BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 070007-EI

In the Matter of

ENVIRONMENTAL COST RECOVERY CLAUSE.
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VOLUME 1
Pages 1 through 146

PROCEEDINGS: HEARING

BEFORE: CHAIRMAN LISA POLAK EDGAR
COMMISSIONER MATTHEW M. CARTER, II
COMMISSIONER KATRINA J. McMURRIAN
COMMISSIONER NANCY ARGENZIANO
COMMISSIONER NATHAN A. SKOP

DATE: Tuesday, November 6, 2007

TIME: Commenced at 9:56 a.m.
Concluded at 10:06 a.m.

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

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

APPEARANCES:

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

JOHN T. BURNETT, ESQUIRE, Progress Energy Service Co., LLC, Post Office Box 14042, St. Petersburg, Florida 33733-4042, appearing on behalf of Progress Energy Service Company, LLC.

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

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

CECELIA 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.

JOHN MCWHIRTER, JR., ESQUIRE, McWhirter, Reeves, & Davidson, P.A., 400 North Tampa Street, Suite 2450, Tampa, Florida 33602, appearing on behalf of Florida Industrial Power Users Group.

PATRICIA A. CHRISTENSEN, ESQUIRE; STEPHEN C. BURGESS, ESQUIRE; and JOSEPH A. MCGLOTHLIN, ESQUIRE, Office of Public Counsel, c/o The Florida Legislature, 111 W. Madison Street, Room 812, Tallahassee, Florida 32399-1400, appearing on behalf of the Citizens of Florida.

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

I N D E X
WITNESSES

EXHIBITS

NUMBER:		ID.	ADMTD.
1	Comprehensive Exhibit List	9	9
2	Staff Composite Exhibit Stip-2	9	9
3	Staff Composite Exhibit - 3	9	9
4	KMD-1	9	9
5	KMD-2	9	9
6	KMD-3	9	9
7	RRL-1	9	9
8	RRL-2	9	9
9	RRL-3	9	9
10	RRL-4	9	9
11	RRL-5	9	9
12	RRL-6	9	9
13	RRL-7	9	9
14	RRL-8	9	9
15	RRL-9	9	9
16	RRL-10	9	9
17	RRL-11	9	9
18	WG-1	9	9
19	WG-2	9	9
20	PW-1	9	9
21	(Confidential) TC-1	9	9
22	(Confidential) TC-2	9	9
23	(Confidential) TC-3	9	9

EXHIBITS

NUMBER:		ID.	ADMTD.
24	(Confidential) TC-4	9	9
25	(Confidential) TC-5	9	9
26	(Confidential) TC-6	9	9
27	(Confidential) TC-7	9	9
28	(Confidential) TC-8	9	9
29	(Confidential) TC-9	9	9
30	(Confidential) SSW-1	9	9
31	(Confidential) SSW-2	9	9
32	(Confidential) SSW-3	9	9
33	SSW-4	9	9
34	MI-1	9	9
36	MI-2	9	9
37	MI-3	9	9
38	MI-4	9	9
39	MI-5	9	9
40	RJM-1	9	9
41	RJM-2	9	9
42	RJM-3	9	9
43	HTB-1	9	9
44	HTB-2	9	9
45	HTB-3	9	9
46	3/30/07 FPL Supplemental CAIR/CAMR Filing	9	9

P R O C E E D I N G S

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CHAIRMAN EDGAR: We will move on and take up docket 07. So the record for the 07 docket is now open.

Preliminary matters.

MS. BROWN: Yes, Madam Chairman, there are a few preliminary matters I'd like to mention at this time. We have provided language to stipulate the position on Issue 10A.

CHAIRMAN EDGAR: Ms. Brown, I'm having a little difficulty hearing you, and I think others may be as well.

MS. BROWN: Is that better?

CHAIRMAN EDGAR: I think that's -- I don't know. Let's --

MS. BROWN: Well --

CHAIRMAN EDGAR: Okay. Can you begin from the beginning for me?

MS. BROWN: I will.

CHAIRMAN EDGAR: Thank you.

MS. BROWN: We have provided language to stipulate the position on Issue 10A regarding Progress Energy's modifications to its Integrated Clean Air Compliance Program. With that stipulation, there are now proposed stipulations on all the issues in the 07 docket and the witnesses have been excused.

Also, I need to mention that when we get to the exhibits, FP&L will have an additional exhibit to move into the record. And when we get to the stipulated issues, FPL will also have a minor computation adjustment to make to Issues 3, 4 and 7. The parties do not intend to make any opening statements. We will recommend that you can finalize the evidentiary record by admitting the prefiled testimony and exhibits, and staff's composite discovery exhibit into the record. And we will also suggest that the Commission can make a bench decision in this case.

So with that, we ask that the prefiled testimony of all witnesses identified in Section VI of the Prehearing Order be inserted into the record as though read. Cross-examination has been waived.

CHAIRMAN EDGAR: Okay. Okay. So we are going to go ahead and get the record in order and get us in a procedural posture so that we are ready for a vote. And so with that, the prefiled testimony for each of the witnesses in the 07 docket will be entered into the record for this docket.

MS. BROWN: As to the exhibits, we ask that you mark and move the Comprehensive Stipulated Exhibit List into the record. The list itself is Exhibit 1. And all other exhibits on the list should be numbered as indicated and moved into the record at this time.

CHAIRMAN EDGAR: Okay. So the Comprehensive Exhibit List will be marked as Exhibit 1. And then do we have additional exhibits to add to the list? Mr. Butler?

MR. BUTLER: We do. There is one. And I provided each of the Commissioners and the other parties intervening as to FPL in this docket copies of what we've marked as Exhibit 46, and this was identified at staff's request. It is the March 30, 2007, FPL Supplemental CAIR/CAMR filing that was made on, or filed with the Commission on that date in this docket. And my understanding is staff wants to have it as part of the record because it is referred to in the stipulated position on Issue 9G.

CHAIRMAN EDGAR: Okay. So we will mark as Exhibit 46 the document that has been distributed and label it FPL's Supplemental CAIR/CAMR filing. Commissioners, any questions? Does everybody have -- okay. So marked.

MR. BUTLER: Thank you.

(Exhibits 1 through 46 marked for identification.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF KOREL M. DUBIN

DOCKET NO. 070007-EI

APRIL 2, 2007

Q. Please state your name and address.

A. My name is Korel M. Dubin 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 the Manager of Regulatory Issues in the Regulatory Affairs Department.

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

A. Yes, I have.

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 2006.

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 KMD-1 consists of eight forms.

- Form 42-1A reflects the final true-up for the period January through December 2006.
- 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 39 through 41 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 will 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 our 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 2006 through December 2006, an over-recovery of $1,563,849, which I am requesting to be included in the calculation of the ECR factors for the January through December 2008 period.

The actual End-of-Period over-recovery for the period January through December 2006 of $14,973,593 (shown on Form 42-1A, line 3) adjusted for the estimated/actual End-of-Period over-recovery for the same period of $13,409,744 (shown on Form 42-1A, line 6) results in the Net True-Up over-recovery for the period January through December 2006 (shown on Form 42-1A, line 7) of $1,563,849.

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 2006. The End of Period true-up shown on page 2 of 2, Lines 5 plus 6 is an over-recovery of $14,973,593. Additionally, Form 42-3A shows the calculation of the Interest Provision of $651,087, which is applicable to end of period true-up over-recovery of $14,973,593.

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 2006 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 $548,957, or 38.1% lower than projected and Form 42-6A shows that total capital investment project costs were $1,364,259 or 8.0% lower than projected. Following are explanations for those O&M Projects and Capital Investment Projects with significant variances. 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 2006 are provided on Form 42-8A.

1. Maintenance of Stationary Above Ground Fuel Storage Tanks - O & M (Project 5a)

Project expenditures were $200,087, or 16.0% higher than previously projected. Actual expenditures for the Port Everglades Plant #4 Metering Tank were approximately $70,000 higher due to internal coating of the vapor space area of the tank being added to the original scope of work. This addition was based on subject matter expert advice to mitigate the internal corrosion caused by fuel oil fumes.

Most of the balance of the variance was associated with additional costs to remove sediment and to make repairs on the bottom plates, steam tubing and related pipe supports on Tank 802 at the Port Everglades

Terminal. Required repairs could not be determined until the oil level was dropped below the manway, the manway's cover was removed, and the API inspector physically entered the tank and conducted the inspection. When this inspection was performed, FPL discovered that there were actually 9" of sediment vs. the 4" that had been originally estimated, and that there was damage to the bottom plates, steam tubing and related pipe supports.

Finally, disposal of storm water trapped inside the tank was not in the original bid scope of potential work. This scope has now been added to the bid packages for all future work.

2. Disposal of Non-containerized Liquid Waste – O & M (Project 17a)

Project expenditures were $59,943, or 15.8% lower than previously projected due to project delays resulting from required maintenance work on the fly ash filter press. Maintenance of the filter press required approximately five months to complete, which delayed performing ash removal work at the Sanford, Turkey Point, and Port Everglades plants.

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

Project expenditures were $278,679, or 29.0% lower than anticipated. Project activities were delayed due to the re-bidding of work activities and specification revisions. The re-bidding of the Project activities brought about streamlined work activity descriptions and favorable pricing for FPL and its customers, resulting in lower overall costs moving forward. The specification revision was due to the encapsulation process for distribution breakers and regulators. Specifically, a fast-dry primer and a dry-fall paint required introduction and approval from the FPL Coatings Specialist in order to make this effort both feasible and safe in view of the close proximity of energized equipment.

4. Substation Pollutant Discharge Prevention & Removal - Transmission - O&M (Project 19b)

Project expenditures were $42,144, or 23.0% lower than anticipated. Projected work was decreased due to the retirement of transmission breakers, resulting in less equipment requiring project work. Additionally, FPL was unable to obtain the necessary clearances to perform certain project work; resulting in that work being deferred.

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

Project expenditures were $247,397, or 63.5% lower than previously projected. Approximately $200,000 was included in the mid-year estimate for work on a 20" gas line Smart Pig. FPL subsequently determined, based on the scope of this work, that the work was misclassified and is not clause recoverable. The balance of the variance is related to the delay of a 50' dig on an 18" pipeline due to standing water in the area of the dig.

6. Manatee Reburn – O&M (Project 24)

Project expenditures were $208,466, or 99.3% lower than previously projected. Reburn burner maintenance inspections at the Manatee Plant revealed less damage than anticipated. Additionally, some projected maintenance costs were covered under warranty.

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

Project expenditures were $124,948, or 17.3% lower than previously projected. Due to the relative cost to FPL of oil and gas, less oil and more gas was burned than originally expected at the Plant and as a result, less operational and maintenance activities were needed for the ESPs. This decreased usage of oil also contributed to less ash being produced. Finally, the failure rates of ESP equipment have proven to be better than originally expected (more reliable), thus requiring less maintenance.

8. UST Replacement/Removal – O&M (Project 26)

Project expenditures were $141,539, or 40.4% higher than projected. This variance is primarily due to an increase in scope. A tank located at the Physical Distribution Center was inspected and found to qualify for the UST Project. The inspection took place after the 2006 Estimated/Actual filing was made.

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

Project expenditures were $45,977, or 14.3% lower than previously projected. The Wastewater Permit for the Cape Canaveral Plant was issued by the FDEP. However, there were delays due to water quality technical issues associated with the treatment systems, and ongoing discussions with Brevard County. For these reasons, reclaimed water was not used at the plant; therefore, there was not a cost for the additional water treatment that would be required in order to use reclaimed water.

10. Manatee Hydro-biological Monitoring Program (HBMP) – O & M (Project 30)

Project expenditures were $6,872 or 44.6% higher than previously projected. This increase is primarily due to unanticipated testing required by the implementation of Emergency Diversion Curves (EDC) as a result of drought conditions.

11. Clean Air Interstate Rule (CAIR) Compliance – O & M (Project 31)

Project expenditures were $450,965, or 74.8% higher than expected. This variance is primarily due to expenses associated with FPL's challenge to the Department of Environmental Protection's (DEP) rules implementing CAIR in Florida. As explained in Randall R. LaBauve's testimony filed on September 1, 2006, these costs were not reflected in

FPL's 2006 estimated/actual or 2007 projected ECRC costs due to the timing of FPL's decision to pursue the challenge.

12. Best Available Retrofit Technology (BART) – O & M (Project 32)

Project expenditures were $27,803, or 54.9% lower than expected primarily due to a reduction in the project's scope. The original estimate included the need for modeling on all plants. Only one plant required a full model review by the vendor, and several plants required only partial modeling.

13. SO2 Allowances – Negative Return on Investment

Project depreciation and return on investment were $50,513, or 8.3% lower than anticipated. The return on the unamortized gains on sales of SO2 allowances decreased primarily due to the reduction in the pre-tax return on capital investment rate from approximately 11.7% (based on 2002 capital ratios and rates used in the estimated/actual filing) to approximately 11.1% (based on 2006 capital ratios and rates used in actual calculations).

14. Manatee Reburn – Capital (Project 24)

Project depreciation and return on investment were $464,710, or 11.9% lower than anticipated. Vendor payments scheduled for 2006 were not made due to performance and scheduled milestones not being met.

Results of initial testing of boiler operating conditions and unit performance did not meet guaranteed emissions rates. Delivery of results from follow-up testing is expected in June/July 2007.

15. Port Everglades Electrostatic Precipitator (ESP) Technology – Capital (Project 25)

Project depreciation and return on investment were $532,014, or 7.5% lower than anticipated, primarily due to a delay in the set-up of the work order due to a computer programming problem which has since been corrected.

16. UST Replacement / Removal – Capital (Project 26)

Project depreciation and return on investment were $26,471, or 100.0% lower than anticipated. Work on the General Office tank was completed later than originally expected and so the related expenses were not recorded until January 2007.

17. Clean Air Interstate Rule (CAIR) Compliance – Capital (Project 31)

Project depreciation and return on investment were $113,492, or 54.0% lower than anticipated. 2006 estimates assumed Reburn technology would be installed on Cape Canaveral Units 1 & 2, Port Everglades Units 3 & 4 and Turkey Point Units 1 & 2. Further analysis of necessary modifications within FPL's fleet to address CAIR compliance has indicated that the addition of Reburn technology on these units may not be necessary. As a result, the plan to implement these modifications, and the associated expenditures, has been deferred.

18. Clean Air Mercury Rule (CAMR) Compliance – Capital (Project 33)

Project depreciation and return on investment were $13,648, or 100.0% lower than anticipated. CAMR expenditures of $361,479 incurred in 2006 related to the Scherer Plant were charged to a non-recoverable account pending receipt of the Commission Order approving the CAMR Compliance Project. These charges were transferred from a non-recoverable account to an ECRC recoverable account in 2007.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF KOREL M. DUBIN

DOCKET NO. 070007-EI

August 3, 2007

Q. Please state your name and address.

A. My name is Korel M. Dubin 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 Manager of Cost Recovery Clauses.

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 Environmental Compliance activities for the period January 2007 through December 2007.

