operating the system.

Q. Was FPL considering the need for a temporary heating system at PCC at the time of your April 13, 2009 filing?

A. Yes. In my testimony dated April 13, 2009, I mention that the IWWF permit and the MPP for PCC have similar requirements for maintaining water temperatures to protect manatees and that FPL would amend its MTHS Project to include the costs for a system at PCC. However, FPL's plans for PCC were not sufficiently finalized at that time to include them in the petition or my testimony.

Q. Please briefly describe FPL's proposed project at PCC.

A. In September 2008, FPL received a Determination of Need from this Commission to undertake a major modernization project at PCC, which will convert the existing conventional steam units into a highly efficient, clean-burning, gas-fired combined cycle unit (the "Modernization Project") to be named the Cape Canaveral Next Generation Clean Energy Center (CCEC).

The activities at PCC will include the installation of an electric heating system, pumps, piping, interconnection to the FPL electrical distribution system testing and operating the system in 2010, monitoring the physical conditions of the manatee embayment area, monitoring manatee distribution and abundance and engaging with jurisdictional agencies to begin long-term planning to reduce potential adverse affects from any future reduction of warm water production at the CCEC.

Since the original MTHS filing, the activities under the MTHS Project at PCC have been better defined since FWC proposed its Conditions of Certification for the project in August 2009.

Q. Please describe the environmental law or regulation requiring the MTHS Project at PCC.

A. FPL is proposing the MTHS Project at PCC in order to ensure compliance with PCC's existing MPP during the construction of CCEC, affirmatively respond to the USFWS letter of June 24, 2008, and comply with FWC's proposed Conditions of Certification for the CCEC.

The FDEP issued IWWF Permit Number FL0001473 to FPL's PCC on August 10, 2005. Specific Condition 9 of the IWWF permit states that "the Permitee shall continue compliance with the facility's MPP approved by the Department on December 21, 2000." The MPP requires FPL to provide warm water for manatees during winter months when certain weather conditions are present. FPL will apply for a renewal of the PCC IWWF permit in late January 2010.

The IWWF permit containing Specific Condition 9 is included as Exhibit RRL-10 and FPL's MPP for PCC is included as Exhibit RRL-11. Note that the Manatee Protection Plan refers to "Specific Condition 13," which has been renumbered as Specific Condition 9 in the current IWWF permit.

On June 24, 2008, the FWS provided comments in a letter to FPL regarding the Modernization Project. The FWS indicated that measures would be necessary to protect the manatees from cold water impacts during the transition period of the Modernization Project. A copy of the FWS letter to FPL is included as Exhibit RRL-12. Further, the manatees are protected by the federal Marine Mammal Protection Act of 1972 (16 U.S.C. 1361, et. seq.) and the Endangered Species Act of 1973 (16

U.S.C. 1531, et. seq.). Additionally, the Indian River Lagoon is considered by the USFWS as Critical Habitat for the manatee (42 FR 47840).

As a commenting agency to the Florida Electrical Power Plant Siting Act Site Certification process, FWC proposed Conditions of Certification regarding manatee protection to be required in the final Conditions of Certification. FWC subsequently wrote its agency report ("FWC Staff Report for Florida Power and Light Company – Cape Canaveral Energy Center (CCEC)") and filed it with the FDEP as part of the FPL CCEC Site Certification Application process. In the report, FWC has proposed Conditions of Certification regarding protections for the manatees in the interim period between PCC decommissioning and CCEC post-commercial operation, which is September 2010 through March 2015.

The Conditions of Certification include specific actions FPL must take in exchange for FWC's approval of CCEC. The proposed Conditions of Certification address the Interim Warm-Water Refuge Heating System for manatee protection, environmental monitoring, biological monitoring, and the development of a long-term manatee strategy. A copy of the "FWC Staff Report for Florida Power and Light Company – Cape Canaveral Energy Center (CCEC)" is included as Exhibit RRL-13.

Q. How has FPL complied with the PCC MPP in the past?

A. FPL has successfully complied with the PCC MPP in the past by discharging warm water from plant operation into the Indian River Lagoon via two once-through cooling water discharge structures (one discharge structure per unit). As noted in the MPP, at times when the ambient water temperature has fallen below 61°F as measured at the plant intake, PCC has endeavored to operate in a manner that maintains the water temperature in an adequate portion of the discharge area, for at least one unit, at or above 68°F, until such time as the intake water temperature reached 61°F, unless otherwise authorized by the Bureau of Protected Species Management (BPSM) and the USFWS, or unless safety or reliability of the plant would have been compromised.

Q. **When will FPL begin the MTHS Project at PCC?**

A. FPL will begin the MTHS Project at PCC upon receipt of the CCEC Site Certification determination from the Siting Board. FPL's current MTHS Project schedule assumes the Siting Board determination will be received January 19, 2010.

Q. **Why does the heating system at PCC need to be installed in 2010?**

A. Decommissioning of PCC is scheduled for April 2010. To comply with FWC's conditions of certification for CCEC and allow time for testing prior to the winter manatee season, FPL must install the heating system by September 15, 2010.

Q. **What is a manatee embayment area?**

A. The term "manatee embayment" refers to the PCC intake canal, beginning at the western most extent of the canal and including all waters within the canal between the peninsula and the southern shoreline up to the southern shoreline's eastern-most point. The embayment opens into the Indian River Lagoon. The location of the manatee embayment is shown on Exhibit RRL-14.

Q. **What is the significance of FPL providing warm water to the embayment area?**

A. The Florida manatee, a subspecies of the West Indian manatee found only in the southeastern United States, is listed as endangered under both the U.S. Endangered Species Act and Florida state law. Most manatees congregate at confined warm-water refuges when coastal water temperatures begin to fall below 68°F. The exact threshold at which manatees succumb to cold and die is uncertain and can vary between individual manatees. However, when extremely cold winter temperatures occur, large numbers of manatees may die or have their health impaired. Many of the natural warm water habitats historically used by manatees are no longer available to them. The outflows from power plants, like PCC, have provided a substitute for these lost natural resources.

Manatees are known to inhabit the Indian River Lagoon year-round, and they congregate at the PCC discharge area during colder temperatures because of the warm water discharged from the plant.

Q. **How many manatees can be found in Indian River Lagoon and the discharge area?**

A. On February 6, 2009, 540 manatees were sighted in the vicinity of PCC during an aerial survey.

Q. Why does FPL now need a different heating source for PCC?

A. Implementing the Modernization Project will require that the existing PCC units be dismantled and substantially rebuilt. During this construction period, the units will not be available to provide warm water for compliance with the MPP. The current schedule for the Modernization Project requires that the existing conventional steam units be taken out of service no later than April 2010 to begin the conversion.

Q. Please describe the heating system to be installed at PCC.

A. The heating system to be installed at PCC will include a 30-million Btu per hour electric heating system including pumps, piping, and electrical equipment. The electric heating system will be located to discharge warm water into the western end of the intake canal, where the water depth is approximately 11.5 to 14 feet deep. The intake for the system will be located approximately 1,000 feet east of the system discharge. When the ambient water temperature falls below an established threshold, sea water will be pumped from the intake location through an inlet pipe to the heater, and the heated water will be discharged into the west end of the intake canal, which will serve as the interim period manatee embayment area. The heating system is predicted to provide approximately 2.05 acres of water at or above 68°F during conditions under which heating is needed. A conceptual location of the heating system is included in Exhibit RRL-14.

Q. How did FPL determine the size of the electric heater?

A. To determine the size of the heater required to comply with the MPP obligation, FPL retained an environmental services firm (Golder Associates) to develop a computer model to calculate the required thermal outputs of the heating system.

Q. What conclusions did FPL reach regarding the alternatives for providing warm water to manatees at PCC?

A. As I discussed earlier, FPL will need a heating system at PCC because there will be no other viable source of warm water for manatees during the construction of the Modernization Project. All alternatives considered included a boiler or heater as part of an intake and discharge system that could be installed and operated to provide a sufficient warm water area. After studying commercially available system components, it was concluded that the heating system chosen was the best alternative for FPL to pursue, resulting in the most cost effective means to produce warm water for the manatees.

Q. What will happen to the MTHS at PCC when the modernization is completed in 2013?

A. The PCC MTHS is specifically required during the modernization process. FPL will evaluate the disposition of the MTHS at PCC as the modernization process is being completed. This evaluation will take into account providing the maximum value for FPL's customers while providing the desired environment for the manatees.

Q. What resources does FPL anticipate will be needed to operate the MTHS at PCC?

A. Based on FPL's earlier work on the MTHS at PRV, FPL anticipates using two operators. These operators will be incremental employees whose sole responsibility will be to operate, maintain, and repair the MTHS and these operators will be trained on the operation and maintenance of the MTHS at PCC. Each operator will work separately in a twelve-hour shift during weather critical days. Furthermore, FPL will develop a Best Management Practices (BMP) manual that will address, among other topics, operations, maintenance, troubleshooting, and repair of the MTHS at PCC.

Q. **Please describe the other Conditions of Certification relevant to the MTHS project at PCC.**

A. As found in the environmental monitoring section of the proposed Conditions of Certification for the CCEC project, FWC requires FPL to monitor the physical conditions in the manatee embayment area. FWC also requires FPL to monitor manatee distribution and abundance as prescribed in the biological monitoring section of the proposed Conditions of Certification for the CCEC project. The development of a long-term manatee strategy in the proposed Conditions of Certification requires FPL to engage with jurisdictional agencies to begin long-term planning to reduce potential adverse affects from any future reduction of warm water production at CCEC.

Q. **Please describe the activities and resources FPL anticipates are needed to comply with the PCC Conditions of Certification.**

A. Environmental monitoring includes writing an Environmental Monitoring Plan, evaluating the heating system, deploying temperature monitoring stations to measure air and water temperatures, and preparing environmental monitoring reports. Biological monitoring includes writing a Biological Monitoring Plan, conducting aerial surveys, tagging manatees and conducting telemetry studies, hiring specially-trained manatee observers, providing manatee observation platforms, and preparing biological monitoring reports. FPL will also perform activities required under the long-term manatee strategy mentioned above. Most, if not all, of the long-term strategy activities will occur after 2015 because of the requirements to coordinate activities with agencies protecting the manatees and the need to have future plant life plans for CCEC developed.

Q. Has FPL estimated the cost of the proposed MTHS project and associated activities needed to comply with the PCC Conditions of Certification?

A. Estimated capital costs for the heating system in 2010 are $4.68 million. This estimate includes expenditures for the equipment, design and engineering of the system, labor for installation, interconnection to the FPL power system, and the development of the BMP manual.

After installation and commissioning is complete, FPL expects to incur O&M costs associated with materials and supplies necessary to maintain the heating system at PCC. FPL's annual O&M estimates for years 2010 through 2015 are $202,249, $318,931, $286,600, $298,000, $268,000, $138,500 respectively. The materials and supplies which are expected to be required for operation and maintenance of the heating system may include replacement heating elements, heater control components, electrical fuses, pump seals, and miscellaneous consumable items such as grease/oil for motor maintenance, gaskets, paint and rags. These projected O&M costs do not include the energy costs to operate the heating system. FPL cannot predict how often the system will operate, however, the energy costs will not be significant nor will they be recovered through the ECRC process.

Regarding compliance with the additional PCC Conditions of Certification, FPL estimated that environmental monitoring will cost a total of $865,000 which includes expenses for consultants, instruments, equipment, and production of documents. Biological monitoring is estimated to total $920,000, which includes expenses for consultants, survey flights, instruments, equipment, and production of documents. The development of a long-term manatee strategy is estimated to total $110,000 which includes expenses for consultants, workshops, and production of documents.

Q. **Has FPL estimated its 2010 ECRC recovery amount for the MTHS project and related PCC Conditions of Certification?**

A. FPL plans to place the heating system at PCC into service by September 15, 2010. Based on that in-service date, FPL has projected approximately $160,684 in amortization expense and return on investment associated with this heating system during the remainder of

2010. During 2010, FPL projects spending approximately $202,249 for environmental monitoring, biological monitoring and the long-term strategy development, which are required by the PCC Conditions of Certification.

Q. **Please describe the measures FPL has taken to ensure that costs of the PCC MTHS project and related PCC Conditions of Certification have been minimized.**

A. FPL's Engineering and Construction Division has retained an engineering firm, Worley Parsons, to perform a study to identify the most cost-effective approach to providing a heating system at PCC. Using a performance specification for the recommended heater, FPL's Integrated Supply Chain (ISC) group, participating in the MTHS Project, solicited bids from multiple suppliers, identified the supplier that provided the overall best value, and has secured pricing for the heater component of the PCC MTHS. The ISC group provides enterprise-wide leadership, direction, and operation of a fully integrated supply chain that will also support the procurement of other materials and equipment, as well as the construction services needed to complete the MTHS at PCC. ISC's objective is to drive down costs to FPL and ensure the delivery of the highest quality goods and services.

FPL's Project Controls group has established a scope, budget, and schedule to meet the needs of the MTHS Project. Project Controls is also responsible for tracking all MTHS Project costs through various approval processes, procedures, and databases.

Regarding the FWC Conditions of Certification, FPL has developed its estimates by working with the FWC staff and an independent expert in manatee studies to assess the costs and expenses for environmental monitoring, biological monitoring, and developing a long-term manatee strategy.