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 KMD-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 2007 through December 2007. 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 1 through 43) 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 2007 through December 2007 is an under-recovery, including interest, of $683,962 (Appendix I, Page 4, line 5 plus line 6). This Estimated/Actual True-up under-recovery of $683,962 consists of January through June 2007 actuals and revised estimates for July through December 2007, 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 Martin Plant Drinking Water System Compliance Project, which is discussed and supported in the testimony of Randall R. LaBauve, and the St. Lucie Cooling Water System Inspection and Maintenance Project, which is discussed and supported in FPL's petition filed with the Commission on January 8, 2007.

Q. How do the Estimated/Actual project expenditures for January 2007 through December 2007 period compare with original projections?

A. Form 42-4E (Appendix I, Page 7) shows that total O&M project costs were $5,491,607 (43.3%) higher than projected and Form 42-6E (Appendix I, Page 10) shows that total capital investment project costs were $4,472,647 (15.7%) 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 as Form 42-8E (Appendix I, Pages 13 through 55).

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

Project expenditures are estimated to be $41,805 (1.9%) higher than previously projected. The variance is primarily due to the high demand in the tank repair market, which has increased the cost of labor.

2. Disposal of Noncontainerized Liquid Waste (Project No. 17a) - O&M

Project expenditures are estimated to be $22,368 (8.3%) higher than previously projected. The variance is primarily due to greater than anticipated ash accumulation in the storage basins. As a result of the increase in ash material to be handled for removal, the site incurred extra expenses due to the use of additional moving equipment to support the job. Also, the time associated with the contractor completing the job contributed to the increases in manpower hours. This increase in time and materials to clean out ash accumulation ultimately resulted in increased expenditures.

3. Substation Pollutant Discharge Prevention & Removal – Transmission (Project No. 19b) - O&M

Project expenditures are estimated to be $108,161 (138.4%) higher than projected. In the first and second quarter of 2007, additional transmission transformers requiring leak repairs or re-gasket work activities were discovered and scheduled to be worked during the remainder of 2007. The original projected work activities included one transmission transformer re-gaskets and a few leak repairs. The number increased to five transmission transformer re-gaskets and additional leak repairs.

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

The variance of $523,338 (109%) higher than projected is due to much higher than anticipated gains from the DOE sales of emissions allowances in 2007.

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

Project expenditures are estimated to be $400,354 (47.7%) lower than projected. The variance is primarily due to lower than projected bids for cathodic protection work and the 30"pipeline inspection. Additionally, work was completed prior to the rainy season and costs associated with ground water issues, which were included in the original projections, were avoided.

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

Project expenditures are estimated to be $220,753 (237.4%) higher than projected. Additional required upgrades at the Sanford Plant, Martin Plant, Martin Terminal, Port Everglades Plant, Port Everglades Terminal, Manatee Plant, Manatee Terminal, Turkey Point Plans Units 1 and 2, and Cape Canaveral Plant were identified during development of the plan.

Additional engineering was required to develop conceptual designs and cost estimates for the upgrades, which are scheduled for implementation in 2008. These upgrades were not anticipated at the time FPL filed its original projections for 2007.

At Turkey Point Units 3 and 4, longer than estimated construction durations and the replacement of degraded gas tanks that did not pass Miami-Dade county inspections contributed to the variance. The original projections planned to utilize existing tanks. Once the work began it was discovered the tanks were degraded and needed to be replaced.

7. Manatee Reburn (Project No. 24) - O&M

Project expenditures are estimated to be $41,868 (8.4%) lower than projected. The variance is primarily due to limited maintenance time available during the May and June high load period.

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

Project expenditures are estimated to be $872,150 (41.4%) lower than projected. Fuel economics to date have dictated that the units at the Port Everglades Plant be run on gas because it is less expensive. Therefore, the ESPs have not had to be operated as much as was initially predicted for 2007, which reduced the equipment deterioration and generated significantly less ash for disposal.

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

Project expenditures are estimated to be $161,771 (30.5%) lower than projected. The Wastewater Permit for the Cape Canaveral Plant was issued by the Florida Department of Environmental Protection (FDEP). However, there were delays due to water quality technical issues associated with the treatment systems and reclaimed water was not used at the plant; therefore, there was not a cost for the additional water treatment that would be required in order to use reclaimed water.

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

Project expenditures are estimated to be $1,018,188 (43.4%) lower than projected. This variance is primarily due to economies of scale achieved by the use of one contractor to perform the necessary work. Original estimates included the use of three contractors.

11. Selective Catalytic Reduction (SCR) Consumables (Project No. 29) – O&M

Project expenditures are estimated to be $34,685 (15.4%) higher than projected. The Manatee and Martin Plants are expected to operate at high capacity factors for the remaining months of the year thereby increasing the amount of consumables used. Additionally, catalyst sampling and testing expenses were higher than originally projected.

12. Hydrobiological Monitoring Plan (HBMP) (Project No. 30) –

O&M

Project expenditures are estimated to be $17,895 (71.6%) higher than projected. The variance is primarily due to additional monitoring required due to unexpected drought conditions. The permit requires that while we are on the Emergency Diversion Curves, we conduct additional river monitoring and submit a report.

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

Project expenditures are estimated to be $156,047 (70.9%) higher than projected. This variance is due to costs associated with the 800 MW unit cycling study, which was not included in the original estimates for 2007. This study and its role in helping FPL cost-effectively comply with CAIR is discussed in the direct testimony of Mr. Randall R. LaBauve.

14. Best Available Retrofit Technology (BART) Project (Project No. 32) – O&M

Project expenditures are estimated to be $3,397, whereas FPL did not anticipate any 2007 expenditures for this project originally. The DEP requested additional information on FPL's BART Determination for Turkey Point Units 1 and 2, which necessitated the use of a contractor. This activity was not anticipated at the time FPL filed its original projections for 2007.

15. Continuous Emission Monitoring Systems - CEMS (Project

No. 3b) - Capital

The variance in depreciation and return is $60,189, or 5.5% lower than projected. This variance is primarily due to the procurement of a much lower cost per unit pricing from the vendor (California Analytical). In addition, several installations and in-service dates shifted from 2007 to 2008 due to equipment availability delays and schedule changes.

16. SO2 Allowances – Negative Return on Investment – Capital

The variance of $68,038, or 26.8% lower than projected is due to higher than anticipated gains amortization from the DOE sales of emissions allowances in 2007. This higher amortization resulted in a lower balance on which a return was calculated.

17. Spill Prevention, Control, and Countermeasures - SPCC (Project No. 23) - Capital

The variance in depreciation and return is $107,778, or 5.0% lower than projected. Previously planned diversionary structure work activities have been postponed, pending the completion of an assessment of existing diversionary structures. The Final Rule issued February 26, 2007 amending the existing SPCC Rule allows regulatory relief from containment requirements at facilities with oil-filled equipment by allowing an oil spill contingency planning option or active containment in addition to an inspection and monitoring program for oil-filled equipment in lieu of installing secondary containment or diversionary structures.

18. Clean Air Interstate Rule (CAIR) Compliance (Project No. 31) - Capital

The variance in the return on CWIP is estimated to be $2,742,160, or 63.9% lower than projected. This variance is primarily due to the Reburn and Low NOx Burner projects at Cape Canaveral Units 1 and 2, Port Everglades Units 3 and 4, and Turkey Point Units 1 and 2 being put on hold. This change in strategy is related to FPL's 800 MW unit cycling project and is discussed in Mr. LaBauve's direct testimony.

19. Clean Air Mercury Rule (CAMR) Compliance (Project No. 33) - Capital

The variance in the return on CWIP is estimated to be $1,254,563 or 78.7% lower than projected. Engineering and procurement activities associated with Scherer, which were projected for 2007, will now be performed in 2008.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF KOREL M. DUBIN

DOCKET NO. 070007-EI

AUGUST 31, 2007

Q. Please state your name and address.

A. My name is Korel M. Dubin 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 Manager of 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 2008 through December 2008 period. Additionally, I am including a revised 2007 Estimated/Actual True-up amount.

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. What is FPL's revised 2007 Estimated/Actual True-up amount?

A. The revised 2007 Estimated/Actual True-up amount is an under-recovery of $585,826. The revised schedules that support this $585,826 under-recovery are included on pages 95 through 104 in Appendix I.

Q. Why has FPL revised its 2007 Estimated/Actual True-up amount that was filed on August 3, 2007?

A. The negative return on emission allowances amount was revised to properly reflect the return on the proceeds from the DOE sales of emission allowances in the second quarter of 2007.

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

A. Yes. KMD-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 ECRC factors. Additionally, pages 95 through 104 contain revised Forms 42-1E, 42-2E, 42-3E, 42-6E, 42-7E, and 42-8E, pages 39 and 40.

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 2008 through December 2008. Total environmental costs, adjusted for revenue taxes, amount to $43,765,627 (Appendix I, Page 2, Line 5) and include $44,712,161 of environmental project costs (Appendix I, Page 2, Line 1c) increased by the revised estimated/actual true-up under-recovery of $585,826 for the January 2007 - December 2007 period (Appendix I, Page 2, Line 2), and decreased by the final true-up over-recovery of $1,563,849 for the January 2006 – December 2006 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 51) 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 52 through 92) 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 93) 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 94) presents the calculation of the proposed ECRC factors by rate class.

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 of the Low Level Radioactive Waste Storage Project, which is discussed and supported in the testimony of Randall R. LaBauve, the Martin Plant Drinking Water System Compliance Project, which is discussed and supported in Mr. LaBauve's testimony filed on August 3, 2007, and the St. Lucie Cooling Water System Inspection and Maintenance Project, which is discussed and supported in FPL's petition filed with the Commission on January 8, 2007.

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. 070007-EI

August 3, 2007

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 the Commission's review and approval a new ECRC project, the Martin Plant Drinking Water System Compliance Project. Additionally, my testimony provides an update on FPL's approved Clean Air Interstate Rule (CAIR) Compliance and BART (CAVR) Projects, and discusses a new activity that will be required for FPL's approved St. Lucie Turtle Net Project.

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

A. Yes. Exhibits RRL-1 through RRL-8 listed below are included in Appendix II.

- Exhibit RRL-1 – Florida Department of Environmental Protection Rule 62-550.310, Florida Administrative Code – Primary Drinking Water Standards: Maximum Contaminant Levels and Maximum Residual Disinfectant Levels
- Exhibit RRL-2 – Consent Order in OGC Case Number 06-0744 FPL Martin Plant Public Water System PWS #4431748
- Exhibit RRL-3 – Golder Associates Inc. FPL Martin Plant Potable Water System DBP (THM & HAA5) Analysis
- Exhibit RRL-4 – Department of Environmental Protection – Letter approving Corrective Action Plan for FPL Martin Plant PWS #4431748
- Exhibit RRL-5 – Clean Air Interstate Rule – Summary of FPL 800 MW Unit Cycling Project
- Exhibit RRL-6 – Clean Air Interstate Rule – Summary of FPL Peaking Gas Turbine CEMS
- Exhibit RRL-7 – Clean Air Visibility Rule – Update Summary of FPL BART Project
- Exhibit RRL-8 – Clean Air Visibility Rule – Florida Department of Environmental Protection – Reasonable Progress Rule Workshop Slides

Martin Plant Drinking Water System Compliance Project

Q. Please describe the law or regulation requiring the Martin Plant Drinking Water System Compliance Project.

A. Florida Department of Environmental Protection (FDEP) Rule 62-550.310(3), Florida Administrative Code, imposed drinking water limits on Disinfectants and Disinfection Byproducts (DBPs) to implement the U.S. Environmental Protection Agency's (EPA's) Stage 1 Disinfection and Byproducts Rule, 40 CFR Parts 9, 141, and 142. A copy of Rule 62-550.310(3), F.A.C. is provided as Exhibit RRL-1 of Appendix II. The FDEP's Rule applies to community water systems (CWSs) and nontransient noncommunity water systems (NTNCWSs) that treat their water with a chemical disinfectant for either primary or residual treatment. Among other things, the FDEP Rule established maximum contaminant levels for four certain trihalomethanes (THMs) and haloacetic acids (HAA5s), which are DBPs.

FPL's Martin Plant is a NTNCWS subject to the FDEP Rule. FPL has tried unsuccessfully for several years to bring the drinking water system at the Martin Plant into compliance with the FDEP Rule. However, samples collected from the drinking water system on March 15, 2005, April 12, 2005, September 14, 2005, and December 28, 2005, were all found to be above the levels permitted for THMs and HAA5s. On September 22, 2006, FPL and the FDEP entered into a Consent Order to reach a settlement on the matter of the Martin Plant drinking water system's continuing non-compliance with the FDEP Rule. The Consent Order is provided as Exhibit RRL-2 of Appendix II.

Q. How is FPL complying with the requirements of the Consent Order?

A. Per the corrective actions specified in the Consent Order, FPL retained Golder Associates, Inc., which performed a site visit at the Martin Plant and inspected the drinking water system, reviewed well data, performed a literature search, and evaluated FPL's situation. Golder provided recommendations as to how to achieve compliance with the drinking water limits for THMs and HAA5s at the plant via a final report dated August 29, 2006. A copy of this final report is provided as Exhibit RRL-3 of Appendix II. In its final report, Golder concluded that the two DBP treatment technologies used in the drinking water system, which are aeration and activated carbon filtration, are at present the best technologies for the removal of DBPs and no additional treatment technology is necessary. Nonetheless, Golder concluded that the existing system at the Martin Plant would need corrective modifications in order to achieve the THM and HAA5 levels required per the FDEP and EPA Rules.