Q. Is FPL recovering through any other mechanism the costs for the PCC MTHS project and related PCC Conditions of Certification for which it is petitioning for ECRC recovery?

A. No.

<u>St. Lucie Cooling Water System Inspection and Maintenance Project Update</u>

Q. Please provide an update on the St. Lucie Cooling Water System Inspection and Maintenance Project.

A. As I will explain below, the St. Lucie Cooling Water System Inspection and Maintenance Project (the "Project) has evolved substantially as to the required scope of project activities. In addition, FPL has encountered considerable challenges related to the conditions under which the Project work must be performed.

Q. Please describe the evolution of the scope of Project activities.

A. In anticipation of a Biological Opinion (BO) to be issued by the National Marine Fisheries Service (NMFS) pursuant to section 7 of the federal Endangered Species Act, 16 USC Section1531 (ESA), on January 5, 2007, FPL submitted a petition to the Florida Public Service Commission (FPSC) for approval of the Project. In the affidavit supporting the petition, FPL stated that the purpose of the Project was to inspect and, as necessary, clean up or repair any conditions found during the inspection that could contribute to injuries and/or deaths of endangered species, thus helping to keep FPL in compliance with the ESA. The affidavit further stated that, while the initial project activity consisted of inspection and cleaning of the intake pipes, additional inspection, maintenance and/or modification activities could be required in the future to comply with the ESA.

The major change to the required scope relates to the decision by the NMFS that FPL needs to install exclusion devices at the velocity cap openings in order to prevent large organisms such as adult sea turtles from entering the intake pipes. This change in the NMFS's position is largely a result of the discovery that a nesting female sea turtle had been drawn through an intake pipe into the cooling canal and laid eggs on the bank of the canal, and that the hatchlings then were drawn into plant cooling water intakes where they were trapped and died.

On August 4, 2008, I filed an update to the Project providing details on the specifications of the exclusion device, stating "the exclusion devices consist of a support structure installed in the opening of the velocity caps, which will support panels containing a mesh with 20 inch openings installed at approximately 45 degrees." The testimony also stated that the conceptual design had been submitted to the Nuclear Regulatory Commission (NRC) for review. Although the devices are intended to exclude a variety of sea life, I will refer to them as "turtle excluders" for simplicity.

Q. **What is the status of the inspection and cleaning of the St. Lucie Plant Cooling Water System?**

A. The inspection of the intake pipes and velocity caps was completed during the scheduled 2007 Spring refueling outage. The results of the inspection provided details for what additional work was needed to clean and remove/minimize debris or structural obstructions.

FPL established a project team to plan and manage the scope of the pipe cleaning and debris removal. Generally, the cleaning included the ceiling, floor and columns of the velocity caps, along with the vertical risers and the easternmost 375' of the intake pipes. The work also called for removal of marine growth, unevenness of the concrete and other obstacles and protrusions that could potentially harm marine life.

As with the inspection work, the cleaning and debris removal has to be performed during unit outages, to allow the flow in the pipe that is being cleaned to be blocked off for safety reasons. Initially, FPL expected to complete that work during scheduled outages in 2007, but that has not proved to be possible. The 12' diameter south intake pipe and 200' of the 12' diameter north intake pipe were completed in 2007, representing approximately 57% of the estimated total footage. The vertical risers for the two 12' velocity cap structures were also completed in 2007, representing approximately 66% of the total area. The 2007 cleaning work was delayed approximately 40% of the calendar time because of adverse weather conditions.

No pipe cleaning work was performed during the scheduled 2008 Fall refueling outage because of adverse weather conditions. Work also could not be performed during the scheduled 2009 Spring refueling outage because of a very short outage window. Therefore, the remaining intake pipe and velocity cap cleaning has been scheduled for the 2010 and 2012 Spring refueling outages.

Q. **Please describe the adverse weather conditions that have led to project delays.**

A. Weather conditions have a direct impact on the diving operations since the cleaning of the intake pipe and velocity caps is performed manually by divers. Diving operations are considered a high risk activity. Because of the high risk nature of diving operations and the importance of diver safety, very stringent dive rules are in place to protect divers. The dive restrictions are very dependent on sea conditions which are, in turn, greatly influenced by the weather conditions. In addition to storms and lightning, sea conditions such as wave height, wave surge, and visibility are influenced by the weather and have limits that restrict when divers can be in the water. Although conditions are generally good for dive operations during the spring and summer months when the cleaning is performed, during the duration of the Project, weather has often resulted in lost time or non-productive days where weather would not allow dive operations to start or days when weather limited productive dive time.

Q. Please describe the activities that FPL is undertaking as a result of the NMFS requirement that turtle excluders be installed.

A. The 2007 inspection identified inconsistencies in the size and shape of the windows in the velocity cap structures where the turtle excluders are to be installed. These inconsistencies are believed to be due to a combination of biofouling, marine growth, protrusions of various construction materials in the velocity cap windows and the uneven placement of concrete. Together, these factors have made it impractical to design and install turtle excluders having standard dimensions, meaning that each excluder would have to be customized to the window where it would be installed. Therefore, unless steps are taken to allow the installation of standardized excluders, the design, testing, and installation would not be cost effective. In addition, the reduced area of the windows due to the obstructions has created vortices from which organisms cannot escape. Cost estimates to remove this excess concrete (by concrete cutting methods) as well as other obstacles and protrusions in the window openings were not contemplated in any of the original project cost projections.

The removal of excess concrete required for the installation of the turtle exclusion devices is scheduled to resume in 2010 and continue through 2012. The concrete removal in the 16' pipe will be completed in 2011, which in turn will allow the 16' velocity cap turtle exclusion devices to be installed. The 12' velocity caps' concrete removal is expected to be completed in the Spring of 2012, and the turtle exclusion devices installed in the Summer of 2012.

Q. **What impact have these challenging work conditions and scope changes had on the projected cost of the Project?**

A. As one would expect, they have increased the projected cost considerably. The original cost estimate for the inspection and cleaning/debris removal was approximately $3 million to $6 million, although the petition cautioned at the time that the full scope and hence cost of the Project could not be predicted until the inspection was complete. In 2008, I estimated the cost of the turtle excluders to be approximately $3.75 million. However, those estimates did not take into account (1) the extremely adverse work conditions that would drastically limit the amount of productive dive time, or (2) the need to physically cut out large sections of concrete and other protrusions in order to eliminate dangerous obstacles and create regular window dimensions for the turtle excluders. These changed conditions have increased FPL's estimate of the total project cost from the approximately $10 million just mentioned, to over $21 million today.

FPL's estimated costs for 2010 are $4.2 million. Of that total, $2.8 million of capital expenses are projected for concrete removal activities, and $1.4 million of O&M expenses projected for pipe cleaning activities.

Q. How will FPL ensure that the costs incurred are prudent and reasonable?

A. Consistent with our standard practice for all contractor services procurements, FPL competitively bid all of the concrete cutting and diving activities to ensure costs for activities performed by outside firms were prudently incurred. FPL will revise project estimates as specific costs become available through contractor specific bids and costs. FPL will continue to perform due diligence over the life of this project to minimize costs, which may include investigating alternative concrete cleaning and cutting techniques, changes in diving operations that may include changes to types of work platforms and stations, diver working hours, or other methodologies to ensure the projects costs are prudent and reasonable and that any costs for weather delays are minimized

Q. Is FPL recovering these Project costs through any other mechanism?

A. No.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

WILL GARRETT

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 090007-EI

April 1, 2009

Q. Please state your name and business address.

A. My name is Will Garrett. 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 Service Company, LLC as Controller of Progress Energy Florida (PEF).

Q. What are your responsibilities in that position?

A. As legal entity Controller for PEF, I am responsible for all accounting matters that impact the reported financial results of this Progress Energy Corporation entity. I have direct management and oversight of the employees involved in PEF Regulatory Accounting, Property Plant and Materials Accounting, and PEF Financial Reporting and General Accounting.

Q. Please describe your educational background and professional experience.

A. I joined the company as Controller of PEF on November 7, 2005. My direct relevant experience includes over 2 years as the Corporate Controller for DPL, Inc. and its major subsidiary, Dayton Power and Light, headquartered in Dayton, Ohio. Prior to this position, I held a number of finance and accounting positions for 8 years at Niagara Mohawk Power Corporation, Inc. (NMPC) in Syracuse, New York, including Executive Director of Financial Operations, Director of Finance and Assistant Controller. As the Director of Finance and Assistant Controller, my responsibilities included regulatory proceedings, rates, financial planning, and providing testimony on a variety of matters before the New York Public Service Commission. Prior to joining NMPC, I was a Senior Audit Manager at Price Waterhouse (PW) in upstate New York, with 10 years of direct experience with investor owned utilities and publicly traded companies. I am a graduate of the State University of New York in Binghamton, with a Bachelor of Science in Accounting and I am a Certified Public Accountant in the State of New York.

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

A. Yes.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present for Commission review and approval, Progress Energy Florida's Actual True-up costs associated with Environmental Compliance activities for the period January 2008 through December 2008.

Q. Are you sponsoring any exhibits in support of your testimony?

A. Yes. I am sponsoring Exhibit No. WG-1, which consists of eight forms and Exhibit No. WG-2, which provides details of four capital projects by site.

Exhibit No. WG-1 consists of the following:

- Form 42-1A reflects the final true-up for the period January 2008 through December 2008.
- Form 42-2A reflects the final true-up calculation for the period.
- Form 42-3A reflects the calculation of the Interest Provision for the period.
- Form 42-4A reflects the calculation of variances between actual and estimated/actual costs for O&M activities.
- Form 42-5A presents a summary of actual monthly costs for the period of O&M activities.
- Form 42-6A reflects the calculation of variances between actual and estimated/actual costs for Capital Investment Projects.
- Form 42-7A presents a summary of actual monthly costs for the period for Capital Investment Projects.

- Form 42-8A, pages 1 through 13, consist of the calculation of depreciation expense, property tax expense, and return on capital investment for each project that is being recovered through the ECRC.

Exhibit No. WG-2 consists of detailed support for the following capital projects:

- Pipeline Integrity Management (Capital Program Detail ("CPD"), pages 1 through 2)
- Above Ground Storage Tank Secondary Containment (CPD, pages 3 through 8)
- Clean Air Interstate Rule ("CAIR") Combustion Turbines ("CTs")(CPD, pages 9 through 12)
- CAIR/Clean Air Mercury Rule ("CAMR") (CPD, page 13)

Q. What is the source of the data that you will present by way of testimony or exhibits in this proceeding?

A. The actual data is taken from the books and records of PEF. The books and records are kept in the regular course of our business in accordance with generally accepted accounting principles and practices, and provisions of the Uniform System of Accounts as prescribed by Federal Energy Regulatory Commission (FERC) and any accounting rules and orders established by this Commission.

Q. What is the final true-up amount for which PEF is requesting for the period January 2008 through December 2008?

A. PEF is requesting approval of an under-recovery amount of $14,193,035 for the calendar period ending December 31, 2008. This amount is shown on Form 42-1A, Line 1.

Q. What is the net true-up amount PEF is requesting for the January 2008 through December 2008 period which is to be applied in the calculation of the environmental cost recovery factors to be refunded/recovered in the next projection period?

A. PEF has calculated and is requesting approval of an under-recovery amount of $4,320,606 reflected on Line 3 of Form 42-1A, as the adjusted net true-up amount for the January 2008 through December 2008 period. This amount is the difference between the actual under-recovery amount of $14,193,035 and the actual/estimated under-recovery of $9,872,429, as approved in Order PSC-08-0775-FOF-EI, for the period of January 2008 through December 2008.

Q. Are all costs listed in Forms 42-1A through 42-8A attributable to environmental compliance projects approved by the Commission?

A. Yes, they are.

Q. How did actual O&M expenditures for January 2008 through December 2008 compare with PEF's estimated/actual projections as presented in previous testimony and exhibits?

A. Form 42-4A shows that total O&M project variance was $4,096,097 or 10% higher than projected. Following are variance explanations for those O&M projects with significant variances. Individual project variances are provided on Form 42-4A.

<u>O&M Project Variances</u>

1. **Substation Environmental Investigation, Remediation, and Pollution Prevention (Project No. 1):** The project expenditure variance was $980,253 or 20% higher than projected. This variance is primarily attributable to higher amounts of subsurface contamination encountered during remediation of substations that was not evident during the original visual environmental inspections. This project is further discussed in Corey Zeigler's testimony.

2. **Distribution System Environmental Investigation, Remediation, and Pollution Prevention (Project No. 2)**: The project expenditure variance was $4,068,602 or 27% higher than projected. This variance is primarily attributable to the higher unit cost than forecasted and the carryover of uncompleted work from the 2007 work plan. This project is further discussed in Corey Zeigler's testimony.

3. **SO_2 Emissions Allowances Program (Project No. 5)**: The SO_2 Emissions Allowances O&M project expenditures variance was $1,032,657 or 7% lower than projected. The majority of the variance is being driven by the higher use of natural gas at the Anclote and Bartow plants than was projected during 2008, and the quality of the coal burned at Crystal River having a lower SO_2 content. The higher use of natural gas and coal used at the Crystal River plant resulted in lower SO2 emissions and therefore lower emission allowance requirements.

Q. How did actual Capital recoverable expenditures for January 2008 through December 2008 compare with PEF's estimated/actual projections as presented in previous testimony and exhibits?

A. Form 42-6A shows that the total Capital Investment project recoverable costs variance was $36,501 higher than projected for an immaterial difference from projected. Actual costs and variance by individual project are provided on Form 42-6A. Return on Capital Investment, Depreciation, and Taxes for each project for the period are provided on Form 42-8A, pages 1 through 13.

Q. How did actual Crystal River CAIR/CAMR – Base (Project No. 7.4) capital expenditures for January 2008 through December 2008 compare with PEF's estimated/actual projections as presented in previous testimony and exhibits?

A. These capital expenditures qualify for Allowance for Funds Used During Construction ("AFUDC") and therefore will not be included in the capital recoverable costs until the associated pollution controls are placed in service. PEF reprojected total capital expenditures to be $527,427,410 in 2008 (PSC-08-0775-

FOF-EI, Exhibit LC-1 Schedule 42-8E pg.9) as part of the Estimated/Actual filing. Actual expenditures in 2008 were $524,059,008 or $3,368,402 (1%) lower than projected. This variance is primarily due to an unused contingency within the project.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

COREY ZEIGLER

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 090007-EI

April 1, 2009

Q. Please state your name and business address.

A. My name is Corey Zeigler. My business address is 299 First Avenue North, St. Petersburg, Florida 33701.

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

A. I am employed by Progress Energy Florida (PEF) as Manager, Environmental Permitting & Compliance.

Q. What are your responsibilities in that position?

A. Currently, my responsibilities include managing environmental permitting and compliance activities for Energy Delivery Florida. Energy Delivery Florida is part of the Florida Distribution Business unit of which I support the Distribution and Transmission Operation and Planning Department.

Q. Please describe your educational background and professional experience.

A. I received a Bachelors of Science degree in General Business Administration and Management from the University of South Florida. Prior to holding this role I was the Health and Safety Manager for Progress Energy Florida Transmission and Delivery. I have 17 years experience in the utility industry holding various operational, supervisor and managerial roles at Progress Energy.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to explain material variances between the actual project expenditures versus the Estimated/Actual project expenditures for environmental compliance costs associated with PEF's Substation Environmental Investigation, Remediation, and Pollution Prevention Program (Project 1 & 1a), the Distribution System Environmental Investigation, Remediation, and Pollution Prevention Program (Project 2), and Sea Turtle (Project 9) for the period January 2008 through December 2008.

Q. How did actual O&M expenditures for January 2008 through December 2008 compare with PEF's estimated / actual projections as presented in previous testimony and exhibits for the Substation System Program?

A. The project expenditure variance for the Substation System Program was $980,253 or 20% more than projected. This increase is primarily attributable to higher amounts of subsurface contamination encountered during remediation of substations that was not evident during the original visual environmental inspections.

Q. How did actual O&M expenditures for January 2008 through December 2008 compare with PEF's estimated / actual projections as presented in previous testimony and exhibits for the Distribution System Program?

A. The project expenditure variance for the Distribution System Program was $4,068,602 or 27% more than projected. This increase is driven by a higher unit cost associated with remediation sites that took longer than one day (as originally projected) to complete because of soil conditions or extent of the contamination.

Q. How did actual O&M expenditures for January 2008 through December 2008 compare with PEF's estimated / actual projections as presented in previous testimony and exhibits for the Sea Turtle Program?

A. Actual O&M expenditures are in line with PEF's previously filed Estimated/Actual projections. The actual expenditures on the Sea Turtle Project were $110,572, compared to the Estimated/Actual projection of $106,711 for an immaterial variance of $3,861 in 2008.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

<u>COREY ZEIGLER</u>

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 090007-EI

AUGUST 3, 2009

Q. Please state your name and business address.

A. My name is Corey Zeigler. My business address is 299 First Avenue North, St. Petersburg, Florida 33701.

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

A. I am employed by Progress Energy Florida (PEF) as Manager, Environmental Permitting & Compliance.

Q. What are your responsibilities in that position?

A. Currently, my responsibilities include managing environmental permitting and compliance activities for Energy Delivery Florida. Energy Delivery Florida is part of the Florida Distribution Business unit of which I support the Distribution and Transmission Operation and Planning Departments.

Q. Please describe your educational background and professional experience.

A. I received a Bachelors of Science degree in General Business Administration & Management from the University of South Florida. Prior to holding this role, I was the Health and Safety Manager for Progress Energy Florida's Delivery and Transmission Operations and Planning Departments. I have 17 years experience in the utility industry, holding various operational, supervisor and managerial roles at Progress Energy.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to explain material variances between the Estimated/Actual project expenditures versus the original cost projections for environmental compliance costs associated with Progress Energy Florida (PEF)'s Substation Environmental Investigation, Remediation, and Pollution Prevention Program (Projects 1 & 1a).

Q. Please explain the variance between the Estimated/Actual project expenditures and the original projections for the Substation System Program (project 1 & 1a) for the period January 2009 to December 2009.

A. O&M project expenditures for the Substation System Program are estimated to be $2,728,164 or 40% lower than originally projected. The decrease is driven by scheduling conflicts that resulted in multiple sites being rescheduled from the first half of 2009 to the fourth quarter of 2009 and into 2010, multiple sites containing less contamination than originally projected, and recent scope changes to the remediation taking place at the West Lake Wales substation site. A Site Assessment Report for this substation is being prepared and will be submitted to the Florida Department of Environmental Protection in the upcoming months.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

COREY ZEIGLER

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 090007-EI

AUGUST 28, 2009

Q. Please state your name and business address.

A. My name is Corey Zeigler. My business address is 299 First Avenue North, St. Petersburg, Florida 33701.

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

A. I am employed by Progress Energy Florida as Manager, Environmental Permitting and Compliance.

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. The purpose of my testimony is to provide estimates of the costs that will be incurred in the year 2010 for Progress Energy Florida's ("PEF's" or "Company's") Substation Environmental Investigation, Remediation, and Pollution Prevention Program (Project #1), which was previously approved in PSC Order No. PSC-02-1735-FOF-EI, Distribution System Environmental Investigation, Remediation, and Pollution Prevention Program (Project #2), which was previously approved in PSC Order No. PSC-02-1735-FOF-EI, and the Sea Turtle Coastal Street Lighting Program (Project #9), which was previously approved in PSC Order No. PSC-05-1251-FOF-EI.

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 the schedule (TGF-3) attached to Thomas G. Foster's testimony:

- 42-5P page 1 of 14 - Substation Environmental Investigation, Remediation, and Pollution Prevention
- 42-5P page 2 of 14 - Distribution System Environmental Investigation, Remediation, and Pollution Prevention
- 42-5P page 9 of 14 - Sea Turtle - Coastal Street Lighting

Q. **What costs do you expect to incur in 2010 in connection with the Substation System Investigation, Remediation and Pollution Prevention Program (Project #1)?**

A. For 2010, we estimate PEF will incur total O&M expenditures of approximately $2,075,411 in remediation costs for the Substation System Investigation, Remediation and Pollution Prevention Program. This amount includes estimated costs for remediation activities at 69 substation sites that have already been identified as requiring remediation.

Q. **What steps is the Company taking to ensure that the level of expenditures for the Substation System Program is reasonable and prudent?**

A. PEF works annually with the Florida Department of Environmental Protection ("FDEP") to determine the specific substation sites to be remediated to ensure compliance with FDEP criteria. The Company also provides quarterly reports to FDEP on progress made in remediating substation sites. To ensure the level of expenditures is reasonable and prudent; the Company closely monitors remediation work and provides quarterly reports to the FDEP on progress made in remediating the sites.

Q. What costs do you expect to incur in 2010 in connection with the Distribution System Investigation, Remediation and Pollution Prevention Program (Project #2)?

A. For 2010 we estimate total Operations and Maintenance ("O&M") expenditures of approximately $8,880,800 for the Distribution System Investigation, Remediation and Pollution Prevention Program to perform remediation activities at approximately 751 sites. This estimate assumes approximately 154 3-phase transformer sites at an average cost of $15,800 per site, approximately 597 single-phase transformer sites at an average cost of $10,800 per site as well as program management costs. The average cost per site was based upon PEF's analysis of the prior two years of invoices associated with the remediation of the TRIP sites.

Q. What steps is the Company taking to ensure that the level of expenditures for the Distribution System program is reasonable and prudent?

A. To ensure the level of expenditures is reasonable and prudent; the Company closely monitors remediation work and provides quarterly reports to the FDEP on progress made in remediating distribution sites.

Q. What costs do you expect to incur in 2010 in connection with the Sea Turtle/Street Lighting Program (Project #9)?

A. For 2010, the projected expenses for the Sea Turtle/Street Lighting Program are $21,800. This amount includes $1,800 in O&M costs and $20,000 in capital expenditures to ensure compliance with sea turtle ordinances in Franklin and Gulf Counties and the City of Mexico Beach. The capital expenditures will be spent on modifications and/or replacement of applicable lighting fixtures. The estimated O&M projections include research costs associated with street light technology studies.

Q. What steps is the Company taking to ensure that the level of expenditures for the Sea Turtle/Street Lighting Program is reasonable and prudent?

A. PEF is cooperating with local governments and appropriate regulatory agencies to develop compliance plans that allow flexibility to make only those modifications necessary to achieve compliance. PEF will ensure that evaluation of each streetlight requiring modification occurs so that only those activities necessary to achieve compliance are performed in a reasonable and prudent manner. In addition, PEF will evaluate emerging technologies and incorporate their use where reasonable and prudent.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

PATRICIA Q. WEST

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 090007-EI

April 1, 2009

Q. Please state your name and business address.

A. My name is Patricia Q. West. My business address is 299 First Avenue North, St. Petersburg, Florida 33701.

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

A. I am employed by the Environmental, Health and Safety Services Section of Progress Energy Florida ("PEF" or "Company") as Manager of Environmental Services / Power Operations Group. In that position, I have responsibility to provide regulatory support and obtain necessary environmental permits for the implementation of compliance strategies pertaining to environmental requirements for power generation facilities in Florida.

Q. Please describe your background and experience in the environmental field.

A. I obtained my B.A. degree in Biology from New College of the University of South Florida in 1983. I was employed by the Polk County Health Department from 1983-1986 and by the Florida Department of Environmental Protection

("DEP") from 1986-1990. At DEP, I was involved in compliance and enforcement efforts associated with petroleum storage facilities. In 1990, I joined Florida Power Corporation as an Environmental Project Manager and then held progressively responsible positions in the company's environmental services department, including the position of team leader for the integration of the environmental functions of Florida Power and Carolina Power and Light. I previously served as Manager of Water Programs in the Environmental Services Section of PEF's Technical Services Department and as Manager of Environmental Programs and Strategy. In 2005, I assumed my present position as Manager of Environmental Services / Power Operations Group.

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. **What is the purpose of your testimony?**

A. This testimony provides PEF's Actual True-Up costs associated with the following environmental compliance activities under my responsibility for the period January 2008 through December 2008. In addition, I am sponsoring Exhibit No. __ (PQW-1), which is PEF's review of the efficacy of its Integrated Clean Air Compliance Plan and of retrofit options in relation to expected environmental regulations.

Q. **What current PSC-approved projects are you responsible for?**

A. I am responsible for Pipeline Integrity Management (Project No. 3); Aboveground Storage Tank Secondary Containment (Project No. 4), Phase II Cooling Water Intake (Project No. 6), CAIR / CAMR Peaking / Demand (Project No. 7.2), Arsenic Groundwater Standard (Project No. 8), Modular Cooling Towers (Project No. 11), and the Greenhouse Gas Inventory and Reporting (Project No. 12).

Q. Please summarize the total variances between actual O&M expenditures for these projects and the Estimated/Actual projections presented in prior testimony.

A. The overall total combined O&M variance for all of these projects was $40,434 over the Estimated/Actual costs for 2008.

Q. Have there been any recent developments concerning the Clean Air Interstate Rule (CAIR)?

A. In July 2008, the U.S. Circuit Court of Appeals for the District of Columbia issued a decision vacating CAIR in its entirety. However, in response to EPA's petition for rehearing, the court requested briefs from the parties regarding whether CAIR should be remanded to EPA without vacatur of CAIR. On December 23, the court decided to remand CAIR without vacatur, thereby leaving the rule and its compliance obligations in place. Thus, PEF must continue to move forward with its Integrated Clean Air Compliance Plan ("Plan D") in order to meet the impending CAIR compliance deadlines.

Q. Have there been any recent developments concerning the Clean Air Mercury Rule (CAMR)?

A. Yes. In February 2008, the U.S. Court of Appeals for the District of Columbia (D.C.) Circuit vacated the federal CAMR regulations. On October 17, 2008 EPA petitioned the U.S. Supreme Court to review the CAMR vacatur decision. However, on January 29, 2009, EPA withdrew its petition and announced its intention to proceed with a Maximum Achievable Control Technology (MACT) rulemaking. It is impossible to predict when EPA will complete the MACT rulemaking process or what the emissions standard will be. In any event, because mercury component of PEF's Plan D relies on the co-benefit of selective catalytic reduction ("SCR") and scrubbers rather than mercury-specific controls until 2017, the Plan provides flexibility to respond to any rules EPA may adopt in response to the D.C. Circuit's decision.