Q. What is FPL's corrective action plan and milestone dates?

A. On November 17, 2006, and pursuant to the Consent Order, FPL provided its final corrective action plan and milestone dates to the FDEP. FPL's corrective action plan and milestone dates are as follows:

- September 1, 2006 – FPL submits signed Consent Order and signed/sealed corrective action plan
- October 17, 2006 – FDEP issues written request for additional information (RFI)
- November 17, 2006 – FPL provides additional information to FDEP
- December 20, 2006 – FDEP issues written approval of the plan
- January 12, 2007 – FPL completes measurements of physical characteristics of aeration system, and takes synoptic samples of inlet and outlet water for both the aerator and the carbon filter, and sends those samples to the laboratory
- January 26, 2007 – FPL receives results/report from laboratory
- March 23, 2007 – Install pilot equipment for testing
- June 20, 2007 – Complete testing of pilot
- October 1, 2007 – FPL issues performance specifications to bidders to provide new aerator and carbon filter units
- November 1, 2007 – FPL receives bids to provide new aerator and carbon filter units
- December 1, 2007 – FPL awards contract to successful bidder to install new aerator and carbon filter units

- January 2008 – Installation of new aerator and carbon filter units is complete
- June 2008 – Testing of new aerator and carbon filter units is complete, FPL submits engineer's certification of completion of construction and required supporting documentation
- July 2008 – FDEP issues written clearance to place the system modifications into service

Q. What milestones has FPL completed to date?

A. FPL has completed the pilot testing on a small scale system to test the effectiveness of the proposed treatment process. FPL is awaiting the results of the testing. Once the results are received from the vendor, drawings detailing the necessary changes to the existing system will be obtained. These drawings will be used as part of the bid package to select the contractor for the installation of the final system. The next major milestone will be the issuance of the performance specifications to the bidders to provide new aerator and carbon filter units. The issuance of the performance specifications is scheduled to be completed on October 1, 2007.

Q. Why has FPL not submitted this Project for cost recovery through the ECRC previously?

A. At the time that the Martin Plant drinking water system became subject to the FDEP and EPA rules, FPL reasonably expected that the system would provide adequate water treatment to comply with the THM and HAA5 MCLs established by the rules. It was not until after the unsuccessful tests were performed in 2005, Golder completed its evaluation of the System in August 2006, and FPL negotiated the Consent Order with FDEP in September 2006 that FPL was aware that it would have to conduct the pilot test and implement modifications to the drinking water system required by the Consent Order.

Q. What activities is FPL asking to recover through the ECRC?

A. FPL is requesting to recover costs associated with implementing the treatment options resulting from the pilot test plan, that are found to be necessary to achieve compliance with the FDEP rule. The results of the pilot test plan will determine the most cost-effective and reliable treatment option to achieve compliance.

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

A. Following are FPL's preliminary capital estimates for potential treatment options:

- Addition of larger carbon bed - $40,000 - $60,000
- Addition of multimedia filter bed - $30,000 - $50,000
- Addition of high velocity stripper - $15,000 - $30,000

Additionally, annual O&M estimates for the removal and replacement of the exhausted carbon bed and multimedia filter bed (every 8 to 12 months) are $11,000 to $17,000 to begin in 2008.

Q. Does FPL expect to incur any Project costs in 2007?

A. Yes. FPL expects to incur $4,000 of Capital expenses associated with engineering and drawings detailing the changes to the existing system. These expenses are projected for October and November of 2007.

Q. Has FPL estimated how much will be spent on the Project in 2008?

A. Yes. FPL expects to incur $17,000 of O&M expenses and $140,000 of Capital expenses associated with the installation and maintenance of the new aerator and carbon bed.

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

A. The activities outlined in the preceding paragraphs represent a cost-effective strategy for complying with the Consent Order. FPL will utilize competitive bidding to procure the necessary services.

Q. Is FPL recovering the costs for the Martin Plant Drinking Water System Compliance Project through any other mechanism?

A. No.

CAIR Compliance Project Update

Q. What updates has FPL made to its CAIR Compliance Project?

A. There are two updates. The first relates to FPL's 800 MW Unit Cycling Project, which FPL believes will help it comply with CAIR more cost-effectively. The second update relates to FPL's determination that a more extensive Continuous Emissions Monitoring System (CEMS) Plan is needed for its gas turbine units.

Q. Please discuss FPL's 800 MW Unit Cycling plans.

A. FPL commissioned a study, with the Commission's approval, to evaluate emission reductions and necessary countermeasures to implement the 800 MW Unit Cycling project. Phase one and two of the 800 MW unit cycling study was completed in June of 2007. FPL has reviewed the results of the study and has concluded that implementation of the project on FPL's 800 MW fossil steam Electric Generating Units (EGUs) at the Martin and Manatee Plants would provide cost effective reductions in NOx emissions to help comply with CAIR. The study has identified several modifications that must be undertaken to allow the 800 MW units to cycle as needed without adversely affecting unit availability and reliability. Exhibit RRL-5 to this filing provides a summary of the 800 MW Unit Cycling Report, a discussion of the preliminary project scope to implement the 800 MW Unit Cycling project, a preliminary estimate of project costs, and the resultant projected emission reductions. Evaluation of detailed project cost schedules and implementation plan is currently underway following the determination that the project would provide highly cost effective emission reductions for CAIR compliance. I discussed this project in my October 13, 2006 testimony, but neither its cost nor its impact on the cost of other CAIR compliance projects was known at the time of FPL's 2007 ECRC projections.

As discussed in Exhibit RRL-5, FPL now expects to implement the 800 MW unit cycling project from 2007 through 2010 at its Manatee Units 1 & 2 and Martin Units 1 & 2, at an estimated capital cost of $97 million. Upon completion of the plan on all four 800 MW units, FPL projects an annual NOx reduction of 1,773 tons and an ozone season NOx reduction of 1,563 tons. As a result, FPL will not need to acquire as many additional allowances from the annual and ozone season NOx allowance markets for compliance with CAIR. FPL has provided a detailed description and implementation plan for the 800 MW Unit Cycling Project in Exhibit RRL-5. This exhibit also provides a discussion of FPL's selection of the project for compliance with CAIR.

Q. Has FPL identified potential changes to its CAIR compliance plan that could affect the decision to proceed on implementation of the 800 MW Unit Cycling Project on all of the project units?

A. Yes. On July 13, 2007, Florida Governor Charlie Crist signed three executive orders initiating climate change requirements for Florida.

Executive Order 07-127 requires the FDEP to initiate rulemaking to reduce CO_2 emissions from electricity production to year 2000 levels by 2017, year 1990 levels by 2025, and to a level 80% below the 1990 levels by 2050. The goals established in Executive Order 07-127 may require significant CO_2 emissions reductions from existing fossil power plants, which may impact FPL's decision to fully implement the 800 MW Unit Cycling Project. FPL is currently participating in the FDEP rulemaking and we will be evaluating strategies that may be required to meet the compliance requirements of the new rule. FPL's implementation of the 800 MW Unit Cycling Project, and any other NOx or SO_2 reduction project to comply with the CAIR requirements, will be evaluated to ensure that projects will provide the most cost effective overall compliance strategy to meet all new environmental requirements.

Q. Please discuss the changes FPL has made to its CEMS plans for gas turbine units and why these changes are necessary to comply with CAIR.

A. FPL has recently identified the need to change the CEMS Plan for the small peaking gas turbine units and to implement a Gas Turbine CEMS CAIR Compliance strategy within the CAIR Compliance Project. CAIR requires that generating unit emissions from all CAIR affected sources monitor NOx and SO_2 emissions through implementation of CEMS that comply with the applicable federal emission monitoring requirements under 40 CFR Part 75. FPL's fossil generation is compliant with these requirements of Part 75 through the CEMS, which had been installed to comply with Acid Rain requirements, with the exception of the small combustion turbine peaking units located at the Lauderdale, Port Everglades and Ft. Myers plants. FPL's gas turbine peaking units were not subject to Acid Rain monitoring requirements and historically have not had CEMS.

Initially, FPL planned to comply with the CEMS monitoring requirements for these peaking units through use of Low Mass Emission (LME) default emission rate requirements under Part 75, which require only limited emission monitoring system requirements. Subsequent reviews of FPL's compliance strategy for CAIR identified an increased compliance risk and potential increases in monitoring system costs if FPL adopts the default emission rate monitoring requirements. FPL now proposes to implement LME "Identical Units" Part 75 CEMS requirements, which provide for monitoring of representative units for groups of similar generating units. FPL proposes to implement the revised monitoring plan for the peaking gas turbines at an estimated cost of $396,273 as the least cost alternative for compliance with this part of the CAIR requirements. Exhibit RRL-6 to this filing provides a discussion of the LME monitoring options under 40 CFR Part 75.19, a description of "Similar Units" CEMS option implementation as the preferred compliance method, and the preliminary cost projections for implementation.

Q. What is the status of FPL's legal challenge to CAIR?

A. On December 23, 2007, the Administrative Law Judge (ALJ) ruled against FPL's challenge in the Division of Administrative Hearings of the FDEP's implementation rules for CAIR. FPL appealed the ALJ's decision in the 3rd Circuit Court of Appeals. FPL filed its initial brief on June 8, 2007, the FDEP filed its answer brief on July 16, 2007, and FPL will file its reply brief by August 15, 2007. FPL is also continuing its challenge to EPA's CAIR through an appeal filed in the DC Circuit Court. Initial briefs were filed on March 5, 2007 and final briefs are due September 5, 2007. There is no formal timetable for decisions on CAIR challenges, but FPL anticipates that the state and federal appellate courts will decide late this year or in the first half of 2008.

BART Project Update

Q. What updates has FPL made to its BART Project?

A. There are two updates to FPL's BART Project, which recovers costs associated with the Regional Haze Rule – Best Available Retrofit Technology (BART), now referred to as the Clean Air Visibility Rule (CAVR). The first relates to the current status of FPL's BART Project. The second relates to the determination that the FDEP's requirement for Reasonable Further Progress towards meeting the visibility goals established in Section 169A of the Clean Air Act will require additional analyses to identify generating units within FPL's system that may require additional compliance measures.

Q. Please explain the purpose of your testimony as it relates to the BART Project.

A. In Order No. PSC-05-1251-FOF-EI, the Commission found that the costs associated with complying with the Clean Air Visibility Rule (CAVR) requirements through the BART Project are eligible for recovery through the ECRC, subject to the demonstration that costs for specific activities are reasonable and prudent. To comply with the requirements of the CAVR, FPL evaluated the impacts of generating units affected by the BART requirements to reduce regional haze.

In testimony submitted to the Commission on the BART Project in Docket No. 050007-EI, and approved in Order No. PSC-05-1251-FOF-EI, FPL identified compliance options for FPL units meeting the CAVR requirements. The following issues were addressed as part of the CAVR:

- The available retrofit control options
- Existing pollution control equipment in use at the facility
- Compliance costs associated with each available control option
- The remaining useful life of the unit
- The energy and non-air impacts associated with implementing a control option
- The control options impact on visibility (as determined

through modeling)

The evaluation required FPL to have detailed visibility modeling performed to determine the impacts on Federal Class 1 areas (National Parks and Wildlife Areas). Affected units, which are determined to adversely impact Class 1 areas and meet the CAVR technology requirements, will be required to reduce emissions. FPL has now completed the required visibility modeling at a total cost of $26,203. A summary of the results of this study has been included in Exhibit RRL-7. Screening analyses performed to evaluate CAVR applicability identified that most of FPL's BART eligible units were exempt from CAVR control requirements. FPL's Turkey Point Fossil Units 1 & 2 did not pass the screening analysis and were subject to the more detailed determination required by the rule. FPL provided the CAVR determination for Particulate Matter impacts from Turkey Point Fossil Units 1 & 2 to the Florida FDEP on January 31, 2007.

Q. Please discuss FDEP's proposed Reasonable Progress rulemaking.

A. On May 25, 2007 the FDEP published a Notice of Proposed Rulemaking to adopt Rule 62-296.341, "Regional Haze – Reasonable Progress," which would implement the Reasonable Progress portion of CAVR.

The CAVR requires states to achieve "natural background" visibility in Class 1 areas by 2064. The Reasonable Progress portion of CAVR requires that a "glide path" be established for each Class 1 area, which is effectively the slope from the baseline visibility to the calculated natural background visibility that must be reached by the year 2064. Periodic points along the "glide path" then become "Reasonable Progress" goals to help assure that the natural background visibility deadline is met. States are required to submit State Implementation Plans which demonstrate that the Reasonable Progress goals will be met through achieving visibility improvements periodically along the "glide path". The FDEP held a workshop on its proposed "Reasonable Progress" rule on June 14, 2007. Materials from that workshop have been included in Exhibit RRL-8.

In support of the Reasonable Progress requirements of CAVR, the FDEP performed a screening analysis to identify potential applicable sources and made available those results. FDEP has initially identified 12 of FPL's oil-burning units as Proposed Sources subject to the Reasonable Progress Four-Factor analysis. Under the proposed rule, FPL's sources will have to undergo an evaluation against those four factors to select the appropriate control technology to reduce impacts to Class 1 areas. Units which have been identified as affected units under the Four-Factor test would be required to implement Reasonable Progress Control Technology (RPCT) under the FDEP's proposed rule.

Exhibit RRL-8 provides a detailed description of the EPA guidance on the Four-Factor test. To determine whether FPL's oil burning units will be affected by the proposed rule, FPL plans to engage a consultant to prepare the required four-factor analyses. FPL has projected a year 2007 project cost of $25,000 in O&M costs for the required analyses.

Results from the FDEP screening study for Reasonable Progress indicated that Turkey Point Fossil Units 1 & 2, Port Everglades Units 1 – 4, Riviera Units 3 & 4, Martin Units 1 & 2, and Manatee Units 1 & 2 have potential adverse impacts to Class 1 Areas within Florida. Results from the required Four-Factor analysis will be used to identify FPL fossil steam generating unit emission reduction requirements under the Reasonable Progress rule. FPL anticipates that some additional reductions in emissions of SO_2 and Particulate Matter from FPL EGUs may be required to achieve the Reasonable Progress goals for Florida Class 1 areas. Once the FDEP Reasonable Progress Rule has been finalized, FPL will be required to submit a plan to achieve the Reasonable Progress goals. FPL anticipates that a detailed engineering study to identify the least cost compliance options for Reasonable Progress will be required to develop its compliance plan which is due to the FDEP by January 31, 2008.

St. Lucie Turtle Net Project – New Activity

Q. Please briefly describe FPL's currently approved St. Lucie Turtle Net Project.

A. FPL's current St. Lucie Turtle Net Project was approved by the

Commission in Order PSC-02-1421-PAA-EI, issued on October 17, 2002. The Project included the replacement and enhancement of an existing mesh net system that was located across the intake canal at the St. Lucie Plant to prevent several species of endangered sea turtles from being drawn into the cooling water inlets on the generating units. The existing net system had become deformed to the point that it could trap turtles when large influxes of seaweed and jellyfish entered the intake canal. The net replacement and enhancement of the net system was performed in 2002.

Q. What new activities is FPL now having to undertake pursuant to the St. Lucie Turtle Net Project?

A. The antifoulant and protective coating on the existing 5-inch net located at the intake canal at the St. Lucie Plant has deteriorated, permitting marine growth to adhere to the net material. The net has also experienced UV damage. Because of this determination, the net must be replaced.

The existing deteriorated 5-inch net will be removed and sent back to the manufacturer to be re-coated. FPL will purchase and install a new 5-inch barrier net, and the re-coated original net will be stored on-site as a back-up.