Q. In Order No. PSC-07-0922-FOF-EI issued in Docket 070007-EI on November 16, 2007, the Commission directed PEF to file as part of its ECRC true-up testimony "a yearly review of the efficacy of its Plan D and the cost-effectiveness of PEF's retrofit options for each generating unit in relation to expected changes in environmental regulations." Has PEF conducted such a review?

A. Yes.

Q. Please summarize the conclusions of PEF's review.

A. Based on project milestones achieved to date, PEF remains confident that Plan D will have the desired effect of achieving timely compliance with the applicable regulations in a cost-effective manner. No new or revised environmental regulations have been adopted that have a direct bearing on PEF's compliance plan. Although DEP is in the process of developing a cap-and-trade program to regulate CO_2 emissions, no regulations have been adopted to date and there currently are no demonstrated retrofit options to reduce CO_2 emissions from fossil fuel-fired electric generating units. Moreover, abandoning the Crystal River Units 4 and 5 emission control projects is not a viable option in light of the imminent 2009 and 2010 CAIR deadlines. As I previously discussed, although EPA is proceeding with the adoption of new MACT standards for utility hazardous air pollutant emissions as a result of a federal court decision vacating the federal CAMR rules, this development does not immediately impact PEF's implementation of Plan D because the plan relies primarily on installation of NOx and SO_2 controls to reduce mercury emissions and does not contemplate installation of mercury-specific controls until 2017. For these reasons, PEF's Plan D continues to represent the most cost-effective alternative for achieving and maintaining compliance with the applicable regulatory requirements.

Q. Does this conclude your testimony?

A. Yes it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

PATRICIA Q. WEST

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 090007-EI

AUGUST 3, 2009

Q. Please state your name and business address.

A. My name is Patricia Q. West. 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 the Environmental Health and Safety Services Section of Progress Energy Florida ("Progress Energy" or "Company") as Manager of Environmental Services / Power Generation Florida.

Q. What are your responsibilities in that position?

A. I am responsible for ensuring that environmental technical and regulatory support is provided to the implementation of compliance strategies associated with the environmental 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 (ECRC)?

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. The purpose of my testimony is to explain material variances between the Estimated/Actual project expenditures and the original cost projections for environmental compliance costs associated with PEF's, Aboveground Storage Tank Secondary Containment Program, Arsenic Groundwater Standard Project, the Integrated Clean Air Compliance Program, Thermal Discharge Permanent Cooling Tower, and the Greenhouse Gas Inventory and Reporting Program, for the period January 2009 through December 2009. I also will describe a new Total Maximum Daily Loads for Mercury Program for which PEF is seeking recovery in this docket.

Q. What current PSC-approved projects are you responsible for?

A. I am responsible for Pipeline Integrity Management (Project No. 3); Aboveground Storage Tank Secondary Containment (Project No. 4), Phase II Cooling Water Intake (Project No. 6), CAIR/CAMR Peaking - Demand (Project

No. 7.2), CAIR/CAMR Crystal River (Project No. 7.4), Arsenic Groundwater Standard (Project No. 8), Underground Storage Tanks (Project 10), Modular Cooling Towers (Project No. 11), Thermal Discharge Permanent Cooling Tower (Project No. 11.1), Greenhouse Gas Inventory and Reporting (Project No. 12), and the Mercury Total Daily Maximum Loads Monitoring (Project No. 13).

Q. Please explain the variance between the Estimated/Actual capital expenditures and the original projections for the Above Ground Tank Secondary Containment Program (Project No. 4) for the period January 2009 to December 2009.

A. PEF is projecting capital expenditures to be $872,377 or 65% higher for this program than originally projected. This variance is mainly attributable to the decision to upgrade Turner Tank 7 rather than retire it and expenses that were delayed from 2008 to 2009 due to Tropical Storm Fay and the subsequent flooding that followed.

Q. Please explain the variance between the Estimated/Actual project expenditures and the original projections for the CAIR/CAMR Crystal River (Project No. 7.4) for the period January 2009 to December 2009.

A. PEF is projecting O&M expenditures to be $532,581 or 13% lower for this program than originally projected. This variance is attributable to an outage scheduling adjustment from May 2009 to June 2009 of the Crystal River Selective Catalytic Reduction (SCR) (7.4c) project, and Crystal River Urea to Ammonia System (project 7.4d) resulting in lower than projected ammonia consumption. Also, contributing to the variance is the decrease in the expected monthly cost of ammonia and limestone from the original 2009 projection.

Q. Please explain the variance between the Estimated/Actual project expenditures and the original projections for the Arsenic Groundwater Standard (Project No. 8) for the period January 2009 to December 2009.

A. PEF is projecting O&M expenditures to be $77,669 or 100% lower for this program than originally projected. PEF continues working with the FDEP to address potential groundwater arsenic issues and to develop a compliance plan.

Q. Please explain the variance between the Estimated / Actual project expenditures and the original projections for the Thermal Discharge Permanent Cooling Tower (Project 11.1) for the period January 2009 and December 2009.

A. PEF is projecting capital expenditures to be $2,440,619 or 21% lower for this project in 2009 than originally forecast. This variance is mainly attributable to the refinement of project costs reflecting design changes due to anticipated scope reductions and associated procurement requirements.

Q. Please explain the variance between the Estimated / Actual project expenditures and the original projections for the Green House Gas Inventory and Reporting (Project 12) for the period January 2009 and December 2009.

A. PEF is projecting O&M expenditures to be $42,680 or 75% lower for this program than originally projected. This variance is the result of preparing the inventory report with internal resources rather than external consultants during the first two quarters of the year. A third party consultant will be hired for verification of the report, as required by the Climate Registry, and those are the expenses now projected for 2009.

Q. Is PEF requesting recovery of 2009 costs for any new environmental programs?

A. Yes. On March 4, 2009 PEF filed a petition requesting recovery of costs associated with a new study of Total Daily Maximum Loads (TDML) for mercury in State waters and rules regulating mercury emissions from various sources including, potentially, coal-fired power plants.

Q. Why is the Company implementing this new program?

A. Section 303(d) of the federal Clean Water Act requires each state to identify state waters not meeting water quality standards and establish a TMDL for the pollutant or pollutants causing the failure to meet standards. Under a 1999 federal consent decree, TMDLs for over 100 Florida water bodies listed as impaired for mercury must be established by September 12, 2012. DEP has initiated a research program to provide the necessary information for setting the appropriate TMDLs for mercury. Among other things, the study will assess the relative contributions of mercury-emitting sources, such as coal-fired power plants, to mercury levels in surface waters. In turn, DEP could seek to use this information to attempt to impose new regulatory requirements on mercury-emitting sources, such as coal-fired power plants. Additionally, in a separate effort, DEP's Division of Air Resources Management is in the process of developing rules to regulate mercury emissions from various sources, which may include coal-fired power plants.

DEP has invited stakeholders to participate in the design and completion of the mercury TMDL study. PEF believes it is prudent to participate in the TMDL study and in the parallel air rulemaking effort to ensure that the relative contributions of mercury-emitting sources, such as power plants, are appropriately analyzed so that future environmental compliance costs are minimized. Accordingly, PEF is participating in the mercury TMDL study and air rulemaking proceedings through its membership in the Florida Electric Power Coordinating Group's Environmental Committee (FCG). To ensure that the ongoing regulatory efforts are based on good science, the FCG is contracting with various consultants to participate in the monitoring and modeling of mercury emissions and their fate in the environment.

Q. **Has the Company projected the costs it will incur for the new program?**

Yes. PEF estimates the total project costs to be approximately $92,000 for the remainder of 2009, approximately $36,000 for 2010 and approximately $38,000 for 2011.

Q. Do the costs for the new program qualify for recovery through the ECRC?

A. Yes. Costs for the new program meet the requirements for ECRC recovery previously established by the Commission. Specifically, the expenditures are being prudently incurred after April 13, 1993; the activities are legally required to comply with a governmentally imposed environmental requirement which was created, or whose effect was triggered, after the minimum filing requirements (MFRs) were submitted in PEF's last rate case (Docket No. 050078-EI); and none of the costs of the new program are being recovered through base rates or any other cost recovery mechanism.

Q. Has the Commission previously approved recovery of costs for similar activities associated with development of environmental compliance measures?

A. Yes. As the Commission recognized in Order No. PSC-08-0775-FOF-EI issued in Docket 08-0007-EI on November 24, 2008: "Utilities are expected to take steps to control the level of costs that must be incurred for environmental compliance. An effective way to control the costs of complying with a particular environmental law or regulation can be participation in the regulatory and legal processes involved in defining compliance." Based on that understanding, the Commission has previously approved recovery through the ECRC of costs incurred by utilities for technical analyses and other activities associated with participation in development of regulatory compliance measures. See e.g., Order No. PSC-08-0775-FOF-EI issued in Docket No. 080007-EI (Nov. 24, 2008) (costs for participating in rulemaking and legal proceedings related to EPA's Section 316(b) Phase II rules); Order No. PSC-05-1251-FOF-EI issued in Docket No. 050007-EI (Dec. 22, 2005) (costs associated with technical analysis and legal challenges to Clean Air Interstate Rule); and Order No. PSC-00-0476-PAA-EI issued in Docket No. 991834-EI (Mar. 6, 2000) (costs associated with participating in ozone modeling study).

Q. Does this conclude your testimony?

A. Yes it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

PATRICIA Q. WEST

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 090007-EI

August 28, 2009

Q. Please state your name and business address.

A. My name is Patricia Q. West. My business address is 299 1st Avenue North, St. Petersburg, Florida, 33701.

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

A. I am employed by the Environmental Health and Safety Services Section of Progress Energy Florida ("Progress Energy" or "Company") as Manager of Environmental Services / Energy Supply Florida. In that position I have responsibility to ensure that environmental technical and regulatory support is provided during the implementation of compliance strategies associated with the environmental 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 2010 for environmental programs that fall within the scope of my responsibilities to support Progress Energy's power generation 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 associated with combustion turbines (Project 7.2) and operation of the air emission controls at Crystal River Units 4 and 5 (Project 7.4), Arsenic Groundwater Standard Program (Project 8), Underground Storage Tank Program (Project 10), the Modular Cooling Tower Program (Project 11), the Thermal Discharge Permanent Cooling Tower (Project 11.1) , the Green House Gas Inventory and Reporting Program (Project 12), and the Mercury TMDL project (Project 13).

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 the schedule (TGF-3) attached to Thomas G. Foster's testimony:

- 42-5P page 3 of 14 - Pipeline Integrity Management
- 42-5P page 4 of 14 - Above Ground Storage Tank Containment
- 42-5P page 6 of 14 - Phase II Cooling Water Intake
- 42-5P page 8 of 14 - Arsenic Groundwater Standard
- 42-5P page 10 of 14 - Underground Storage Tanks
- 42-5P page 11 of 14 - Modular Cooling Towers
- 42-5P page 12 of 14 - Crystal River Thermal Discharge Project
- 42-5P page 13 of 14 - Greenhouse Gas Inventory and Reporting
- 42-5P page 14 of 14 - Mercury Total Daily Maximum Loads Monitoring

Q. What costs do you expect to incur in 2010 in connection with the Pipeline Integrity Management Program (Project 3)?

A. For 2010, we project that Progress Energy will incur a total of $ $1,218,000 in O&M and no capital expenditures to comply with the Pipeline Integrity Management ("PIM") regulations (49 CFR Part 195).

PEF is projecting to spend $193,000 in O&M on PIM Program Implementation which includes general program management and oversight by PEF employees and contractors who assist with program requirements which include regulatory review, auditing and procedures management, document updates, High

Consequence Area (HCA) reviews, spill analyses, integrity assessment planning, pipeline mapping, data integration, risk analyses, preventive and mitigative measures update, and review of alarms and abnormal operating conditions. An additional $630,000 in O&M will be required to implement risk reduction projects, including bollards at main line valve (MLV)-5, depth of cover repairs and erosion control, atmospheric corrosion inspection and repairs, control room management implementation, pipeline refurbishment MLV operator columns, testing and repair of anodes, Haines Bayshore on-site construction monitor, emergency casing extensions, and public awareness mailing and drills. The Five-Year Reassessment effort will require $395,000 in O&M expenditures to management the assessment process, including third party review of results, repairs and validation reviews, updating risk analysis and biennial review, and assessment anomaly ranking and documentation close-out.

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 2010 in connection with the Aboveground Storage Tank Secondary Containment Program (Project 4)?**

A. Progress Energy is projecting to spend $638,000 in capital expenditures in 2010. These costs are for the tank upgrade work at Bartow which includes: cleaning the tank, performing required inspections, installing and testing new steel double bottom, and preparing and coating the new bottom.

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 2010 in connection with the Phase II Cooling Water Intake Program (Project 6)?

A. Progress Energy is not anticipating any costs to be incurred in 2010.

Q. What costs do you expect to incur in 2010 in connection with combustion turbines as part of the Integrated Clean Air Compliance Program (Project 7.2)?

A. PEF expects to incur $67,300 in O&M expenditures for the operation and maintenance of predictive emissions monitoring systems at the combustion turbine sites. O&M costs for ongoing software vendor support of these new systems will be $47,300; and $20,000 for air emissions testing in the event that such testing is required after maintenance activities.