Q. Why didn't FPL include costs for a net replacement in its original filing in 2002?

A. FPL's petition for recovery of the St. Lucie Turtle Net Project was filed on June 18, 2002. At the time the petition was filed, FPL had not yet selected the manufacturer of the net. When the manufacturer and net material were chosen, it was determined that a protective coating would be required in order to maintain the integrity of the net. Per the manufacturer, the protective coating had a five-year life expectancy, information that was not known at the time of the original filing.

Q. How will FPL ensure that the costs incurred for re-coating the current net and the purchase of the net are prudent and reasonable?

A. The project scope will be awarded based on competitive bid. Qualified bidders will be selected to bid on the project. The lowest bid that meets the specification requirements will be awarded the contract. Project implementation will be supervised by FPL.

Q. When does FPL expect to incur costs for the new activity associated with the St. Lucie Turtle Net Project?

A. FPL expects to purchase the new 5-inch net in the last quarter of 2007. The current net will be sent to the manufacturer for re-coating during the first quarter of 2008 at which time the new net will be installed.

Q. What is FPL's estimated cost for the new activities associated with the St. Lucie Turtle Net Project?

A. The estimated capital cost for the new 5-inch net is $288,000, to be incurred in the last quarter of 2007. The estimated O&M cost associated with re-coating the existing net is $10,000, to be incurred in the first quarter of 2008.

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. 070007-EI

August 31, 2007

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 FPL's plans for a new environmental compliance project, the Low Level Radioactive Waste (LLW) Storage 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:

- RRL-9 - 10 CFR Part 20, Subpart K – Nuclear Regulatory Commission - Waste Disposal.
- RRL-10 - South Carolina State Statutes - Title 48 - Environmental Protection and Conservation, Chapter 46 - Atlantic Interstate Low-Level Radioactive Waste Compact Implementation Act.
- RRL-11 – 10 CFR Part 50 Subpart 54 – Nuclear Regulatory Commission – Conditions of licenses.

Q. Please describe the need for the LLW Storage Project

A. FPL operates four (4) nuclear electrical generating units, St. Lucie Units 1 and 2 and Turkey Point Units 3 and 4. Each unit is operated in accordance with an operating license, which is issued by the Nuclear Regulatory Commission (NRC). The operating licenses require FPL to operate each of their nuclear units in compliance with NRC regulations, including NRC regulations regarding Standards for Protection Against Radiation at Title 10, Code of Federal Regulations, Part 20 (referred to here as "Part 20").

A byproduct of the nuclear electrical generation process is the generation of low-level radioactive waste (LLW). LLW is physically similar to the type of wastes that are produced in other industrial processes except that LLW has become contaminated with radioactive isotopes that were produced by the nuclear reactor. LLW includes radioactively contaminated rags, absorbents, used protective clothing, laboratory ware, worn out metal parts and components, spent ion exchange (resin) media and spent filter media. LLW is classified based on its radioactive content, as Class A, Class B and Class C. Class A LLW is the least radioactive and Class C LLW is the most radioactive that can be disposed of at burial facilities. 10 CFR 20.2001 provides the NRC regulatory requirements for disposing of LLW. In general, Class A, Class B or Class C LLW must be disposed of at a licensed LLW disposal facility. The NRC also allows LLW to be stored on-site at licensed power generation facilities such as FPL's St. Lucie and Turkey Point plants, but it must be stored in a manner that protects on-site workers and members of the public against harmful radiation exposure.

Since beginning operation of FPL's nuclear reactors in 1972, FPL has disposed of LLW at the Barnwell Low-Level Radioactive Waste Disposal Facility located in Barnwell County, South Carolina (Barnwell). Although FPL has two sites available to dispose of Class A LLW (one in Barnwell and the other in Clive, Utah), Barnwell is presently the only facility available to FPL (and most other nuclear utilities) for disposal of Class B and Class C LLW. After June 30, 2008 FPL will no longer be able to dispose of LLW at Barnwell because of recent changes to South Carolina environmental law. Consequently, after that date, FPL will not have a licensed disposal facility available to dispose of its Class B and Class C LLW. Disposal of Class A LLW at Clive, Utah will not be affected.

Because the only NRC-authorized method for disposal of FPL's Class B and Class C LLW is by transfer to a licensed low-level radioactive waste disposal facility (physical and radiological characteristics of Class B and Class C LLW preclude alternative disposal methods such as decay in storage, release in effluents, and release into sanitary sewerage), FPL will be required to construct on-site facilities to store its Class B and Class C LLW safely until new disposal options become available.

Q. Please describe the environmental laws or regulations requiring the project.

A. The project is necessitated by the NRC's restrictions on how LLW may be disposed of, coupled with FPL's loss of access to Barnwell due to the prohibition under South Carolina law on FPL's use of Barnwell after June 30, 2008.

Q. How does FPL intend to respond to the loss of access to the Barnwell LLW disposal site?

A. FPL plans to construct interim on-site storage facilities to safely store its Class B and Class C LLW until alternative disposal facilities become available. This will result in capital and on-going O&M expenses related to the on-site storage of Class B and Class C LLW.

Q. How long does FPL anticipate having to store LLW on-site at its nuclear plants?

A. At the present time, FPL does not know how long it will be required to store its Class B and Class C LLW on-site before an authorized LLW disposal facility becomes available. If necessary, FPL could safely store its Class B and Class C LLW on-site for the life of each plant and then disposition the LLW during decommissioning of the plant.

Q. Won't FPL's costs for the LLW Storage Project be offset by the elimination of the LLW disposal fees that FPL is currently paying to the Barnwell LLW disposal site?

A. No. In accordance with the current Generally Accepted Accounting Principles (GAAP), FPL accrues the costs for disposal of its LLW when the LLW is first generated. The accrual process is repeated each year for all waste that has been generated during that year but has not been disposed of. Accruals are based on the projected costs to dispose of the material at the time the accrual is assessed. Accrual of disposal costs on the LLW that FPL must store on-site is appropriate because FPL remains responsible for disposing of that LLW at some future date. In the absence of more specific information, FPL is currently accruing disposal costs based on the existing Barnwell disposal fees. FPL expects that the ultimate actual disposal cost will be at least as much as the accruals, because it does not appear likely at this time that a new disposal facility would charge lower fees than what is currently being charged at Barnwell.

FPL's on-site storage of its Class B and Class C LLW will result in incremental increases in capital and O&M costs associated with the construction of facilities and the management and handling of the LLW on-site, which would not be required if the LLW could be disposed of as contemplated at the time of FPL's last base rate proceeding.

FPL is seeking to recover through the ECRC only its incremental costs associated with the on-site storage of LLW.

Q. Please describe the LLW storage facilities FPL intends to build.

A. Although the final design for the interim on-site LLW storage facilities has not been determined, FPL will likely base its storage facility projects on past interim storage plans that were prepared during the 1990s when Barnwell was previously scheduled to close. Barnwell did not close and the storage facilities were never constructed. FPL is currently reviewing those project plans to determine if they remain suitable.

The interim storage facilities would be constructed within the Radiation Controlled Area (RCA) at each of FPL's nuclear plants, on a concrete or gravel pad foundation with appropriate concrete curbs. The LLW would be containerized in cylindrical liners compatible with the LLW that is being stored. The liners are placed inside engineered thick concrete outer containers that completely enclose the liners and will provide both radiation shielding and protection for the enclosed liners. The container array within the facility would be surrounded by an additional shield wall and measures would be implemented to prevent inadvertent entry to ensure radiation standards for the public and for workers are met.

Q. When does FPL expect the new on-site LLW storage facilities to become operational?

A. FPL expects that the LLW storage facility at each nuclear plant site will be available to store LLW starting in 2009. FPL is allowing approximately one year between the expected date that access to Barnwell will be lost and completion of the on-site storage facilities, in order to provide as much time as possible for a political solution to the disposal dilemma to present itself and thus avoid the need for the storage facilities.

Q. If the Barnwell facility is no longer available for LLW disposal after June 30, 2008, how will FPL store the LLW until the on-site facility becomes operational in 2009?

A. FPL currently has a limited amount of temporary on-site LLW storage capability. FPL intends to dispose its current Class B and Class C LLW inventory at Barnwell prior to June 30, 2008, thus freeing up the temporary space to store LLW after that date. Assuming that Barnwell indeed is unavailable after June 30, 2008, FPL will manage any new Class B and/or C LLW using the temporary on-site storage space until the new storage facilities become operational.

Q. What alternatives to the construction of on-site storage facilities did

FPL consider?

A. Due to the physical and radiological characteristics of the Class B and Class C LLW, the anticipated unavailability of disposal capacity for Class B and Class C LLW, and the lack of development of new LLW disposal facilities, FPL believes that safe on-site storage of its Class B and C LLW is the only current viable alternative to address the loss of disposal at Barnwell. FPL is continuing to evaluate with vendors and industry groups potential measures to minimize the impact of the loss of the Barnwell disposal site; however, at the present time FPL believes that it will be required to provide on-site storage for Class B and Class C LLW.

FPL is by no means the only utility with nuclear plants that is faced with the loss of disposal at Barnwell. In fact, if the Barnwell access restrictions are imposed as planned, after June 30, 2008 there will be more nuclear plants without access to dispose of Class B and Class C LLW than those ones that still have that access.

Q. Has FPL estimated the total cost of the proposed LLW Storage Project?

A. FPL's preliminary capital estimate to construct the interim storage facilities is approximately $12 million for both of FPL's nuclear plants.

Q. What is the 2008 projected cost for the LLW Storage Project?

A. FPL's projected 2008 capital expenditures for the LLW Storage Project are approximately $1.5 million. This projection reflects costs for project planning and scoping analyses; alternatives analyses; siting evaluations; conceptual designs; and initiation of design implementation planning for the two facilities, including pre-construction preparations, engineering, design inputs, storage container design, cost studies, plant change evaluations and licensing and permitting activities.

Q. How will FPL ensure that the construction and O&M costs incurred are prudent and reasonable?

A. FPL's construction plans are based on just-in-time delivery in order to allow ample time for a political solution to the current disposal dilemma to present itself.

FPL's construction of a LLW storage facility will initially be based on an interim storage facility with a capacity of approximately five years. Containers will be procured on an as needed or optimized basis. FPL will expand the storage facility as necessary to accommodate additional required on-site storage. By constructing the storage facility so that it can be expanded for future storage increments, FPL will minimize its capital investment costs so that in the event that Barnwell or another LLW disposal facility eventually becomes available, FPL will not have built more capacity than is needed.

FPL will construct and operate its storage facilities in accordance with industry guidelines that have been prepared by experts from within the nuclear industry. In addition, FPL will continue to evaluate and apply, as appropriate, best practices and proven waste minimization and volume reduction principles in order to minimize the scope and size of the on-site radioactive waste storage facilities.

The development and implementation of the new on-site storage facility will be subject to rigid procurement and cost controls. FPL will use competitive bidding for the procurement of materials and services associated with the LLW Storage Project to ensure a safe, reliable and least-cost approach.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

WILL GARRETT

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 070007-EI

April 2, 2007

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.

Q. What are your responsibilities in that position?

A. As legal entity Controller for Progress Energy Florida (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. I assumed the responsibilities for the Environmental Cost Recovery Clause (ECRC) True-Up filing in February 2006, from Javier Portuondo.

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 2 ½ 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, and financial planning, 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. 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 2006 through December 2006.

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 2006 through December 2006. 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 11, 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: Above Ground Storage Tank Secondary Containment (CPD, pages 2 through 6), CAIR/CAMR (CPD, pages 7 through 8), CAIR CTs (CPD, pages 9 through 12), and Underground Storage Tanks (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 this Commission.

Q. What is the final true-up amount for which PEF is requesting for the period January 2006 through December 2006?

A. PEF is requesting approval of an under-recovery amount of $14,323,932 for the calendar period ending December 31, 2006. This amount is shown on Form 42-1A, Line 1.

Q. What is the net true-up amount PEF is requesting for the January 2006 through December 2006 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 over-recovery amount of $2,446,714 reflected on Line 3 of Form 42-1A, as the adjusted net true-up amount for the January 2006 through December 2006 period. This amount is the difference between the actual under-recovery amount of $14,323,932 and the actual/estimated under-recovery of $16,770,646, as approved in Order PSC-06-0972-FOF-EI, for the period of January 2006 through December 2006.

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 2006 through December 2006 compare with PEF's estimated/actual projections as presented in previous testimony and exhibits?

A. Form 42-4A shows that total O&M project costs were $2,359,910 or 6.8% lower 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):** Project expenditures were $1,583,097 or 44.0% more than projected. This variance is primarily attributable to remediations at 6 substation sites requiring more work to be performed than was estimated. This project is further discussed in Kent D. Hedrick's testimony.

2. **Distribution System Environmental Investigation, Remediation, and Pollution Prevention (Project No. 2)**: Project expenditures were $2,617,485 or 16.1% lower than projected. This variance is primarily attributable to the inability to complete the number of remediations assumed in the 2006 work plan for the last quarter of 2006. This project is further discussed in Kent D. Hedrick's testimony.

3. **Pipeline Integrity Management Program (Project No. 3a)**: The Pipeline Integrity Management (PIM) O&M project expenditures were $412,091 or 58.2% lower than projected. The majority of the variance is being driven by delays on several projects due to contract and performance issues with third party vendors. This project is further discussed in Patty Q. West's testimony.

4. **Phase II Cooling Water Intake (Project No. 6)**: Project expenditures were $202,280 or 22.7% lower than projected. The variance is attributable to some program studies being deemed unnecessary that were originally projected to be performed. This project is further discussed in Patty Q. West's testimony.

5. **Sea Turtle – Coastal Street Lighting (Project No. 9)**: Project expenditures were $72,631 or 66.8% lower than expected. This variance is attributable to not performing the lighting research that was planned and not fully completing compliance activities in certain areas. This project is further discussed in Kent D. Hedrick's testimony.

Q. How did actual Capital recoverable expenditures for January 2006 through December 2006 compare with PEF's estimated/actual projections as presented in previous testimony and exhibits?

A. Form 42-6A shows that total Capital Investment project recoverable costs were $14,805 or 1.5% lower than projected. Actual costs and variance by individual project are provided on Form 42-6A. Following are variance explanations for those Capital projects with significant variances. Return on Capital Investment, Depreciation, and Taxes for each project for the period are provided on Form 42-8A, pages 1 through 11.

Capital Investment Project Variances:

1. **Above Ground Tank Secondary Containment (Project No. 4):** Recoverable costs were $41,947 or 11.6% lower than projected. The variance is primarily attributable to depreciation and property tax costs that were not recovered due

to two tanks that were not placed in service as projected. This project is further discussed in Patty Q. West's testimony.

2. **Sea Turtle – Coastal Street Lighting (Project No. 9):** Project expenditures were expected to be \$125,615 in 2006. However, \$0 were actually spent causing recoverable costs to be \$8,021 or 100% lower than projected. This variance is primarily attributable to ongoing research activities necessary before capital is expended. This project is further discussed in Kent D. Hedrick's testimony.

3. **CAIR/CAMR - Anclote & CAIR CTs (Project 7.1 & 7.2):** Recoverable costs were \$13,737 or 34.8% lower than projected. The variance is primarily attributable to lower actual capital expenditures and subsequent return on capital for these projects than was projected. These projects are further discussed in Patty Q. West's testimony.

4. **CAIR/CAMR – AFUDC (Project 7.3):** These capital expenditures qualify for AFUDC and therefore will not be included in the recoverable costs until the associated pollution controls are placed in service. PEF projected total capital expenditures to be \$34,650,045 in 2006. However, actual expenditures in 2006 were \$10,698,570 or 30.9% lower than projected. The variance is primarily attributable to a delay in finalization of engineering, procurement, and construction contracts. This project is further discussed in Patty Q. West's testimony.

Other Matters

Q. Did PEF include any costs relative to PEF's Modular Cooling Tower Project subject to refund including interest pending resolution of Docket No. 060162-EI in this true-up filing?

A. Yes. PEF has included $4,635,743 in O&M expenses and $516,221 in capital expenditures which the Commission approved in Order No. PSC-06-0972-FOF-EI subject to refund, including interest, pending resolution of Docket No. 060162-EI.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

KENT D. HEDRICK

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 070007-EI

April 2, 2007

Q. Please state your name and business address.

A. My name is Kent D. Hedrick. 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 Carolina as Manager, Performance Support.

Q. Please describe your educational and professional background in the environmental field.

A. I received a Bachelors of Science degree in Environmental Engineering from the University of Florida. In addition, I am a registered professional engineer in the State of 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. My testimony provides Progress Energy Florida's Actual True-Up costs associated with the following environmental compliance activities for the period January 2006 through December 2006: Substation Environmental Investigation, Remediation, and Pollution Prevention (Project No.1); Distribution System Environmental Investigation, Remediation, and Pollution Prevention (Project No.2); and Sea Turtle – Coastal Street Lighting (Project No.9).

Q. How did actual O&M and Capital expenditures for January 2006 thru December 2006 compare with PEF's estimated / actual projections as presented in previous testimony and exhibits?

A. Details regarding each of the identified projects are provided below:

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

1. **Substation Environmental Investigation, Remediation, and Pollution Prevention (Project No.1):** Project expenditures were $1,583,097 or 44.0% more than projected. This variance is primarily attributable to remediations at 6 substation sites having more work performed than was estimated. The

amount of remediation needed at substations is difficult to estimate because of the potential spread of contamination beneath the surface. The full magnitude of contamination is not known until work begins.

2. **Distribution System Environmental Investigation, Remediation, and Pollution Prevention (Project No.2):** Program expenses were $2,617,485 or 16.1% less than projected. This variance is primarily due to a lower number of sites being remediated than re-projected for the 2006 work plan. The lower number of sites remediated was caused primarily by insufficient contract resource availability during the fourth quarter of 2006. Remediation work identified in 2006 that was not completed is planned to be completed in 2007. Progress Energy Florida has also implemented changes to our work process to better optimize resource planning and scheduling. These changes include: performance metrics tied directly with environmental objectives; advanced communication with contractors starting in December 2006 regarding the 2007 work plan; and applying the operational experience gained with the high volume of environmental work during 2006.

3. **Sea Turtle – Coastal Street Lighting (Project No.9):** Project expenditures were $72,631 or 66.8% lower than expected. This variance is attributable to not performing the lighting research that was planned and not fully completing compliance activities in certain areas. Progress Energy Florida

is working with the University of Florida to conduct research on identifying the lighting characteristics that are not adverse to sea turtles. This research is intended to be used to develop new lighting technology that will add to the limited compliance options that exist presently. The research was delayed until 2007 to allow time to better develop the components of the research and to identify a potential lighting supplier to take part in the technology evaluation and development. Progress Energy Florida has identified a potential lighting partner and is currently working with the University of Florida to finalize the research plan. These research activities are expected to occur in 2007. Progress Energy Florida completed compliance activities on St. George Island in Franklin County. Additional compliance activity was planned for Mexico Beach but was not completed because of continued evaluation to determine the most prudent compliance options to implement. These compliance activities are expected to occur in 2007.

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. 070007-EI

APRIL 2, 2007

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 ("Progress Energy" 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.S. 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. What is the purpose of your testimony?

A. This testimony provides Progress Energy Florida's Actual True-Up costs associated with the following environmental compliance activities for the period January 2006 thru December 2006: the Pipeline Integrity Management Program (Project No. 3a); Phase II Cooling Water Intake (Project No. 6); Above Ground Tank Secondary Containment (Project No. 4); Clean Air Projects for Anclote (Project No. 7.1), Combustion Turbines (Project No. 7.2) and Crystal River AFUDC (Project No. 7.3).

Q. How did actual O&M expenditures for January 2006 thru December 2006 compare with PEF's estimated / actual projections as presented in previous testimony and exhibits?

A. Details regarding each of the identified projects are provided below:

O&M Project Variances:

1. **The Pipeline Integrity Management Program (Project No. 3a):** The Pipeline Integrity Management (PIM) O&M project expenditures were $412,091 or 58.2% lower than projected. The majority of the variance was the result of delays on various projects for the following reasons: (1) research and design phase took longer than anticipated, (2) inability to finalize contractual agreement with vendor, and (3) termination of agreement with design vendor that was not performing as expected. An effort will be made to include the work not completed in 2006 in the 2007 work plan.

2. **Phase II Cooling Water Intake Program (Project No. 6):** Project expenditures were $202,280 or 22.7% lower than projected. The variance is attributable to some program studies being deemed unnecessary that were originally projected to be performed. The program was originally budgeted assuming that all possible studies would be required; however, initial studies at Crystal River Units 1, 2, 3, and Suwannee plants rendered subsequent studies unnecessary. Also, contractor use of graduate students for field work at Crystal River and Suwannee resulted in lower labor costs than originally anticipated. This approach could not be determined until the bids were received.

Q. Have there been any recent developments that affect the status of the Phase II Cooling Water Intake Program?

A. Yes. On January 25, 2007, the U.S. Court of Appeals for the Second Circuit remanded several substantive portions of the Phase II rules back to the U.S. Environmental Protection Agency (EPA) for further action. In light of the Court's decision, on March 20, 2007, EPA's Assistant Administrator issued a memorandum stating that EPA expects to issue a Federal Register notice in the near future to formally suspend the rule. The memorandum further states that, in the meantime, all permits for Phase II facilities should include conditions under Section 316(b) developed based on Best Professional Judgment (BPJ). BPJ permit conditions are yet to be determined.

Q. How does the Second Circuit's decision affect Progress Energy's implementation of the Phase II Cooling Water Intake Program?

A. Because they may provide information relevant to the development of Section 316(b) conditions under EPA's "BPJ" approach and future regulations adopted in response to the Second Circuit's decision, Progress Energy is completing certain cooling water intake studies that were initiated before the Court's decision and are nearing completion. Whether and the extent to which any further action will be required depends upon discussions with DEP as well as any further action taken by EPA in response to the Second Circuit's decision.

Q. How did actual Capital recoverable costs for January 2006 thru December 2006 compare with PEF's estimated / actual projections as presented in previous testimony and exhibits?

A. Details regarding each of the identified projects are provided below:

Capital Project Variances:

1. Above Ground Tank Secondary Containment (Project No. 4): Recoverable costs were $41,947 or 11.6% lower than projected. The variance is primarily attributable to a delay in placing the Intercession City tanks in service to begin depreciation due to invoices that were in dispute. These tanks were placed in service in March 2007 with the projected in service date of November 2006. Also, the Turner project has not been placed in service due to continuing efforts to resolve material quality issues. Evaluation of these materials will continue into 2007.

2. Clean Air Projects

- **Anclote CAIR (Project No. 7.1):** Actual capital expenditures were $66,645 or 55.1% less than projected. The variance is due to a delay in the completion of studies to analyze emission control technology options and identify a cost effective approach. This work is now planned for 2007.
- **Combustion Turbine CAIR (Project No. 7.2):** Actual capital expenditures were $398,417 or 44.1% less than projected. The variance is the result of several factors, including the unavailability of work crews due to extended outage work at Bartow, material usage costs less than projected in late 2006, and the ability to reuse some fuel oil flow meters rather than purchase new meters.
- **Crystal River AFUDC (Project No. 7.3):** These capital expenditures for engineering, design, and construction of emission control facilities at

Crystal River qualify for AFUDC and therefore will not be included in the recoverable costs until the associated pollution controls are placed in service. Progress Energy projected total capital expenditures to be $34,650,045 in 2006 and anticipated the signing of the construction contract and mobilization of equipment and personnel by December 2006. Actual expenditures were $10,698,570 or 30.9% less than expected because the contract for engineering, procurement, construction and project management ("EPC contract") has not been finalized; finalization is expected in the second quarter of 2007.

Q. Have there been any other developments concerning Progress Energy's Clean Air Compliance Plan?

A. Yes. As Mr. Portuondo stated in supplemental testimony in last year's docket (No. 060007-EI), costs for major construction projects have increased over original projections due to continued price increases in commodities, equipment and labor. Progress Energy continues to monitor project costs and anticipates adjustments to the Clean Air compliance strategy in order to achieve compliance in the most cost-effective manner. Progress Energy plans to update the Commission on the status of the Company's compliance strategy after the EPC contract has been finalized.

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. 070007-EI

AUGUST 3, 2007

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 / Energy Supply Florida. In that position I have responsibility to ensure 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?

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 Pipeline Integrity Management Program, Aboveground Storage Tank Secondary Containment Program, Underground Storage Tank Program, Phase II Cooling Water Intake Program, the Integrated Air Compliance Program for the Clean Air Interstate Rule (CAIR) and Clean Air Mercury Rule (CAMR), Arsenic Groundwater Standard Project and the Modular Cooling Towers for the period January 2007 through December 2007.

Q. Please explain the variance between the Estimated/Actual project expenditures and the original projections for the Pipeline Integrity Management Program for the period January 2007 to December 2007.

A. PEF is projecting O&M expenditures to be $511,427 higher than previously projected due to work that was not completed from the 2006 work plan being carried over into 2007. This work includes general program management and oversight by PEF employees as well as contractors who assist with regulatory review, auditing and procedures management; the installation of guardrails along US 19 to protect valve mechanisms along the road right-of-way; and installation of a pipeline telemetry system that allows remote control of valves designed to isolate sections of the pipeline in the event of a leak, thereby minimizing impact to nearby environmentally sensitive areas.

PEF is projecting project capital expenditures to be $19,741 lower than originally projected and they will occur later in the year than previously projected. This variance is primarily attributable to fewer consultant hours being needed than projected and a delay in the Pipeline Control System Upgrade study which was conducted to evaluate means of upgrading the existing control system to new standards, consistent with recommendations from the National Transportation Safety Board and the Federal Department of Transportation. This study had to be completed before the capital project could proceed.

Q. Please explain the variance between the Estimated/Actual project expenditures and the original projections for the Above Ground Tank Secondary Containment Program for the period January 2007 to December 2007.

A. PEF is projecting capital expenditures to be $536,893 higher for this program than originally projected. This variance is primarily attributable to costs associated with the two Anclote storage tank projects being performed in 2007 rather than 2008 as originally planned. This change in schedule is the result of changing work priorities at the plant site. In addition, there was a need to transfer fuel oil from the Suwannee tank to allow required upgrades to be performed.

Q. Please explain the variance between the Estimated/Actual project expenditures and the original projections for the Phase II Cooling Water Intake Project for the period January 2007 to December 2007.

A. PEF is projecting O&M expenditures to be $931,199 lower than previously projected for this program. The variance is primarily attributable to regulatory matters that will result in ceasing work after the original baseline biological field studies are complete, thereby not completing the Comprehensive Demonstration Studies as originally anticipated. This change in approach is due to EPA's official suspension of the 316(b) Phase II rule in the July 9, 2007 Federal Register.

Q. Please explain the variance between the Estimated/Actual project expenditures and the original projections for the Clean Air Interstate Rule and the Clean Air Mercury Rule for the period January 2007 to December 2007?

A. Capital expenditures for Crystal River are projected to be approximately $85.3 million higher than previously projected for this program for various reasons. First, when the original projections were submitted in 2006 a comprehensive engineering, procurement and construction (EPC) contract was anticipated to be in place by the end of 2006. PEF is still in negotiations with the vendor to finalize the scope of the project and ultimately secure the contract. Due to the further refinement of the project scope, the overall projected costs of the project have increased. Second, because of the competitive nature of the construction industry, we have seen significant escalations in the cost of basic construction materials and in labor costs especially for SCR and scrubber equipment and installations. Lastly, for certain project components with long-lead time, PEF has already contracted with qualified vendors to ensure that required in service dates are met. The Crystal River project has no bearing on the ECRC recoverable balance because it is accruing AFUDC.

PEF is also projecting capital expenditures for the Combustion Turbine (CT) projects to be $351,951 higher than previously projected primarily attributable to the acceleration of work from 2008 into the 2007 work plan as well as the carry over of work not being performed in 2006 being completed in 2007.

The Anclote CAIR project is expected to be lower than the original capital expenditure projection by $51,103 primarily attributable to work that has shifted to later in the year due to a delay in the completion of studies to analyze emission control technology options.

Q. Please explain the variance between the Estimated/Actual project expenditures and the original projections for the Arsenic Groundwater Standard Project for the period January 2007 to December 2007.

A. PEF projects O&M expenditures to be $69,616 lower for this program than originally projected. PEF continues working with the FDEP to establish an arsenic compliance plan and schedule, in accordance with the FDEP Industrial Waste Water Permit that was issued on January 9, 2007. Some of this work will continue into 2008 as PEF implements the compliance plan that is just now being developed through negotiations with FDEP.

Q. Please explain the variance between the Estimated/Actual project expenditures and the original projections for the Underground Storage Tank Program for the period January 2007 to December 2007.

A. PEF is projecting capital expenditures to be $67,230 lower than originally projected. PEF had a reduction in costs for the original Bartow and Crystal River projects. The reduction is due to an adjustment to subtract removal costs of the original assets that were incorrectly included as part of the asset addition costs.

Q. **Please explain the variance between the Estimated / Actual project expenditure and the original projections for the Modular Cooling Towers for the period January 2007 and December 2007.**

A. PEF is projecting capital expenditures to be $147,916 higher than originally projected for the Modular Cooling Towers. This variance is attributable to the increased costs associated with the installation of two permanent breakers that are needed to ensure the proper functionality of the cooling towers.