Q. Are there additional costs that you expect to incur in 2010 in connection with operation of air emission controls at Crystal River Units 4 and 5 as part of the Integrated Clean Air Compliance Program (Project 7.4)?

A. PEF estimates that $23,056,328 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 Plan. Labor costs are expected to be $3,506,004. This estimate is based upon current staffing levels which were developed after review of similar operations outside of Progress Energy as well as comparison of similar units within the Company. A&G expenses of $16,871 related to the incremental positions that were created for support of the Integrated Clean Air Compliance Program project. Contractor expenses are expected to be $2,021,458 for such activities 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 safety equipment and other employee costs are estimated at $231,759, with parts and materials expected to be $984,975. Reagent costs (net gypsum sales / disposal, limestone, urea / ammonia, and dibasic acid) are expected to total $16,295,261.

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. Expenditures will be managed by plant operations personnel and benchmarked against other similar operations. Additional operating and maintenance personnel are only being added as the new equipment and systems are being commissioned and placed into service. The system designs have been reviewed and adjusted to minimize operating and maintenance expenditures as well as capital expenditures.

Q. **What costs do you expect to incur in 2010 in connection with the Arsenic Groundwater Standard Program (Project 8)?**

A. Progress Energy continues to work with the Florida Department of Environmental Protection to comply with the terms of the renewed industrial wastewater permit for the Crystal River Energy Complex (January 9, 2007) and the modified Conditions of Certification (November 29, 2007; and June 5, 2009). Given this level of uncertainly regarding this program, PEF is not projecting any costs specific to the Arsenic program in 2010.

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 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 2010 in connection with the Underground Storage Tanks Program (Project 10)?

A. PEF is not anticipating any expenditures in this program during 2010.

Q. What costs do you expect to incur in 2010 in connection with the Modular Cooling Tower Program (Project 11)?

A. PEF is projecting to spend approximately $4.2 million in O&M expenditures in 2010. These costs are for rental fees associated with the five-year lease agreement that began in 2006.

Q. **What costs do you expect to incur in 2010 in connection with the Thermal Discharge Permanent Cooling Tower (Project 11.1) for 2010?**

A. PEF is projecting to spend approximately $34.6 million in ECRC capital expenditures in 2010. These costs are associated with equipment procurement, site preparation, and construction activities associated with the cooling tower basin, intake/discharge structures, and related systems/structures.

Q. **What costs do you expect to incur in 2010 in connection with the Green House Gas Inventory and Reporting Program (Project 12)?**

A. PEF is projecting to spend approximately $22,500 in O&M in 2010. These costs are for annual Climate Registry fee as well as consulting fees and third-party verification of the inventory.

Q. **What steps is the Company taking to ensure that the level of the expenditure for the Green House Gas Inventory and Reporting Program is reasonable and prudent?**

A. In 2009 Progress Energy issued a request for proposal to multiple consultants with expertise in the area of green house gas inventory validation. Bids were received and reviewed. A contract effective in May 2009 was established and verification services will be conducted under this contract.

Q. **What costs do you expect to incur in 2010 in connection with the Mercury TMDL Program (Project 13)?**

A. Consistent with the March 4, 2009, Petition seeking approval of this new program, PEF expects to spend $36,077 in 2010. These costs will cover ongoing participation in the FCG / FDEP effort with modeling results and data analyses to be used in the development of upcoming rules.

Q. **What steps is the Company taking to ensure that the level of the expenditure for the Mercury TMDL Program is reasonable and prudent?**

A. PEF's has agreed to this level of expenditure in support of the FCG effort with FDEP. No additional funds can be spent without PEF's review and concurrence.

Q. Does this conclude your testimony?

A. Yes it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

KEVIN MURRAY

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 090007-EI

AUGUST 28, 2009

Q. Please state your name and business address.

A. My name is Kevin Murray. My business address is 299 First Avenue North, Saint Petersburg, Florida, 33701.

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

A. I am employed by Progress Energy Florida ("PEF") as General Manager of Plant Construction Projects.

Q. What are your responsibilities as General Manager of Florida Construction Projects?

A. As General Manager of Plant Construction Projects, I am responsible for the oversight of PEF's major fossil generation projects, including the Crystal River Units 4 and 5 air quality control system projects.

Q. Please describe your educational background and professional experience.

A. I received my Bachelor of Science Degree in Mechanical Engineering from the University of Arizona. I have 15 years of professional experience in engineering and project management within the electric power industry. I started my career in the power industry with Westinghouse Power Generation (now Siemens) based in Orlando, where I was employed as an engineer working on power plant proposals. During this time, I received an award for my work on a project in Thailand. I went to work for El Paso Corporation as an engineer and then as a project manager. I was involved in both North and South America, including 1-year residency in Brazil. I joined Progress Energy in 2004 and served as the director of engineering for the Company's new fossil power projects. In 2008, I was promoted to General Manager of Projects for Progress Energy Florida, which includes responsibility for implementing the Crystal River Units 4 and 5 air quality control system projects.

Q. Have you previously submitted testimony in this proceeding?

A. No.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to update the Commission on the Crystal River Units 4 and 5 air quality control system project ("Crystal River Project") included in PEF's Integrated Clean Air Compliance Plan. I also will present PEF's current estimates of the costs that will be incurred in the 2010 for the Crystal River Project.

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 the schedule (TGF-3) attached to Thomas G. Foster's testimony:

- 42-5P page 7 of 14 - Integrated Clean Air Compliance Plan (CAIR)

Q. How far along is PEF in implementing the Crystal River Project?

A. The Crystal River Project remains on schedule to meet the in-service dates set forth in the Integrated Clean Air Compliance Plan approved by the Commission in 2007. Through July 2009, we have incurred or have committed to incur capital costs of approximately $995.8 million and $93.2 million of AFUDC on the Project. This represents approximately 88 percent of the total projected costs of the Project, as presented in the Integrated Clean Air Compliance Plan approved by the Commission in Docket No. 070007-EI

Q. What project milestones do you expect to achieve in 2010?

A. We currently expect to achieve several significant project milestones in 2010. In [redacted], we expect to place the Crystal River Unit 4 selective catalytic ("SCR") system and the Unit 4 Flue Gas Desulfurization ("FGD" or "scrubber") system into service. In his pre-filed testimony, Mr. Foster explains the impact of placing these controls and associated equipment in-service on PEF's ECRC factors.

Q. What are PEF's projected 2010 expenditures for the Crystal River Project (Project 7.4)?

A. As shown in Form 42-4P page 9 in Exhibit No. __ (TGF-3) to the testimony of Thomas G. Foster. PEF currently is projecting to spend approximately $58.1 million in capital expenditures on the Crystal River Project in 2010. The scope of work for 2010 includes the finalization of the Unit 4 SCR and FGD projects.

Q. What measures are PEF implementing to ensure that the level of expenditures for the Crystal River Project is reasonable and prudent?

A. PEF will continue to implement the measures discussed in prior testimony to ensure that costs incurred are reasonable and prudent. Among other things, we will continue to regularly track project expenditures against the detailed project scopes to ensure that PEF receives what it contracted for and that any scope changes are properly evaluated and documented. We also will continue to conduct regularly scheduled meetings with the primary contractors and senior management to maintain supervision of the project, to ensure that management remains fully informed, and to ensure that management expectations are communicated to the outside vendors and the project team

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

DALE WILTERDINK

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 090007-EI

April 1, 2009

Q. Please state your name and business address.

A. My name is Dale W. Wilterdink. My business address is 15760 West Power Line Street, Crystal River, Florida 34428.

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

A. I am employed by Progress Energy Florida ("PEF") as Manager of Plant Construction Projects.

Q. What are your responsibilities as Manager of Plant Construction Projects?

A. I serve as Project Manager for the Crystal River Units 4 and 5 air quality control system project ("Crystal River Project") included in PEF's Integrated Clean Air Compliance Plan, which the Commission approved in Docket No. 070007-EI. As Project Manager, I have primary overall responsibility and accountability for the Crystal River Project. I provide direct management of all aspects of the project, including the installation of Flue Gas Desulfurization ("FGD" or "scrubber"), Low NOx Burners (LNBs), Selective Catalytic Reduction ("SCR") and other related activities, such as installation of a new stack, common limestone preparation/dewatering system, coal pile liners, ponding, and the water supply system. I also work with members of my project team to ensure that key stakeholders throughout the Company, including senior management, remain informed about the status of the Crystal River Project.

Q. Please describe your educational background and professional experience.

A. I received a B.S. degree in Chemistry and a Masters in Business Administration from Grand Valley State University. I have over twenty six years experience in the power industry, including direct project management for large, multi-unit air pollution control projects. Prior to joining Progress Energy, I worked air quality control system projects for URS Corporation, Advatech (a joint venture between URS and Mitsubishi Heavy Industries), Marsulex (formerly General Electric Environmental Services), and Grand Haven Board of Light and Power.

Q. Are you sponsoring any exhibits with your testimony?

A. Yes. I am sponsoring Exhibit No. __ (DW-1), which is an organization chart showing the organizational structure the Company has established for management and oversight of internal company personnel and contractors involved in the Crystal River Project.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to summarize the status of PEF's implementation of the Crystal River Project, including the variance between actual 2008 Project expenditures and the Estimated/Actual projection submitted in Docket No. 080007-EI. I also will describe some of the measures PEF has taken to ensure that the costs incurred for the Crystal River Project are reasonable and prudent.

Q. What is the current status of the Crystal River Project?

A. The Crystal River Project is on schedule to meet the in-service dates set forth in the Integrated Clean Air Compliance Plan approved by the Commission in Docket No. 070007-EI. Over the past year, we have achieved several significant project milestones including:

- Completion of the access road in April, 2008;
- Completion of the vehicle barrier system in May, 2008;
- Completion of the flue gas chimney shell in May, 2008;
- Completion of the Unit 5 FGD absorber tower in September, 2008; and
- Completion of Unit 4 LNB/AH in December, 2008

As discussed in the annual review of PEF's compliance plan sponsored by PEF witness Patricia Q. West, there are uncertainties associated with all major construction projects including the Crystal River Project. At this time, however, the Crystal River Project is on-schedule to achieve the in-service dates set forth in PEF's Commission-approved Integrated Clean Air Compliance Plan.

Q. How do the actual project expenditures for the Crystal River Project compare with PEF's estimated/actual projections for the period January 2008 to December 2008?

A. The actual total expenditures for the Crystal River Projects in 2008 were $524,059,008 million, which is $3,368,402 million (1%) less than projected in PEF's Estimated/Actual projection. The difference is attributable to the unused portion of the project's contingency that is used to manage acknowledged risks that are likely to occur during the project. Risks projected to occur during 2008 did not materialize, but may still occur during the remainder of the project.

Q. **Please describe the management structure being used to oversee implementation of the Crystal River Project?**

A. PEF has established an organizational structure to ensure prudent decision-making and project oversight as implementation of the Integrated Clean Air Compliance Plan proceeds. The specific team for the Crystal River Project is as shown in Exhibit No.__ (DW-1). The Company has assigned me to be the dedicated Project Manager with primary overall responsibility and accountability for the Crystal River Project. I oversee all of the internal team members as well as all of the external contractors working on the project. My project management team, which also includes a dedicated Project Engineer and Project Controls personnel, regularly works with Company personnel from other departments, including Environmental Services, Corporate Services, Fossil Generation, Legal, Regulatory Planning, and Health and Services as needed. The Company also has appointed the Project Assurance Department to support and advise the project management team.

To promote efficient integration of the new equipment with current operations, the Company also has established a Plant Integration Team (PIT) that will be involved through the startup and commissioning process. The PIT was established early in the life of the Project to allow for plant operational input into the technical and functional requirements incorporated in the Project design, the operational design features, the anticipated operation of the new systems and the performance guarantees. During the construction phase, the PIT provides interface between me and plant operations and has the primary responsibility for developing operational maintenance procedures for the new equipment. The PIT also will participate in startup integration for commercial operation.

Q. Has the Company implemented policies and procedures to ensure proper management of the Crystal River Project and to control project costs?

A. Yes. The project is being implemented in accordance with the Generation and Transmission Construction Department's policies and procedures, which prescribe specific requirements for project management, quality assurance/quality control (QA/QC), schedule management, cost accounting and reporting, and other aspects of the project implementation. These policies and procedures reflect the collective experience and knowledge of the Company. They have been tested on other capital projects of this nature and reflect lessons learned from those projects. They also are consistent with best practices for capital project management in the industry.

Q. Are employees involved in the Crystal River Project trained in the Company's project management and cost control policies and procedures?

A. Yes, they are. The project management team for the Crystal River Project has been trained in these policies and procedures.

Q. Does the Company verify that the project management and cost control policies and procedures are followed?

A. Yes, it does. PEF uses internal audits to verify that its program management and oversight control are in place and being implemented.

Q. Has the Company implemented other mechanisms to ensure proper oversight and review of the Crystal River Project?

A. Yes. We have implemented several mechanisms to ensure proper oversight and review of the Crystal River Project. My project management team and I work closely with the Project Assurance Department to identify key project decisions and milestones to ensure that adequate documentation is prepared and maintained. Among other things, the project management team regularly prepares Project Cost Reports to track project expenditures against the detailed project scopes to ensure that PEF receives what it contracted for and that any scope changes are properly evaluated and documented.