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. 070007-EI

August 31, 2007

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 2008 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 for the new Clean Air Interstate Rule (CAIR) and the Clean Air Mercury Rule (CAMR) (Project 7), Arsenic Groundwater Standard Program (Project 8), Underground Storage Tank Program (Project 10), as well as the Modular Cooling Tower Program (Project 11).

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 exhibit:

1. Exhibit No. __PW-1, which provides a summary of the CAIR/CAMR project costs.

Q. What costs do you expect to incur in 2008 in connection with the Pipeline Integrity Management Program (Project 3)?

A. For 2008, we project that Progress Energy will incur a total of $337,000 in O&M and $657,500 in capital expenditures to comply with the Pipeline Integrity Management ("PIM") regulations (49 CFR Part 195). PEF is projecting to spend $237,000 in O&M on PIM Program Administration, which includes risk modeling, program auditing, and procedure development. In addition, we are projecting O&M costs of $100,000 for pipeline mapping of the GIS database to enhance the risk modeling and analysis and the continued start-up and commissioning support, operator training, project close-out and documentation of the implementation of the Pipeline Telemetry System. Capital expenditures of $657,500 are projected for the upgrade of the existing control systems and decommissioning of an obsolete system in order to improve monitoring and management capabilities of operations (e.g., flow, pressure, temperature) as well as recording operational data. This work includes the detailed design and implementation phases of the project.

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 2008 in connection with the Aboveground Storage Tank Secondary Containment Program (Project 4)?

A. Progress Energy is projecting to spend $2.8 million in capital expenditures in 2008. These costs are for the tank upgrade work at DeBary which includes: cleaning the tank, performing required inspections, installing and testing new steel double bottom, preparing and coating new bottom and pipe modifications as well as engineering of a double-walled piping project at the Crystal River power plant that is now scheduled for installation in 2009.

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 2008 in connection with the Phase II Cooling Water Intake Program (Project 6)?

A. Progress Energy is projecting to spend $147,500 in O&M expenditures in 2008. These costs are for consultant fees that may be incurred in the event the EPA and / or Florida DEP (FDEP) provides direction on proceeding with the Comprehensive Demonstration Study work. This work was recently ceased due to the suspension of the rule; however, even though the rule has been suspended, the FDEP has preliminarily indicated that additional study work will be required. This work would be associated with the cooling water intake structures at the Anclote, Bartow, Crystal River, and Suwannee sites.

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

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

Q. What costs do you expect to incur in 2008 in connection with the CAIR / CAMR Program (Project 7)?

A. PEF is projecting to spend approximately $573 million in capital expenditures on the CAIR / CAMR compliance projects at the Crystal River and Anclote generating facilities in the year 2008 as referenced in Exhibit No. __ (PW-1). Of that amount, approximately $570 million projected to be spent on Crystal River activities has no bearing on the ECRC recoverable balance because it will accrue AFUDC. A breakout of the costs includes:

- Installation of permanent Continuous Mercury Monitoring Systems on Crystal River Units 1 and 2 and temporary Continuous Mercury Monitoring Systems on Crystal River Units 4 and 5. PEF is seeking a waiver from the EPA to delay the installation of permanent monitoring equipment at facilities that are currently undergoing plant modifications to install scrubber systems, as we are doing on Units 4 and 5. EPA has already granted a waiver to at least one Southeast utility and has encouraged other utilities with scrubbers under construction to submit similar requests; therefore, Progress Energy expects to be successful in obtaining approval of the waiver. Upon the agency's authorization, temporary EPA-approved mercury monitors will be installed on these units in late 2008. The current cost estimate for the installation of permanent systems on Units 1 and 2 and temporary systems on Units 4 and 5 is approximately $2.7 million. Permanent mercury monitoring equipment will be installed on Unit 5 in early 2009 and on Unit 4 in early 2010.

- Crystal River (CAIR) Controls: PEF estimates approximately $570 million to be spent in 2008. The scope of this work includes finalization of engineering, procurement and installation of the following components of the project: Unit 4 Low NOx burners, Unit 5 SCRs, absorber towers for the FGD on Units 4 and 5, and a common chimney. Other equipment and systems that will be worked on in 2008 include: limestone handling, dewatering, gypsum removal, coal pond liners, settling ponds, make-up water system, storage tanks, piping, and electrical and control system.
- Anclote NOx Reduction: PEF is planning on spending approximately $300,000 in 2008 to investigate and conduct tests or trials of alternative NOx reduction technologies that may be capable of cost-effectively reducing NOx emissions without significantly increasing particulate matter emissions.

PEF will also incur $48,500 in O&M expenditures for the new emission monitoring systems at the combustion turbine sites. During 2007 the affected 44 combustion turbine unit stacks were retrofitted with sampling ports, fuel flow meters, analyzers and software systems to ensure compliance with the new rule. Beginning in 2008 data from these new emissions monitoring systems must be collected and submitted quarterly to the EPA. New data acquisition systems (DAS) have been installed and will be used to retrieve the required operational data from the plant DCS. This data will then be used by the DAS to estimate the total NOX and SO2 emissions (per the 40 CFR 75 regulations) generated by each individual unit. The amount, in tons, of each pollutant will be totaled and reported to the EPA in accordance with the current rule. PEF estimates that O&M costs for ongoing software vendor support of these new systems will be $48,500 in 2008.

Q. Are there any additional costs that you expect to incur in 2008 in connection with the CAIR / CAMR Program (Project 7)?

A. [redacted]

[redacted]

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

A. An initial screening of technology and fuel choice options was performed by the Company's Technical Services Department and System Planning and Operations Department when the preliminary CAIR and CAMR rules were announced in 2004. Subsequent to this initial screening and the March 2005 issuance of the final CAIR and CAMR, a more detailed series of analyses were performed and a plan was developed (the "Progress Energy Florida Integrated Clean Air Compliance Plan", submitted on March 31, 2006) to demonstrate that the selected technologies and fuel choice options were the most cost effective ways for PEF to comply with the CAIR and CAMR at Crystal River and Anclote. As discussed in the direct testimony of Samuel Waters submitted on June 1, 2007, the plan was re-evaluated in 2007 and the revised plan was submitted to the Florida Public Service Commission on June 1, 2007.

As discussed in detail in the pre-filed testimony of Thomas Cornell submitted on June 1, 2007, the primary component of PEF's contracting strategy for the Crystal River SCR and FGD projects is the utilization of a "lump sum"

Engineering, Procurement, and Construction ("EPC") structure with a joint venture consisting of the prime engineering and construction companies. For certain project components with long-lead times, PEF has contracted with other qualified vendors to ensure that required in-service dates are met. As Mr. Cornell explains, the goal of this overall strategy is to mitigate the risk of price increases to PEF and its customers, to encourage safe construction, and assure timely and cost-effective construction in order to ensure compliance with regulatory requirements.

Q. What costs do you expect to incur in 2008 in connection with the Arsenic Groundwater Standard Program (Project 8)?

A. Progress Energy is currently working with the Florida Department of Environmental Protection to comply with the terms of the renewed industrial wastewater permit for the Crystal River Energy Complex. Based upon preliminary discussions, PEF is projecting O&M expenditures of approximately $78,000. These costs are being deferred from 2007 because of delays in obtaining the renewed permit and will include groundwater study costs, results assessment, and possible remediation to address potential exceedances of the new standard.

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

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

Q. What costs do you expect to incur in 2008 in connection with the Underground Storage Tanks Program (Project 10)?

A. Progress Energy is not anticipating any costs to be incurred in 2008.

Q. What costs do you expect to incur in 2008 in connection with the Modular Cooling Tower Program (Project 11)?

A. PEF is projecting to spend approximately $3.4 million in O&M expenditures in 2008. These costs are for rental fees associated with the five-year lease agreement that began in 2006.

Q. Does this conclude your testimony?

A. Yes it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

LISA LOHSS

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 070007-EI

AUGUST 3, 2007

Q. Please state your name and business address.

A. My name is Lisa Lohss. 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 Supervisor, Distribution Component Performance.

Q. What is the scope of your duties?

A. Currently, my responsibilities include supervising Distribution component life cycle and maintenance activities for the Energy Delivery Florida organization.

Q. Please describe your educational background and professional experience.

A. I received a Bachelors of Science degree in Electrical Engineering and a Masters of Business Administration degree from University of South Florida. In addition, I hold an EIT from the Florida Board of Professional Requlation. Currently I hold the position of Supervisor, Distribution Component Performance. Prior to my current assignment, I held several engineering positions with Progress Energy Florida (PEF).

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's Distribution System Environmental Investigation, Remediation, and Pollution Prevention Programs for the period January 2007 through December 2007.

Q. Please explain the variance between the Estimated/Actual project expenditures and the original projections for the Distribution System Program for the period January 2007 to December 2007.

A. O&M project expenditures for the Distribution System Program are estimated to be $1,010,677 higher than originally projected. This increase is primarily attributable to the projected completion of a greater number of sites than were originally planned, including carryover from the 2006 workplan.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

LISA C. LOHSS

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 070007-EI

AUGUST 31, 2007

Q. Please state your name and business address,

A. My name is Lisa C. Lohss. My business address is 299 First Avenue North, St. Petersburg, Florida 33733.

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

A. I am employed by Progress Energy Florida as Supervisor, Distribution Component Performance.

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

A. Yes.

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. My testimony provides estimates of the costs that will be incurred in the year 2008 for PEF's Distribution System Investigation, Remediation and Pollution Prevention Programs (Project #2), which was previously approved in PSC Order No. PSC-02-1735-FOF-EI.

Q. What costs do you expect to incur in 2008 in connection with the Distribution System Investigation, Remediation and Pollution Prevention Program (Project #2)?

A. For 2008 we estimate total O&M expenditures of approximately $15 million for the Distribution System Investigation, Remediation and Pollution Prevention Program to perform remediation activities at approximately 1,500 sites. This estimate assumes approximately 220 3-phase transformer sites at an average cost of $14,500 per site, approximately 1,300 single-phase transformer sites at an average cost of $8,500 per site as well as program management costs.

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 selected contractors through a competitive bidding process and frequently reviews invoices for accuracy and proper documentation. In addition, the Company closely monitors remediation work, performs sample testing of inspection results, and provides quarterly reports to the FDEP on progress made in remediating distribution sites.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

DONALD R. ENNIS

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 070007-EI

August 31, 2007

Q. Please state your name and business address,

A. My name is Donald R. Ennis. 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 Carolinas as Manager, Environmental Permitting & Compliance.

Q. What is the scope of your duties?

A. Currently, my responsibilities include managing environmental permitting and compliance activities for the Energy Delivery Florida and Energy Delivery Carolinas organizations.

Q. Please describe your educational background and professional experience.

A. I received a Bachelors of Science degree in Biology from Campbell University. In addition, I am a Registered Environmental Manager with the National Registry of Environmental Professionals. Currently I hold the position of Manager, Environmental Permitting & Compliance. Prior to my current assignment, I held several environmental management positions with Progress Energy Carolina and Progress Energy Service Company, LLC.

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 2008 for Progress Energy Florida (PEF)'s Substation System Investigation, Remediation and Pollution Prevention Programs (Project #1), which was previously approved in PSC Order No. PSC-02-1735-FOF-EI, and for PEF's Sea Turtle/Street Lighting Program (Project #9) which was previously approved in PSC Order No. PSC-05-1251-FOF-EI.

Q. What costs do you expect to incur in 2008 in connection with the Substation System Investigation, Remediation and Pollution Prevention Program (Project #1)?

A. For 2008, we estimate Progress Energy Florida will incur total O&M expenditures of approximately $2.2 million in remediation costs for the Substation System Investigation, Remediation and Pollution Prevention Program. This amount includes estimated costs for remediation activities at 40 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. The Company 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 selected contractors through a competitive bidding process and reviews invoices for accuracy.

Q. What costs do you expect to incur in 2008 in connection with the Sea Turtle/Street Lighting Program (Project #9)?

A. For 2008, the projected expenses for the Sea Turtle/Street Lighting Program are $300,000. This amount includes $280,000 in O&M costs and $20,000 in capital expenditures to satisfy new criteria that local governments are applying 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. Compliance plans are currently under review and are subject to change pending regulatory agencies' determinations regarding the most cost-effective and appropriate measures for specific sites.

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, Progress Energy Florida 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

THOMAS CORNELL

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 070007-EI

JUNE 1, 2007

Q. Please state your name and business address.

A. My name is Thomas Cornell. My business address is 410 S. Wilmington Street, Raleigh, North Carolina, 27602.

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

A. I am employed by Progress Energy Carolinas ("PEC") as General Manager, Project Development and Engineering in the Plant Construction Department. My section is responsible for the development and engineering of new fossil fuel power plants and major capital modifications to existing plants for both the PEC and Progress Energy Florida ("PEF" or "Company") systems.

Q. What are your responsibilities as General Manager of Project Development and Engineering?

A I am responsible for all of the project development (siting, planning, permitting, scoping, etc.) and engineering related activities (design, major procurements, contracting strategies, construction support, start-up and commissioning support, etc.) associated with new generation fossil fuel projects and air quality control projects for both PEC and PEF, including the Flue Gas Desulfurization ("FGD" or "scrubber"), Low NOx Burners (LNBs), Selective Catalytic Reduction ("SCR") and other pollution control projects included in PEF's Integrated Clean Air Compliance Plan.

Q. Please describe your educational and background.

A. I received a B.S. degree in Mechanical Engineering from Cornell University and an M.S. degree in Engineering Management from Florida Institute of Technology. I have over eighteen years experience in the power industry related to engineering, manufacturing, procurement, construction, start-up and commissioning, and project management associated with combustion turbines, steam turbines, combined cycles, coal gasification cycles, nuclear steam cycles, and air quality control systems (LNB systems, SCR systems, CO systems, and FGD systems). In addition to Progress Energy I have been employed by Siemens Westinghouse, General Electric, and Entergy Wholesale Operations.