We also conduct a wide variety of meetings to maintain supervision of the project and to ensure that Company management remains fully informed. We conduct regularly scheduled, monthly meetings with the EPC contractor (EPCR) and primary FGD and SCR design and procurement contractor (B&W) to review construction progress and the remaining scope of work. Following those meetings, we hold regular monthly meetings with executive management to review the status of the project and its costs, as well as the administration of the various contracts. Executives from EPCR and B&W participate in these meetings to ensure that management expectations are communicated to the outside vendors as well as the project team.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

DALE WILTERDINK

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 090007-EI

AUGUST 3, 2009

Q. Please state your name and business address.

A. My name is Dale W. Wilterdink. My business address is 15760 West Power Line Street, Crystal River, Florida 34428.

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

A. I am employed by Progress Energy Florida ("PEF") as Manager of Plant Construction Projects.

Q. What are your responsibilities as Manager of Plant Construction Projects?

A I serve as Project Manager for the Crystal River Units 4 and 5 air quality control system project ("Crystal River Project") included in PEF's Integrated Clean Air Compliance Plan, which the Commission approved in Docket No. 080007-EI. As Project Manager, I have primary overall responsibility and accountability for the Crystal River Project. I provide direct management of all aspects of the project, including the installation of Flue Gas Desulfurization ("FGD" or "scrubber"), Low NOx Burners (LNBs), Selective Catalytic Reduction ("SCR") and other related activities, such as installation of a new stack, common limestone preparation/dewatering system, coal pile liners, ponding, and the water supply system. I also work with members of my project team to ensure that key stakeholders throughout the Company, including senior management, remain informed about the status of the Crystal River Project.

Q. Please describe your educational background and professional experience.

A. I received a B.S. degree in Chemistry and a Masters in Business Administration from Grand Valley State University. I have over twenty six years experience in the power industry, including direct project management for large, multi-unit air pollution control projects. Prior to joining Progress Energy, I worked air quality control system projects for URS Corporation, Advatech (a joint venture between URS and Mitsubishi Heavy Industries), Marsulex (formerly General Electric Environmental Services), and Grand Haven Board of Light and Power.

Q. Are you sponsoring any exhibits with your testimony?

A. Yes. I am sponsoring Exhibit No. __ (DW-1), which is an organization chart showing the organizational structure the Company has established for management and oversight of internal company personnel and contractors involved in the Crystal River Project.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to summarize the status of PEF's implementation of the Crystal River Project, including Estimated/Actual project expenditures for 2009. I also will describe some of the measures PEF has taken to ensure that the costs incurred for the Crystal River Project are reasonable and prudent.

Q. What is the current status of the Crystal River Project?

A. The Crystal River Project is on schedule to meet the in-service dates set forth in the Integrated Clean Air Compliance Plan approved by the Commission in Docket No. 070007-EI, and reaffirmed in the stipulation approved in Docket No. 080007-EI. The Project has achieved several significant milestones including:

- Completion of the access road in April, 2008;
- Completion of the vehicle barrier system in May, 2008;
- Completion of the flue gas chimney shell in May, 2008;
- Completion of the Unit 5 FGD absorber tower in Sept, 2008;
- Completion of Unit 4 low NOx burner in December,2008; and
- Completion of the Unit 5 SCR in June 2009

As discussed in the annual review of PEF's compliance plan there are uncertainties associated with all major construction projects including the Crystal River Project. At this time, however, the Crystal River Project is on-schedule to achieve the in-service dates set forth in PEF's Commission-approved Integrated Clean Air Compliance Plan.

Q. How do the Estimated/Actual capital investment activities for the Crystal River Project compare with the original projections for the period January 2009 to December 2009?

A. PEF's estimate of the total capital revenue requirements for the Crystal River Projects in 2009 will be approximately $11.1million or 31% lower than originally projected. This variance is due to the change of in-service dates of the Unit 5 SCR and FGD projects. As a result of an extended spring outage, The Unit 5 SCR and related SCR Common projects' in-service dates were delayed from May to June and July, respectively. The

Unit 5 FGD and related FGD Common and Gypsum projects' in-service dates were moved from November to December because of a change in PEF's companywide outage schedule.

Q. **Does PEF expect to incur CAIR costs in 2009 that were not anticipated at the time of the Company's 2009 projection filing?**

A. Yes. Specifically, additional sootblowers and intelligent sootblowing systems have been included in this filing and are needed in an area which is expected to encounter potentially severe slagging when burning the new fuel source at Crystal River Units 4 and 5 that will result from the installation and operation of CAIR equipment. The intelligent sootblowing system identifies these critical slagging and fouling areas and determines how often and how much sootblowing is needed throughout the boiler and convection pass to help maintain unit stability and reliability, as well as minimize boiler tube erosion. These projects have not been included in filings to this point due to the relatively new and on-going nature of the operating experience gathered within our company.

Q. **What measures has the Company taken to minimize the risk of costs increases for the Crystal River Project?**

A. Since the inception of the Crystal River Project, PEF has sought to minimize the risk of future cost increases to PEF and its customers and to allocate risk where it can be best managed. We implemented a contracting strategy that enabled PEF to negotiate contracts that mitigate the risk of price increases without jeopardizing construction time-frames necessary to ensure compliance with the applicable regulatory requirements. For the Engineering, Procurement and Construction (EPC) contract, which represents the majority of costs for the Crystal River Project, this strategy included an aggressive "open book" scoping assessment which enabled the Company to identify the costs for project components in detail to provide greater cost certainty. As part of the detail review process, Progress Energy personnel and outside engineers carefully reviewed the reasonableness of the scope and associated quantities of commodities, equipment, subcontracts, labor and other project indirect components submitted by EPC contractor (Environmental Partners Crystal River or "EPCR"), as well as the prices quoted by EPCR.

We negotiated a portfolio of fixed price, lump sum contracts including the EPC contract, as well as contracts with the primary FGD and SCR design and procurement contractor (Babcock & Wilcox or "B&W"), and the vendors of major equipment such as scrubber towers (Stebbins Engineering and Manufacturing Company), flue gas chimney (Commonwealth Dynamics, Inc.), and SCR catalyst (CERAM Environmental, Inc.). These contracts, which PEF submitted for the Commission's review in Docket No. 070007-EI, also incorporate a payment milestone structure with associated liquidated damages to ensure timely performance. This contracting strategy has enabled PEF to mitigate cost and performance risks.

Q. Please describe the management structure being used to oversee implementation of the Crystal River Project?

A. PEF has established an organizational structure to ensure prudent decision-making and project oversight as implementation of the Integrated Clean Air Compliance Plan proceeds. The specific team for the Crystal River Project is as shown in Exhibit No.__(DW-1). The Company has assigned me to be the dedicated Project Manager with primary overall responsibility and accountability for the Crystal River Project. I oversee all of the internal team members as well as all of the external contractors working on the project. My project management team, which also includes a dedicated Project Engineer and Project Controls personnel, regularly works with Company personnel from other departments, including Environmental Services, Corporate Services, Fossil Generation, Legal, Regulatory Planning, and Health and Services as needed. The Company also has appointed a designated Project Assurance Advisor to support and advise the project management team.

To promote efficient integration of the new equipment with current operations, the Company also has established a Plant Integration Team (PIT) that will be involved through the startup and commissioning process. The PIT was established early in the life of the Project to allow for plant operational input into the technical and functional requirements incorporated in the Project design, the operational design features, the anticipated operation of the new systems and the performance guarantees. During the construction phase, the PIT provides interface between me and plant operations and has the primary responsibility for developing operational maintenance procedures for the new equipment. The PIT also will participate in startup integration for commercial operation.

Q. Has the Company implemented policies and procedures to ensure proper management of the Crystal River Project and to control project costs?

A. Yes. The project is being implemented in accordance with the Generation Construction Department's policies and procedures, which prescribe specific requirements for project management, quality assurance/quality control (QA/QC), schedule management, cost accounting and reporting, and other aspects of the project implementation. These policies and procedures reflect the collective experience and knowledge of the Company. They have been tested on other capital projects of this nature and reflect lessons learned from those projects. They also are consistent with best practices for capital project management in the industry.

Q. Are employees involved in the Crystal River Project trained in the Company's project management and cost control policies and procedures?

A. Yes, they are. The project management team for the Crystal River Project has been trained in these policies and procedures.

Q. Does the Company verify that the project management and cost control policies and procedures are followed?

A. Yes, it does. PEF uses internal audits to verify that its program management and oversight control are in place and being implemented.

Q. Has the Company implemented other mechanisms to ensure proper oversight and review of the Crystal River Project?

A. Yes. We have implemented several mechanisms to ensure proper oversight and review of the Crystal River Project. My project management team and I work closely with the Project Assurance Advisor to identify key project decisions and milestones to ensure that adequate documentation is prepared and maintained. Among other things, the project management team regularly prepares Project Cost Reports to track project expenditures against the detailed project scopes to ensure that PEF receives what it contracted for and that any scope changes are properly evaluated and documented.

We also conduct a wide variety of meetings to maintain supervision of the project and to ensure that Company management remains fully informed. We conduct regularly scheduled, monthly meetings with the EPC contractor (EPCR) and primary FGD and SCR design and procurement contractor (B&W) to review construction progress and the remaining scope of work. Following those meetings, we hold regular monthly meetings with executive management to review the status of the project and its costs, as well as the administration of the various contracts. Executives from EPCR and B&W participate in these meetings to ensure that management expectations are communicated to the outside vendors as well as the project team.

The Company also reviews the feasibility of the Crystal River Project with senior management through the Company's Integrated Project Plan ("IPP") process, which has been established for gaining management approval for expenditures of significant funds. The original IPP for the Crystal River Project was prepared in October 2007 in conjunction with the execution of the final EPC contract. Among other things, the IPP outlined the scope of the project, project costs, the Company's risk management strategy, and the economic evaluation discussed in the Integrated Clean Air Compliance Plan submitted to and approved by the Commission in last year's docket.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

JOSEPH MCCALLISTER

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 090007-EI

April 1, 2009

Q. Please state your name and business address.

A. My name is Joseph McCallister. My business address is 410 South Wilmington Street, Raleigh, North Carolina 27601.

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

A. I am employed by Progress Energy Carolinas (PEC) in the capacity of Director, Gas, Oil and Power.

Q. What are your responsibilities in that position?

A. I am responsible for the procurement of natural gas, fuel oil and emission allowances and the power trading and optimization on behalf of PEC and Progress Energy Florida (PEF).

Q. Have you previously provided testimony before this Commission in connection with PEF's Environmental Cost Recovery Clause?

A. Yes. In last year's docket (No. 080007-EI); I presented testimony outlining PEF's overall approach to procuring emission allowances as part of its Integrated Clean Air Compliance Plan and preparation for the compliance requirements of the Clean Air Interstate Rule (CAIR).

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to summarize PEF's actions to date related to its emission allowance procurement strategy as part of its Integrated Clean Air Compliance Strategy in preparation for the requirements under the CAIR.

Q. How does PEF determine how many emission allowances it needs to purchase?

A. As part of the fuel and generation forecasts, expected emissions are projected. The forecasts are generated periodically and are based on input assumptions such as generation availability and capacity, planned generation outage schedules, purchase power contracts, fuel and emissions price forecasts, planned environmental equipment installations and load projections. To determine if the Company needs to purchase emission allowances for compliance requirements in the current or future time periods, PEF compares the forecasts of the emissions that will be generated to the number of emissions allowances that PEF owns through allocations, purchases and accumulated inventory. The Integrated

Clean Air Compliance Plan stated that for the PEF system, the expected quantity of emissions generated based on the forecasts was greater than the number of allowances that PEF owns for the respective periods. As a result, PEF projected the need to purchase allowances from the market in order to comply with the regulations.

Q. How did CAIR impact PEF's procurement activities for emission allowances?

A. CAIR established an updated cap-and-trade system for SO_2 and NOx and covers 28 eastern states and the District of Columbia. CAIR established modified sulfur dioxide (SO_2) annual compliance requirements under Title IV of the Clean Air Act by requiring 2.0 SO_2 allowances to be submitted per ton of SO2 emissions beginning with 2010 annual compliance filings, and 2.86 SO2 allowances to be submitted per ton of SO2 emission starting with 2015 annual compliance filings. In addition, CAIR established new seasonal and annual emission compliance requirements for nitrogen oxides (NOx). Beginning in 2009, CAIR requires affected sources to complete a seasonal NOx emission allowance compliance submittal for the May 1 through September 30 time period as well as an annual NOx emission allowance compliance submittal for the January 1 through December 31 time period each year.

Q. What strategy has PEF pursued for procuring emissions allowances to ensure compliance with CAIR?

A. PEF's overall procurement strategy for meeting emissions allowance requirements is to buy allowances over time based on forecasted compliance needs. PEF believes a procurement strategy of buying emissions allowances over time is a reasonable and prudent approach to ensure that compliance requirements are met while reducing price risk and volatility for customers.

As part of its Integrated Clean Air Compliance Plan, PEF forecasted the need to purchase both seasonal and annual NOx emissions allowances in order to comply with CAIR beginning with 2009 operations. For that reason, and consistent with its strategy, PEF has purchased seasonal and annual NOx allowances over time to gradually increase inventories to the levels necessary to achieve compliance.

Q. Have there been any recent developments associated with CAIR?

A. Yes. As discussed in my pre-filed testimony and the pre-filed testimony of Patricia Q. West and Michael Kennedy in the 080007-E1 Docket, the Court issued a decision vacating CAIR on July 11, 2008. As a result, PEF stopped purchasing CAIR emissions allowances in light of the uncertainty created by the Court's decision. More recently, on December 23, 2008, the Court issued a revised decision that remanded CAIR back to the EPA without vacating the rule. CAIR now remains in effect in its original form until new rules consistent with the Court's finding are developed and adopted. Since CAIR is in effect per the December 23, 2008 ruling, the Annual NOx emissions market has begun trading again and PEF has resumed procuring allowances consistent with its strategy and requirement to comply with the CAIR.

Q. How do actual purchases of emission allowances for the period January 2008 through December 2008 compare with PEF's estimated/actual projections as presented in previous testimony?

A. Actual purchases of 2008 emission allowances are in line with PEF's previously filed Estimated/Actual projections. The actual revenue requirements on the inventory of SO_2 and NOx emission allowances were $9,664,191, compared to the Estimated/Actual projection of $9,616,405 for an immaterial variance (0%) in 2008.

Q. Does this conclude your testimony?

A. Yes it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

JOSEPH MCCALLISTER

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 090007-EI

August 3, 2009

Q. Please state your name and business address.

A. My name is Joseph McCallister. My business address is 410 South Wilmington Street, Raleigh, North Carolina 27601.

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

A. I am employed by Progress Energy Carolinas (PEC) in the capacity of Director, Gas, Oil and Power.

Q. What are your responsibilities in that position?

A. I am responsible for the procurement of natural gas, fuel oil and emission allowances and for power trading and optimization on behalf of PEC and Progress Energy Florida (PEF).

Q. Have you previously provided testimony before this Commission in connection with PEF's Environmental Cost Recovery Clause?

A. Yes. In Docket No. 080007-EI I presented testimony outlining PEF's overall approach to procuring emission allowances as part of its Integrated Clean Air Compliance Plan and preparation for the compliance requirements of the Clean Air Interstate Rule (CAIR).

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to summarize PEF's actions to date related to its emission allowance procurement strategy as part of its Integrated Clean Air Compliance Strategy in preparation for the requirements under the CAIR.

Q. How does PEF determine how many emission allowances it needs to purchase?

A. As part of the fuel and generation forecasts that are generated periodically by the company, expected emissions are projected. The forecasts are based on input assumptions such as generation availability and capacity, planned generation outage schedules, purchase power contracts, fuel and emissions price forecasts, planned environmental equipment installations and load projections. To determine if the Company needs to purchase emission allowances for compliance requirements in the current or future time periods, PEF compares the forecasts of the emissions that will be generated to the number of emissions allowances that PEF owns through allocations, purchases and accumulated inventory.

Q. How did CAIR impact PEF's procurement activities for emission allowances?

A. CAIR established an updated cap-and-trade system for SO2 and NOx and covers 28 eastern states and the District of Columbia. CAIR established a modified sulfur dioxide (SO2) annual compliance requirements under Title IV of the Clean Air Act by requiring that for vintage years 2010-2014, 2.0 allowances are required per ton of SO_2 emissions, and for the 2015 and later vintages, 2.86 SO_2 allowances are required per ton of SO_2 emissions. In addition, CAIR established new seasonal and annual emission compliance requirements for nitrogen oxides (NOx). Beginning in 2009, CAIR requires affected sources to complete a seasonal NOx emission allowance compliance submittal for the May 1st through September 30th time period as well as an annual NOx emission allowance compliance submittal for the January 1st through December 31st time period each year. As part of its Integrated Clean Air Compliance Plan, PEF forecasted the need to purchase both seasonal and annual NOx emissions allowances in order to comply with CAIR beginning with 2009 operations. For that reason, and consistent with its strategy, PEF has purchased seasonal and annual NOx allowances over time to gradually increase inventories to the levels necessary to achieve compliance.

Q. How did Estimated/Actual Emissions expense for the period January 2009 through December 2009 compare with PEF's original 2009 O&M projections?

A. The project expenditure variance for the Estimated/Actual SO_2 and NOx emission expenses are $52,637,496, compared to the original projection of $71,976,198 for a variance of $(19,338,701) or -27% in 2009. There are two primary drivers to explain the lower expenses. First, actual emissions have been lower than forecasted emissions due to lower power demand and fuel switching from coal-fired and oil-fired generation to gas-fired generation when economically and operationally feasible. Second, the weighted average cost – the per allowance cost at which emissions are expensed – is lower than the original projection. The weighted average price is lower because fewer allowances needed to be purchased for this time period and the average price for procured allowances was lower than original projections.

Q. How do the Estimated/Actual revenue requirements on inventory of emission allowances for the period January 2009 through December 2009 compare with PEF's original projections?

A. The revenue requirements on the inventory of SO_2 and NOx emission allowances are estimated to be $681,439 or 10% higher than originally projected. Revenue requirements were higher due to the larger inventory balance that is reprojected throughout the year attributable to the lower power demand and fuel switching as described above.

Q. Does this conclude your testimony?

A. Yes it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

JOSEPH McCALLISTER

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 090007-EI

August 28, 2009

Q. Please state your name and business address.

A. My name is Joseph McCallister. My business address is 410 South Wilmington Street, Raleigh, North Carolina 27601.

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

A. I am employed by Progress Energy Carolinas (PEC) in the capacity of Director, Gas, Oil and Power.

Q. What are your responsibilities in that position?

A. I am responsible for the procurement of natural gas, fuel oil and emission allowances and for power trading and optimization on behalf of PEC and Progress Energy Florida (PEF).

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. The purpose of my testimony is to present PEF's projected costs related to its emission allowance procurement strategy as part of its Integrated Clean Air Compliance Strategy to comply with the requirements under the Clean Air Interstate Rule (CAIR).

Q. Do you have any exhibits to your testimony?

A. I am co-sponsoring the Description and Progress Report for Environmental Compliance Activities and Projects, Form 42-5P page 5 of 14, portion of the schedule attached to Thomas G. Foster's testimony.

Q. What costs do you expect to incur in 2010 in connection with the SO_2/NOx Emissions Allowances Program (Project #5)?

A. For 2010, we estimate PEF will incur total O&M expenditures of approximately $10,207,630 in costs for the sulfur dioxide (SO_2) and nitrogen oxides (NOx) Emissions Allowances Program.

Q. What steps is the Company taking to ensure that the level of expenditures for the SO_2/NOx Emissions Allowances Program is reasonable and prudent?

A. PEF's overall procurement strategy for complying with regulatory emissions program requirements is to buy allowances over time based on forecasted compliance needs. PEF believes a strategy of procuring emissions allowances over time is a reasonable and prudent approach to ensure that compliance requirements are met.

As part of its Integrated Clean Air Compliance Plan, PEF forecasted the need to purchase both seasonal and annual NO_X emissions allowances in order to comply with CAIR NO_X requirements for 2010 operations. For that reason, and consistent with its strategy, PEF purchased seasonal and annual NO_X allowances over time to gradually increase inventories to the levels necessary to achieve compliance.

PEF forecasts that it has sufficient allowances to comply with CAIR SO_2 and NO_X requirements for 2010 operations.

Q. Does this conclude your testimony?

A. Yes it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

THOMAS G. FOSTER

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 090007-EI

AUGUST 3, 2009

Q. Please state your name and business address.

A. My name is Thomas G. Foster. 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 Service Company, LLC as Supervisor of Regulatory Planning Florida.

Q. What are your responsibilities in that position?

A. I am responsible for regulatory planning and cost recovery for Progress Energy Florida, Inc. ("PEF"). These responsibilities include: regulatory financial reports; and analysis of state, federal and local regulations and their impact on PEF. In this capacity, I am also responsible for the Environmental Cost Recovery Clause (ECRC) Actual/Estimated filing, made as part of Docket No.090007.

Q. Please describe your educational background and professional experience.

A. I joined Progress Energy on October 31, 2005 as a Senior Financial analyst in the Regulatory group. In that capacity I supported the preparation of testimony and exhibits associated with various Dockets. In late 2008, I was promoted to Supervisor Regulatory Planning. Prior to working at Progress I was the Supervisor in the Fixed Asset group at Eckerd Drug. In this role I was responsible for ensuring proper accounting for all fixed assets as well as various other accounting responsibilities. I have 6 years of experience related to the operation and maintenance of power plants obtained while serving in the United States Navy as a Nuclear operator. I received a Bachelors of Science degree in Nuclear Engineering Technology from Thomas Edison State College. I received a Masters of Business Administration with a focus on finance from the University of South Florida and I am a Certified Public Accountant in the State of Florida.

Q. *What is the purpose of your testimony?*

A. The purpose of my testimony is to present, for Commission review and approval, Progress Energy Florida's Estimated/Actual True-up costs associated with Environmental Compliance activities for the period January 2009 through December 2009.

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

A. Yes. I am sponsoring the following exhibits:

1. Exhibit No. __TGF-1, which consists of PSC Forms 42-1E through 42-8E; and
2. Exhibit No. __TGF-2, which provides details of capital projects by site.

These forms provide a summary and detail of the Estimated/Actual True-up O&M and Capital Environmental costs and revenue requirements for the period January 2009 through December 2009.

Q. What is the Estimated/Actual True-up amount for which PEF is requesting recovery for the period of January 2009 through December 2009?

A. The Estimated/Actual True-up amount for 2009 is an over-recovery, including interest, of $24,075,581 as shown in Exhibit No. __ (TGF-1), Form 42-1E, Line 4. This amount will be added to the final true-up under-recovery of $4,320,606 for 2008 shown on Form 42-2E, Line 7-a, resulting in a net over-recovery of $19,754,975 as shown on Form 42-2E, Line 11. The detailed calculations supporting the estimated true-up for 2009 are contained in Forms 42-1E through 42-8E.

Q. Are any of the costs listed in Forms 42-1E through 42-8E attributable to Environmental Compliance projects that have not previously been approved by the Commission?

A. No, with the exception of a new environmental program related to development of a new Total Maximum Daily Limits for Mercury in State waters and rules regulating mercury emissions from various sources including, potentially, coal-fired power plants. This new program is discussed and supported in the testimony of Ms. Patricia Q. West.

Q. Please explain the purpose of Form 42-8E p.10 ?

A. This schedule is simply a breakout of the return on the reagent inventory and associated reagent and byproduct expenses due to the CAIR projects. These costs are included in Form 42-5E and 42-7E as appropriate. The expected costs associated with these reagents and byproducts had previously been presented in the 2009 projection on Form 42-2P.

Q. How do the Estimated/Actual O&M expenditures for January 2009 through December 2009 compare with original projections?

A. Form 42-4E shows that total O&M project costs are projected to be $22,720,636 or 24% lower than originally projected. Following are variance explanations for those O&M projects with significant variances. Individual project variances are provided on Form 42-4E.

<u>O&M Project Variances</u>:

1. Transmission and Distribution Substation Environmental Investigation, Remediation, and Pollution Prevention (Project #1) - O&M

Total O&M project costs are estimated to be $2,728,164 or 40% lower than previously projected. As discussed in the testimony of Corey Zeigler, this variance is primarily attributable to variance in the recent scope changes to the remediation taking place at the West Lake Wales substation site.

5. Emissions Allowances (Project #5) – O&M

SO_2 expenses are estimated to be $19,338,701 or 27% lower than originally projected. As discussed in the testimony of Joseph McCallister, this variance is primarily being driven by lower projected tons of emissions. The decrease in tons is attributable to lower SO_2 content in fuel, as well as lower energy requirements than projected.

8. CAIR/CAMR Crystal River (Project #7.4) – O&M

Total O&M project costs are estimated to be $532,581 or 13% lower than originally projected. As discussed in the testimony of Patricia West, this variance is mainly attributable to an outage scheduling adjustment from May 2009 to June 2009 of the Crystal River Selective Catalytic Reduction (SCR) (7.4c) project, and Crystal River Urea to Ammonia System (project 7.4d) resulting in lower than projected ammonia consumption.

9. Arsenic Groundwater Standard (Project #8) – O&M

Total O&M project costs are estimated to be $77,669 or 100% lower than originally forecasted. This variance is due to the work being postponed until finalization of a compliance plan and schedule with FDEP. This project is further discussed in Ms. West's testimony.

10. Greenhouse Gas Inventory and Reporting (Project #12) – O&M

Total O&M project costs are estimated to be $42,680 or 75% lower than originally forecasted. As discussed in the testimony of Patricia West, this variance is mainly attributable to the result of preparing the inventory report with internal resources rather than external consultants during the first two quarters of the year.

11. Mercury Total Daily Maximum Loads Monitoring (Project #13) - O&M

Total O&M project costs are estimated to be $92,164 or 100% higher than originally forecasted. As discussed in the testimony of Patricia West, PEF filed a petition requesting recovery of costs associated with development of a new Total Daily Maximum Load for mercury in State waters and rules regulating mercury emissions from various sources including, potentially, coal-fired power plants.

Q. How do the Estimated/Actual Capital recoverable investments for January 2009 through December 2009 compare with PEF's original projections?