Q. Are you sponsoring any exhibits with your testimony?

A. Yes. I am sponsoring the following exhibits:

- Exhibit No. __ (TC-1), which is an organization chart showing the Company's internal management structure for the projects being implemented under the Integrated Clean Air Compliance Plan;
- Exhibit No. __ (TC-2), which is an organization chart showing the organizational structure the Company has established for management and oversight of contractors involved in the Crystal River projects included in the compliance plan;

- Composite Exhibit No. __(TC-3), which is a Letter of Intent (LOI) to enter an Engineering, Procurement and Construction ("EPC") contract with Environmental Projects Crystal River ("EPCR"), along with four amendments to the LOI;
- Composite Exhibit No. __(TC-4), which is a contract with The Babcock and Wilcox Company ("B&W"), as well as associated work authorizations, for design, engineering, equipment, and other work associated with the Crystal River SCR and FGD projects;
- Composite Exhibit No. __ (TC-5), which is a contract with Worley Parsons (and associated work authorizations) for preliminary design, engineering and other work associated with the Crystal River SCR and FGD projects;
- Exhibit No. __ (TC-6), which is a contract with The Stebbins Engineering and Manufacturing Company ("Stebbins") for design, fabrication, construction, and assembly of two FGD Absorber Towers for Crystal River Units 4 and 5;
- Exhibit No. __ (TC-7), which is a contract with CERAM Environmental, Inc. ("CERAM") for the design, fabrication, delivery, and testing of the SCR catalyst for the Crystal River Units 4 and 5 SCR projects; and
- Exhibit No. __ (TC-8), which is a contract with Commonwealth Dynamics, Inc. ("CDI"), for the design, fabrication, and construction of a Flue Gas Chimney as part of the Crystal River Units 4 and 5 scrubber projects.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to summarize the status of PEF's implementation of its integrated plan for complying with the Clean Air Interstate Rule ("CAIR"), Clean Air

Mercury Rule ("CAMR") and Clean Air Visibility Rule ("CAVR"). I will describe the organization PEF has established for project management and oversight. I will explain the process the Company is following to ensure that costs incurred for the various projects included in the integrated compliance plan are reasonable and prudent and that the risks of potential cost increases to PEF and its customers are minimized. I also will summarize the contracts that PEF has executed and a key contract it is currently negotiating to implement the project in a cost-effective and timely manner.

<u>PEF's Integrated Clean Air Compliance Plan</u>

Q. What has been your involvement in the Integrated Clean Air Compliance Plan that PEF submitted to the Commission on March 31, 2006?

A. I became involved with the integrated compliance plan in April, 2006. I am one of the primary persons involved in developing and implementing the Company's contracting strategy. Among other things, I have worked with Company personnel, potential vendors, and third-party estimators to further define the scope and potential costs of the various projects included in the plan.

Q. Are you familiar with PEF's Integrated Clean Air Compliance Plan submitted to the Commission last year?

A. Yes. Although I became involved in the project after PEF submitted the plan to the Commission last year, I am thoroughly familiar with the 2006 plan. It has served as the starting point for my work in further defining the scope of the various projects.

Q. How does PEF's current compliance plan compare to the one submitted to the Commission on March 31, 2006?

A. Like the original plan submitted in 2006, the current plan still calls for:

- Installation of FGD and SCRs (as well as LNBs) on Crystal River Units 4 and 5;
- Burning compliance coal at Crystal River Units 1 and 2 [redacted].
- Installation of LNBs and separated overfire air ("LNB/SOFA") controls on Anclote Units 1 and 2 in [redacted] and [redacted] respectively; and
- For CAMR compliance, installation of a powder activated carbon ("PAC") injection system on Crystal River Unit 2 [redacted].

There are only limited changes to the plan submitted last year. First, the scheduled in-service date for the Crystal River Unit 4 FGD system [redacted], and the in-service date for the Unit 4 SCR project has been moved [redacted]. In addition, as discussed in Mr. Waters' testimony, PEF has decided not to burn 40 percent natural gas in the Anclote Units as contemplated in the plan presented in 2006.

Q. Why have the schedules for the Crystal River Unit 4 FGD and SCR projects changed?

A. We changed the Unit 4 FGD and SCR project schedules to (1) optimize the most efficient construction schedule, which will mitigate cost escalation risks, and (2) account for constrained labor and equipment availability in the [redacted] time frame. The original schedule called for as much work as possible to be done on Crystal River Unit 4, including installation of the SCR, during an outage planned for the [redacted] so that the work necessary for the tie in of the FGD in [redacted], would be minimal. This was necessary to avoid impacting an outage already planned for the [redacted] on PEF's Crystal River Unit 3. Due at least in part to the increased demand for pollution control projects prompted by the adoption of CAIR, lead-times for critical SCR equipment have increased. To compensate for the increased lead-times, the Company decided in late 2006 to reschedule the Unit 4 SCR project for an outage in the [redacted]. As preliminary engineering and planning progressed, however, it became evident that there was not adequate time to permit, design, engineer, procure, and construct the Unit 4 SCR system by the [redacted]. PEF considered various options and chose to combine the SCR and FGD work into one outage in the [redacted]. Given the scope and amount of work to be performed at the Crystal River Energy Complex in the [redacted], we determined that it would be reasonable and prudent to combine the CR4 SCR and FGD project into that outage.

Q. Have the schedules for the Crystal River Unit 5 FGD and SCR projects changed?

A. No. As in the plan submitted last year, the Unit 5 FGD and SCR projects are scheduled to be placed in-service in [redacted].

Q. Have the estimated costs of the Integrated Clean Air Compliance Plan increased since last year's submittal?

A. Yes. Based on current estimates, over all construction costs projected for the plan have increased 70 percent over the estimates provided last year.

Q. Why have the estimated costs increased?

A. There are several reasons for the increase. One of the impacts of the final CAIR rule was to create significant industry demand for major retrofit construction projects to engineer, procure, and install the necessary air pollution control equipment. This occurred at a time when there was already significant construction activity due, in part, to an improving economy. The situation was exacerbated by even more construction demand in the aftermath of Hurricane Katrina and by the rising demand for steel, concrete and other commodities in countries such as China and India. As a result of these world-wide market conditions, PEF and the industry have seen significant increases in costs for major construction projects, especially for SCR and scrubber equipment and installations. The increases were primarily driven by significant escalation in the cost of basic construction materials and in labor costs.

Project Management and Oversight

Q. How is the Company ensuring proper management and oversight of the projects included in the Integrated Clean Air Compliance Plan?

A. In January of 2006 the Plant Construction Department was restructured to better align the management of the future fossil fuel new generation projects as well as the air quality control system projects (including, for example, North Carolina Clean Smokestacks, CAIR, CAMR, and CAVR projects). As shown in Exhibit No. __(TC-1) the Plant Construction Department was structured with three primary project supporting sections; (1) Project Development and Engineering, (2) Project Management and Construction, and (3) Business Management and Compliance (Project Controls). From these sections dedicated project teams were put in place for all of the major (> $100 million) capital projects with a project manager, development engineer(s), a project engineer, discipline engineer(s), construction management, Environmental Health and Safety ("EHS") personnel, QA/QC engineer(s), start-up and commissioning engineer(s), project controls and accounting personnel, and operations integration personnel. The specific team for the Crystal River Unit 4 and 5 projects is as shown in Exhibit No.__(TC-2). The Project Manager will oversee all of the internal team members as well as all of the external contractors working on the project.

Status of Crystal River Projects

Q. How has the Company gone about securing contracts for the Crystal River work?

A. The company's process for selecting any contract typically involves multiple steps beginning with review and selection of qualified bidders, development of a detailed request for proposal ("RFP"), review and evaluation of bid responses, and the final stage of negotiation on technical and commercial terms. The particular type of contract pursued, the process used, and the details of the commercial terms vary depending on the scope of work and market conditions at and during the time over which the contract will be executed. The goal of the company in this process is to select highly qualified bidders and utilize the type of contract and commercial terms that will allow the work to be completed on time, within schedule constraints and limit the risk to the company and its customers of potential cost increases due to market conditions.

In light of the dramatic increases in costs for pollution control equipment and installation that I previously discussed, one of the primary goals of the Company in negotiating with contractors is to minimize the risk of future cost increases to PEF and its customers and to allocate risk where it can be best managed. For Crystal River, the primary component of PEF's contracting strategy is the utilization of an Engineering, Procurement, and Construction ("EPC") structure with the prime engineering (Burns & McDonnell, Inc. and Utility Engineering Corporation) and construction (Zachry Construction Corporation) companies aligned in a joint venture structure. The joint venture companies will be joint and several in fulfilling all obligations associated with the EPC Contract.

In negotiating the EPC contract, the Company is using an "open book" approach with eventual conversion to lump sum once the detailed project scope is finalized, rather than an open-ended "time-and-materials" contract structure. Under this approach, the scope and costs for project components are being identified in detail to provide greater certainty in the final cost of the Crystal River projects and to appropriately balance the risk of costs increases between PEF and the EPC contractor.

For certain project components with long-lead times, the Company has already contracted with qualified vendors to ensure that required in-service dates are met. The goal of this overall strategy is to mitigate the risk of price increases to PEF and its customers, to encourage safe construction, and assure timely and cost-effective construction in order to ensure compliance with regulatory requirements.

Q. What is the status of the EPC contract for the Crystal River Projects?

A. PEF has executed a Letter of Intent ("LOI") to sign an EPC contract with Environmental Partners Crystal River ("EPCR"), which is a joint venture between Zachry Construction

Corporation ("Zachry"), Utility Engineering Corporation, which is a subsidiary of Zachry, and Burns & McDonnell, Inc.

Q. How did PEF decide to negotiate with EPCR for the EPC contract?

A. In May 2006, PEF issued an RFP to Zachry, Fluor Enterprises, Shaw Stone & Webster, Inc., and Bechtel Power Corporation, all of whom had been identified as qualified vendors who were interested in performing the extensive work required to implement PEF's CAIR Compliance Plan projects at Crystal River. The RFP required submittal of an open book, detailed cost breakdown structure aligned with an eventual conversion to a lump sum type format. The cost breakdowns were required to be submitted in a specific format so that the Company could review various components of the fixed price type structure, among other things, scope of supply, quantities, subcontracts, equipment, escalation rates, contingencies, fees, general and administrative ("G&A") costs, and indirect costs. The Company communicated with all four qualified vendors, but EPCR was the only bidder willing to provide a competitive open book type approach bid with the ability to convert to a lump sum, fixed price type format. Two of the bidders declined to provide a competitive bid and were only interested in working on an exclusive basis with the Company and one bidder determined that it did not have an available project team to support the project.

Q. What is the status of the negotiations with EPCR?

A. In November 2006, following a detailed review of the EPCR proposal and an evaluation of the capabilities of the EPCR partners, the parties executed a LOI to provide time for

PEF to further define the scope of the project so that detailed pricing could be developed and evaluated.

Due to the extensive nature of the work involved, the LOI has been extended and revised to provide a framework for the ongoing negotiations as well as the basis for preliminary engineering, procurement and initial site-related activities necessary to progress toward meeting the in-service dates of the various projects. As amended, the LOI limits PEF's cost exposure to a not-to-exceed cap of approximately [redacted] for costs associated with the preliminary work. Copies of the LOI and amendments are provided as Exhibit No. __(TL-3) to my testimony.

The amended LOI provides an expiration date of June 30, 2007. PEF and EPCR are in the final stages of negotiation and both parties anticipate having a contract in place by June 30, 2007.

Q. What steps have PEF taken to ensure the proposed price quoted by EPCR is reasonable and fair?

As part of the detail review process, Progress Energy personnel and outside engineers and estimators have reviewed the scope and associated quantities of commodities, equipment, subcontracts, labor and other project indirect components submitted by EPCR, as well as the prices quoted by EPCR. In addition, an assessment of project scope has enabled PEF to evaluate potential cost reduction opportunities, such as further engineering and scope optimization and removing project components from the scope of the EPC contract if they can be more cost-effectively performed by PEF or other contractors. The final contract will include the benefits of this work.

Q. What responsibilities will the individual members of the EPCR joint venture have under the EPC contract?

A. The joint venture companies, each of whom is jointly and severally liable in the EPC Contract, have an ownership structure as follows:

- Zachry Construction Corporation 50%
- Burns & McDonnell, Inc. 45%
- Utility Engineering Corporation 5%

Under this joint venture arrangement Burns & McDonnell, Inc. will have ultimate responsibility for all balance of plant engineering, specification of engineered equipment, and technical support during construction and start-up and commissioning. Utility Engineering Corporation will support Burns and McDonnell engineering efforts in specialized areas, namely detailed civil design and material handling. Zachry Construction Corporation will perform or manage all aspects of procurement and construction of the project and shall furnish all required management, labor, tools, equipment, material, parts, transportation, and supervision necessary to complete the project. The joint venture also has the responsibility to act as the owner's agent to administer all of the Company's purchased equipment (B&W equipment, stack, absorbers, induced draft ("ID") fans, catalyst, field erected tanks, precipitators, etc.).

Q. What are the anticipated costs for the EPC contract?

A. PEF has been working with EPCR to refine scope and negotiate all aspects of the final contract. EPCR has provided price estimates at various intervals during the negotiations. To date, Zachry provided indicative, lump sum pricing of approximately [redacted].

The final price contract value will be determined at the completion of the contract negotiations.

Q. You mentioned that preliminary engineering, design and procurement work being done by B&W and WorleyParsons under existing agreements. Please explain how those agreements came about.

A. In June 2002, the North Carolina General Assembly enacted the North Carolina Clean Smokestacks Act, which required significant reductions in sulfur dioxide ("SO_2") and nitrogen oxide ("NOx") emissions from power plants in North Carolina, including units operated by PEF's sister utility, PEC. In response to the new statute, PEC undertook a two-phased evaluation process to select contractors to provide engineering, equipment and construction for multiple FGD and SCR systems to be installed on PEC units. PEC first developed a short list of firms based on technical evaluations of statement of qualifications submitted by bidders. PEC then conducted interviews, site visits, and evaluations of additional information provided by the short-listed vendors to evaluate their experience, qualifications and project management programs. Based on this evaluation process, B&W was selected to design and supply the major equipment for the FGD system and Worley Parsons (f/k/a Parsons Energy & Chemicals Group, Inc.) was selected as the Architect/Engineer. PEC entered into a contract with WorleyParsons in November 2002 and with B&W effective March 2003.

After it became clear that CAIR would require installation of FGD and SCR controls on the Crystal River units, PEF became a party to the B&W and WorleyParsons contracts so that preliminary design and engineering work could begin expeditiously. Because both companies were involved in the PEC projects and that both have previously performed work on the Crystal River units, they were qualified and able to begin preliminary engineering and design within a relatively short time-frame.