A. Total recoverable capital investments itemized on Form 42-6E, are projected to be $10,273,396 or 23% lower than originally projected. Below are variance explanations for those approved Capital Investment Projects with significant variances. Individual project variances are provided on Form 42-6E. Return on Capital Investment, Depreciation and Taxes for each project for the Estimated/Actual period are provided on Form 42-8E, pages 1 through 14.

Capital Investment Project Variances:

1. **Above Ground Tank Secondary Containment (Project #4.x) – Capital**

   Capital expenditures are expected to be $872,377 or 65% higher than projected, resulting in an increase in revenue requirements of $143,986, due to the decision to upgrade Turner Tank 7 rather than retire it. This project is further discussed in Ms. West's testimony.

2. **Emissions Allowances (Project #5) – Capital**

   The revenue requirements on the inventory of sulfur dioxide (SO_2) and nitrogen oxide (NOx) emission allowances are estimated to be $681,439 or 10% higher than originally projected. As discussed in the testimony of Joseph McCallister the revenue requirements were higher due to the larger inventory balance that is reprojected throughout the year attributable to the lower power demand and fuel switching from coal-fired generation to gas-fired generation when economically feasible.

3. CAIR/CAMR (Project #7.x) – Capital

Project revenue requirements are estimated to be $11,069,225 or 31% lower than originally projected. This variance is primarily attributable to the change of in-service dates of the Unit 5 SCR and FGD projects. This project is further discussed in Dale Wilterdink's testimony.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

THOMAS G. FOSTER

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 090007-EI

AUGUST 28, 2009

Q. Please state your name and business address.

A. My name is Thomas G. Foster. 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 Service Company, LLC, as Supervisor of Regulatory Planning Florida.

Q. Have you previously filed testimony before this Commission in connection with PEF's Environmental Cost Recovery Clause (ECRC)?

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. The purpose of my testimony is to present, for Commission review and approval, PEF's calculation of the revenue requirements and its ECRC factors for application on customer billings during the period January 2010 through December 2010. My testimony addresses the capital and operating and maintenance ("O&M") expenses associated with PEF's environmental compliance activities for the year 2010 and actions to date related to its emission allowance procurement strategy as part of its Integrated Clean Air Compliance Plan for complying with the Clean Air Interstate Rule (CAIR) and related regulatory requirements.

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

A. Yes. I am sponsoring the following exhibits:

1. Exhibit No. __(TGF-3), which consists of PSC Forms 42-1P through 42-7P; and
2. Exhibit No. __(TGF-4), which provides details of four capital projects by site.

The following individuals will also be co-sponsors of Forms 42-5P pages 1 through 14 as indicated in their previously filed testimony:

- Mr. Zeigler will co-sponsor Forms 42-5P pages 1, 2 and 9
- Ms. West will co-sponsor Forms 42-5P pages 3, 4, 6, 8, 10, 11, 12, 13 and 14

- Mr. McCallister will co-sponsor Forms 42-5P page 5
- Mr. Murray will co-sponsor Forms 42-5P page 7

Q. What is the total recoverable revenue requirement relating to the projection period January 2010 through December 2010?

A. The total recoverable revenue requirement including true-up amounts and revenue taxes is $234,002,435 as shown on Form 42-1P, Line 5 of Exhibit No. __(TGF-3).

Q. What is the total true-up to be applied in the period January 2010 through December 2010?

A. The total true-up applicable for this period is an over-recovery of $19,754,975. This consists of the final true-up of under-recovery of $4,320,606 for the period from January 2008 through December 2008 and an estimated true-up over-recovery of $24,075,581 for the current period of January 2009 through December 2009. The detailed calculation supporting the estimated true-up was provided on Forms 42-1E through 42-8E of Exhibit No. __ (TGF-1) filed with the Commission on August 3, 2009.

Q. Are all the costs listed in Forms 42-1P through 42-7P attributable to Environmental Compliance projects previously approved by the Commission?

A. Yes, with the exception of the Total Maximum Daily Loads for Mercury Project, which is discussed below. PEF's 2010 ECRC projections include the following projects that have been previously approved by the Commission:

PEF's Integrated Clean Air Compliance Plan (Program No.7), which the Commission approved as a prudent and reasonable means of complying with CAIR and related regulatory requirements in Order No. PSC-07-0922-FOF-EI.

The Substation and Distribution System O&M programs (Nos. 1 and 2) were previously approved by the Commission in Order No. PSC-02-1735-FOF-EI.

The Pipeline Integrity Management Program (No. 3) and the Above Ground Tank Secondary Containment Program (No. 4) were previously approved in Order No. PSC-03-1348-FOF-EI.

The recovery of SO_2 Emission Allowances (No. 5) was previously approved in Order No. PSC-95-0450-FOF-EI; however, the costs were moved to the ECRC Docket from the Fuel Docket beginning January 1, 2004 at the request of Staff to be consistent with the other Florida IOUs.

The Phase II Cooling Water Intake 316(b) Program (No. 6) was previously approved in Order No. PSC-04-0990-PAA-EI.

The Sea Turtle Lighting Program (No. 9), the Arsenic Groundwater Standard Program (No. 8), and the Underground Storage Tanks Program (No. 10) were previously approved in Order No. PSC-05-1251-FOF-EI.

The Modular Cooling Tower Program (No. 11) was previously approved by the Commission in Order No. PSC-07-0722-FOF-EI.

The Crystal River Thermal Discharge Compliance Project (No. 11.1) and the Greenhouse Gas Inventory and Reporting Project (No. 12) were previously approved in Order No. PSC-08-0775-FOF-EI.

Q. What is the Total Maximum Daily Loads for Mercury Project?

A. On March 4, 2009, PEF submitted a petition for approval to recovery costs to be incurred as a result of PEF's participation in studies related to the Florida Department of Environmental Protection's ("FDEP's") development of Total Maximum Daily Loads ("TMDLs") for mercury in Florida waters, as well as separate rules to regulate mercury emissions from various sources including, potentially, coal-fired power plants. As discussed in PEF's Petition and the pre-filed testimony of Ms. Patricia Q. West submitted on August 3, 2009, the program qualifies for cost recovery under the ECRC and is consistent with

Commission policy encouraging utilities to take efforts to control environmental compliance.

Q. Have you prepared schedules showing the calculation of the recoverable O&M project costs for 2010?

A. Yes. Form 42-2P contained in Exhibit No. __(TGF-3) summarizes the recoverable O&M cost estimates for these projects in the amount of $46,919,229.

Q. Have you prepared schedules showing the calculation of the recoverable capital project costs for 2010?

A. Yes. Form 42-3P contained in Exhibit No. __(TGF-3), summarizes the cost estimates projected for these projects. Form 42-4P, pages 1 through 15, shows the calculations of these costs that result in recoverable jurisdictional capital costs of $206,669,820.

Q. Please explain why the beginning balance in the Capital Program Detail Exhibit No. _(TGF-4) for the CAIR project (7.4k) does not tie to the 2009 Estimated/Actual filing?

A. *Subsequent to the* 2009 Estimated/Actual *filing it was noticed that* Project (7.4k) was not placed into service in December 2009. Therefore, to properly reflect this project in 2010, PEF included the correct beginning balances for plant in-service (line 2) and accumulated depreciation (line 3). Also, PEF properly included a true-up in line 7c – Other for the equity and debt components that should have been in the 2009 Estimated/Actual filing. Finally, a true-up was also placed in line 8e – Other for the depreciation and property taxes that should have been included in the 2009 Estimated/Actual filing.

Q. Have you prepared schedules providing the description and progress reports for all environmental compliance activities and projects?

A. Yes. Form 42-5P, pages 1 through 14, contained in Exhibit No. __(TGF-3) with provides each project description and progress, as well as the projected recoverable cost estimates.

Q. What is the total projected jurisdictional costs for environmental compliance activities in the year 2010?

A. The total jurisdictional capital and O&M costs of $253,589,049 to be recovered through the ECRC, are calculated on Form 42-1P, contained in Exhibit No. __(TGF-3).

Q. Please describe how the proposed ECRC factors were developed.

A. The ECRC factors were calculated as shown on Forms 42-6P and 42-7P contained in Exhibit No. __(TGF-3). The demand component of class allocation factors were calculated by determining the percentage each rate class contributes to the monthly system peaks and then adjusted for losses for each rate class. This information was obtained from PEF's July 2009 load research study. The energy allocation factors were calculated by determining the percentage each rate class contributes to total kilowatt-hour sales and then adjusted for losses for each rate class. Form 42-7P presents the calculation of the proposed ECRC billing factors by rate class.

Q. Have you made any changes in how the costs associated with Project 7 are being allocated to the different rate classes?

A. Yes. Project 7 capital and O&M costs are being allocated to the retail rate classes on an energy basis as opposed to a production demand basis. Previously, pursuant to the settlement in Docket 050078, PEF's last Rate Case, PEF was allocating the costs of this project to the rate classes on a demand basis. Beginning in 2010, PEF will no longer be operating under this settlement and as such believes the costs associated with this project are more appropriately allocated to the retail rate classes on an energy basis. This is consistent with the stipulation approved for TECO in Order PSC-04-1187 in Docket No. 040007. This is also consistent with Order No. PSC-94-0044 where the Commission ordered that costs associated with the compliance with the Clean Air Act Amendments of 1990 (CAAA) be allocated to the rate classes in the ECRC on an energy basis due to the strong nexus between the level of emissions which the CAAA seeks to reduce and the number of kilowatt hours generated.

Q. Please explain why you provided three separate billing factors?

A. PEF has provided the allocation of the retail revenue requirements to the rate classes three ways: 12CP and 50% AD as proposed by the Company in Docket # 090079-EI, 12CP and 25% AD as recently approved for Tampa Electric in Docket # 080317-EI, and 12CP and 1/13th AD, the Company's currently approved method.

Q. Why are the ECRC factors for the Curtailable (CS) and Interruptible (IS) rate classes presented both individually and combined in your exhibit TGF-3?

A. As explained in the direct testimony of William C. Slusser Jr. in Docket 090079-EI, these rate classes should be combined and treated as one rate class since their load characteristics are similar. The ECRC factors for these rate classes are presented both individually and combined on page 42-7P, in my exhibit TGF-3, pending the outcome of the Commission decision in Docket No. 090079-EI.

Q. What are PEF's proposed 2010 ECRC billing factors by the various rate classes and delivery voltages?

A. The computation of PEF's proposed ECRC factors for customer billings in 2010 is shown on Form 42-7P, contained in Exhibit No. __(TGF-3). In summary, these factors are as follows:

RATE CLASS	ECRC FACTORS 12CP & 50% AD	ECRC FACTORS 12CP & 25% AD	ECRC FACTORS 12CP & 1/13AD
Residential	0.655 cents/kWh	0.656 cents/kWh	0.656 cents/kWh
General Service Non-Demand			
@ Secondary Voltage	0.647 cents/kWh	0.646 cents/kWh	0.646 cents/kWh
@ Primary Voltage	0.641 cents/kWh	0.640 cents/kWh	0.640 cents/kWh
@ Transmission Voltage	0.634 cents/kWh	0.633 cents/kWh	0.633 cents/kWh
General Service 100% Load Factor	0.630 cents/kWh	0.628 cents/kWh	0.627 cents/kWh
General Service Demand			
@ Secondary Voltage	0.636 cents/kWh	0.635 cents/kWh	0.634 cents/kWh
@ Primary Voltage	0.630 cents/kWh	0.629 cents/kWh	0.628 cents/kWh
@ Transmission Voltage	0.623 cents/kWh	0.622 cents/kWh	0.621 cents/kWh
Interruptible & Curtailable			
@ Secondary Voltage	0.616 cents/kWh	0.615 cents/kWh	0.614 cents/kWh
@ Primary Voltage	0.610 cents/kWh	0.609 cents/kWh	0.608 cents/kWh
@ Transmission Voltage	0.604 cents/kWh	0.603 cents/kWh	0.602 cents/kWh
Lighting	0.637 cents/kWh	0.634 cents/kWh	0.632 cents/kWh

Q. When is PEF requesting that the proposed ECRC billing factors be made effective?

A. PEF is requesting that its proposed ECRC billing factors be made effective with the first bill group for January 2010 and continue through the last bill group for December 2010.

Q. Please summarize your testimony.

A. My testimony supports the approval of an average environmental billing factor of 0.644 cents per kWh which includes projected capital and O&M revenue requirements of $234,002,435 associated with a total of 13 environmental projects and a true-up over-recovery provision of $19,754,975. My testimony also demonstrates that the projected environmental expenditures for 2010 are appropriate for recovery through the ECRC.

Q. Does this conclude your testimony?

A. Yes, it does.

(Transcript continues in sequence with Volume 2.)

STATE OF FLORIDA)

: CERTIFICATE OF REPORTER

COUNTY OF LEON)

I, LINDA BOLES, RPR, CRR, Official Commission Reporter, do hereby certify that the foregoing proceeding was heard at the time and place herein stated.

IT IS FURTHER CERTIFIED that I stenographically reported the said proceedings; that the same has been transcribed under my direct supervision; and that this transcript constitutes a true transcription of my notes of said proceedings.

I FURTHER CERTIFY that I am not a relative, employee, attorney or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorneys or counsel connected with the action, nor am I financially interested in the action.

DATED THIS 12th day of November, 2009.

Linda Boles

LINDA BOLES, RPR, CRR
FPSC Official Commission Reporter
(850) 413-6734