Q. Please briefly describe the scope of the B&W contract with regard to work on the Crystal River projects.

A. PEF has selected B&W to design and provide the major equipment for the Crystal River FGD, LNB, and SCR projects in order to take advantage of the continuity and efficiencies available as a result of Progress Energy's prior experience with B&W on the PEC projects. The total estimated cost of B&W's work under the contract, which is provided as Exhibit No. __ (TC-4) to my testimony, is approximately [redacted]. The current contract provides for incremental release of work to B&W through specific work authorizations. However, this contract is being revised to be better aligned with the project with fixed pricing, schedule delivery guarantees, and performance guarantees. The final price contract value will be determined at the completion of the contract negotiations. To date, PEF has issued B&W authorizations totaling approximately [redacted]. The work authorized to date includes:

- Project planning, scheduling and engineering associated with the FGD, LNB, and SCR work;
- Process design, general arrangement and equipment layout drawings, design specifications, material selections, vendor supply evaluations, water balances, limestone analyses and purchasing critical long-lead-time equipment;

- Procurement of long-lead-time equipment, common equipment, and other materials required in preliminary stages, such as ball mills, absorber recycle pumps, sonic horns, absorber oxidation air lances;
- Material and labor costs for the Unit 4 SCR Expansion Joints; and
- Design and manufacture of LNBs

Q. Please briefly describe the scope of PEF's contract with WorleyParsons.

A. PEF has contracted with WorleyParsons to provide preliminary work for the Crystal River project. A copy of the contract is provided as Exhibit No. __ (TC-5) to my testimony. The WorleyParsons contract provides for incremental release of work through specific work authorizations. To date, PEF has issued WorleyParsons authorizations totaling [redacted]. Work performed under those authorizations includes:

- Services for Units 4 and 5 steel support, including detailed engineering and design;
- Preliminary engineering services for SCR steel design;
- Completion of sulfur trioxide ("SO_3") mitigation study;
- Preliminary engineering of the limestone and gypsum handling system;
- Completion of a pressure transient study;
- Establish costs and schedules to implement Continuous Mercury Monitoring Systems and integrate with the existing CEMS;
- Bid evaluation and procurement for ID fans and motors; and
- Assistance in EPC technical evaluation, scope finalization, review of EPC engineering documents, schedule and vendor documents.

Once the EPC contract is finalized, the WorleyParsons work will be shifted to EPCR and/or phased out.

Q. You mentioned that PEF has entered or is in the process of entering into contracts for certain distinct project components. Please identify those contracts.

A. In order to ensure that in-service dates are met, PEF has entered into the following contracts for specific project components that typically have long manufacturing and/or construction lead-times:

- The Stebbins Engineering and Manufacturing Company ("Stebbins") has been contracted to design, fabricate, construct, and assemble two FGD Absorber Towers for the Crystal River Units 4 and 5 scrubber projects;
- CERAM Environmental, Inc. ("CERAM") has been contracted for the design, fabrication, delivery, and testing of the SCR catalyst for the Crystal River Units 4 and 5 SCR projects; and
- Commonwealth Dynamics, Inc. ("CDI"), for the design, fabrication, and construction of a Flue Gas Chimney as part of the Crystal River Units 4 and 5 scrubber projects.

Q. What is an FGD Absorber Tower?

A. The absorber tower is a major component of any wet FGD system. The absorber tower is essentially a large vessel in which combustion product gases or "flue gases" containing SO_2 are mixed with a liquid limestone slurry solution. This produces a chemical reaction that reduces SO_2 from the flue gas stream. Due to the corrosive nature of the limestone slurry solution, the selection of the materials for the absorber tower and the tower internals is critical. There are three basic material options—metallic alloy material, carbon steel material with a rubber or flaked glass lining, or a concrete and tile design. Technical studies performed by WorleyParsons for PEC as part of PEC's scrubber installation program determined that a concrete and tile design is the best alternative due to its ability to withstand high chloride concentrations and the high uncertainty associated with future pricing of alloy materials used in other design alternatives. Evaluations performed by WorleyParsons and PEC also determined that a concrete and tile design was price competitive with alloy towers.

Q. How did PEF select Stebbins for the FGD Absorber Tower contract?

A. Stebbins is the only company in the United States that designs and erects concrete and tile absorber towers. B&W provides alloy absorber towers. As part of the PEC scrubber program, Progress Energy obtained cost estimates and performed a technical evaluation of both approaches and concluded that the concrete and tile tower design was price competitive with an alloy tower and would be superior to the alloy design in its ability to withstand the corrosive nature of the limestone slurry that would be in the tower. Due to the potential use of brackish water, the ability of the tower design to withstand the corrosive nature of the limestone slurry was even more important for Crystal River.

For Crystal River, the actual costs for PEC's Roxboro Unit 2 absorber tower were used to negotiate a price with Stebbins. The negotiated price was consistent with the actual Roxboro 2 cost with adjustments for quantity differences and material and labor escalation.

Stebbins has performed well and met schedules on the PEC projects. By using Stebbins at Crystal River, PEF will have the benefit of engineering efficiencies gained from PEC's experience. Further, PEF obtained a place in the tight production queue for such equipment. Based on these considerations, PEF selected Stebbins to perform this work and executed a contract with Stebbins on January 24, 2007. A copy of the contract is provided as Exhibit No. __ (TC-6) to my testimony.

Q. What is the cost of the Stebbins FGD Absorber Tower contract?

A. In order to mitigate the risk of cost increases, the Stebbins contract includes a fixed price of [redacted], subject to increase only by written change orders authorized by PEF. This price reflects fleet discount pricing due to the fact that multiple towers are being purchased for absorber towers to be installed at Crystal River Units 4 and 5 and other towers purchased by PEC. Taking into account the differences between the various units, the prices for the Crystal River towers are consistent with the prices for the PEC towers, which, as I previously indicated, were initially established by competitive bidding

Q. You mentioned that PEF has entered into a contract with CERAM for the manufacture of SCR catalysts. What is an SCR catalyst?

A. The catalyst is the key component of an SCR system. The SCR process begins with injection of ammonia into the flue gas stream. The flue gas then enters the catalyst chamber where the ammonia is absorbed onto the catalyst surface. Ammonia on the catalyst surface reacts with NOx in the presence of oxygen to form water and elemental nitrogen. As a result of this chemical reaction, NOx is removed from the flue gas stream.

Q. How did PEF select CERAM for the SCR Catalyst contract?

A. On behalf of PEF, B&W reviewed the market and identified two potential vendors for the SCR Catalyst: CERAM and Cormetech, Inc. Both CERAM and Cormetech submitted bids for the design and manufacture of the SCR Catalyst. PEF determined that CERAM's bid provided the best offer, in terms of lowest cost and more favorable terms and conditions. PEF selected CERAM to negotiate a final agreement and executed a contract with CERAM on December 27, 2006. The contract provides for a fixed price of approximately [redacted], with payment retention provisions tied to specific milestones. A copy of the contract is provided as Exhibit No. __ (TC-7) to my testimony.

Q You mentioned that PEF has entered a contract with CDI for the manufacture of a new Flue Gas Chimney as part of the Crystal River FGD projects. Why is a new Flue Gas Chimney required?

A. The flue gas chimney or "stack" is the structure through which the flue gas is exhausted. Installation of the wet FGD systems on the Crystal River units will increase the amount of moisture in the flue gas, which can cause corrosion of the Flue Gas Chimney. Because the existing Flue Gas Chimneys for Units 4 and 5 are not designed for these conditions, a new Flue Gas Chimney will be installed with FRP (fiberglass) liners, one for each unit. The new, dual Flue Gas Chimney will replace the two existing stacks currently used for Units 4 and 5.

Q. How did PEF select CDI for the Flue Gas Chimney contract?

A. As with the Absorber Towers, PEF made its selection of CDI to design and erect the Crystal River chimney on the basis of both competitive pricing and technical and commercial evaluations performed as part of the PEC scrubber program. Early in the PEC program, the Company reviewed the marketplace and found only three companies with the capability to design and manufacture Flue Gas chimneys for scrubber projects: CDI, Pullman Power, and Hamon-Custodis. PEC obtained proposals from those companies and after evaluation of appropriate competitive factors, including safety programs, cost, design, resource availability, and ability to meet required schedules, awarded the PEC chimney work to CDI.

For Crystal River. PEF negotiated a price with CDI based on the PEC competitive prices adjusted for quantity differences and material, equipment, and labor escalation. At the time the Crystal River contract was negotiated, the market for chimney work had changed significantly since the PEC projects were bid. As more utilities initiated scrubber additions, the demand for the limited resources of three chimney erectors increased significantly along with corresponding escalation in material, equipment, and labor costs. During negotiations, CDI agreed to hold its profit, overhead, and contingency to those percentages that had won the competitive bids at PEC and adjust labor and material prices based on current market conditions. Negotiating a contract with CDI on this basis provided PEF an opportunity to "lock-in" the chimney work for Crystal River on a reasonable price basis and on a schedule that supported the needs of the Crystal River project. At the conclusion of the negotiations, PEF executed a contract for the Crystal River chimney with CDI on January 26, 2007. The CDI contract provides for a lump sum, fixed price of [redacted], subject to increase only by written change orders authorized by PEF. A copy of the contract is provided as Exhibit No. __ (TC-8) to my testimony.

Status of Anclote Projects

Q. What is the status of the Anclote LNB/SOFA projects?

A. Our Anclote LNB/SOFA project continues to be a primary outstanding issue. Information provided by vendors tells us that while LNB/SOFA installations are effective at reducing NOx emissions, they also have the potential to increase particulate emissions. PEF is engaged in a current study to determine the magnitude of potential increases. For example, it is likely that LNB/SOFA at the Anclote Unites would require additional particulate controls, such as ESP's. If it is determined that additional particulate controls are needed, PEF will evaluate the most cost-effective control options and whether the cost of such additional controls would increase the cost per ton of NOx removal above the expected cost of NOx allowances.

Conclusion

Q. Has PEF acted prudently in implementing its Integrated Clean Air Compliance Plan?

A. Yes. PEF has established a detailed organizational structure to ensure prudent decision-making and project oversight as implementation of the Integrated Clean Air Compliance Plan proceeds. In addition to ensuring timely and safe implementation of the various construction projects, this organizational structure will enable the

Company to monitor costs against detailed project scopes to ensure that PEF receives what it contracted for and that any scope changes are properly evaluated and documented. The Company also has pursued an aggressive scoping assessment and contracting strategy that has enabled PEF to negotiate contract terms that will mitigate the risk of price increases to the Company and its customers without jeopardizing construction time-frames necessary to ensure compliance with the new regulatory requirements. As part of the process, internal PEF personnel and third party evaluators have reviewed and benchmarked projected costs to ensure they are reasonable in light of costs being incurred for similar projects through the country. For these reasons, entering into the agreements that I have discussed represents reasonable and prudent action by the Company to ensure compliance with CAIR, CAMR and CAVR.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

SUPPLMENTAL DIRECT TESTIMONY OF

THOMAS CORNELL

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 070007-EI

OCTOBER 17, 2007

Q. Please state your name and business address.

A. My name is Thomas Cornell. My business address is 410 S. Wilmington Street, Raleigh, North Carolina, 27602.

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

A. I am employed by Progress Energy Carolinas as General Manager, Project Development and Engineering in the Plant Construction Department.

Q. Have you previously submitted testimony in this docket?

A. Yes, I have.

Q. Have your responsibilities change is you previously submitted testimony in this docket?

A No

Q. What is the purpose of your supplemental testimony?

A. The purpose of my supplemental testimony is to present the final Engineering Procurement and Construction ("EPC") contract for the projects being constructed at Crystal River Unit 4 and 5 as part of Progress Energy Florida's ("PEF's") integrated plan for complying with the Clean Air Interstate Rule ("CAIR"), Clean Air Mercury Rule ("CAMR"), Clean Air Visibility Rule ("CAVR") and related regulatory requirements. At the time I submitted testimony in June of this year, the contract was in the final stages of negotiation. The parties executed the contract on October 2, 2007. My testimony also will describe some changes to the construction schedule for the Crystal River projects.

Q. Are you sponsoring any exhibits with your testimony?

I am sponsoring Exhibit No. __ (TC-9), which is the executed EPC contract with Environmental Projects Crystal River ("EPCR"), which is a joint venture of Zachry Construction Corporation, Utility Engineering Corporation, and Burns & McDonnell, Inc. Because the contract contains confidential proprietary business information, it is being submitted along with a Request for Confidential Classification.

Q. How does the final cost of the EPC contract compare to the estimate provided in your June 1 direct testimony?

A. The final costs of the EPC contract is approximately $[redacted] million, compared to the $[redacted] million estimate provided in my prior testimony. As discussed in my prior testimony, the Company's negotiations with EPCR included a detailed assessment of project scope to evaluate potential cost reduction opportunities, such as further engineering and scope optimization and removing project components from the scope of the EPC contract. As a result of that effort, certain project components have been removed from the scope of the final EPC contract and may be performed by PEF or other contractors. In addition, other modifications and refinements were made to finalize cost elements of the remaining scope items. Based on analyses performed by Progress Energy personnel and outside engineers and estimators, the total cost elements included in the final ECP contract are reasonable in light of costs being experience for similar projects across the country.

Q. Have the total expected costs for PEF's Integrated Clean Air Compliance Plan changed?

A: At this time, the Company is continuing to estimate the total construction costs for the CAIR/CAMR/CAVR compliance projects at approximately $1.26 billion, as indicated in Figure 4 of the Integrated Clean Air Compliance Plan provided as Exhibit No. __ (SSW-1) to Mr. Water's direct testimony. Although the Company expects to achieve some cost savings as a result of the EPC scoping work discussed above, we do not anticipate any material change in the original overall estimate for CAIR/CAMR/CAVR compliance activities.

Q. Please explain the schedule changes that you previously referenced?

A: Subsequent to the June 2007 filing with the Commission, the Company renegotiated the completed construction and in-service date for the Crystal River Unit 5 Flue Gas Desulphurization ("FGD") project from Spring of 2009 to the Fall of 2009. The schedule change was a result of discussions raised by EPCR related to the high peak manpower requirements needed to meet the original schedule for Unit 5 FGD project. The Company reviewed the detail schedule and peak manpower requirements with EPCR. Given the tight market conditions for craft labor in the current and foreseeable future – particularly in the Southeastern US – the Company determined that it was best to minimize the risk to the current outage schedule and examine other options to ensure project completion while maintaining generation capacity. The Company reviewed a number of options and determined that an additional outage presented the least overall risk to the Company to ensure available manpower for the project and presented the least risk to resource planning needs for the Company's customers. This schedule change is not anticipated to have a material impact on the overall cost of the capital project.

Q. Does this conclude your supplemental testimony?

A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

SAMUEL WATERS

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 070007-EI

JUNE 1, 2007

Q. Please state your name, employer, and business address.

A. My name is Samuel S. Waters and I am employed by Progress Energy Carolinas (PEC). My business address is 410 S. Wilmington Street, Raleigh, North Carolina, 27602.

Q. Please tell us your position with PEC and describe your duties and responsibilities in that position.

A. I am Director of System Planning and Regulatory Performance for Progress Energy Carolinas (PEC). I am responsible for directing the resource and transmission planning processes for PEC and continue to be responsible for environmental planning for both PEC and Progress Energy Florida (PEF). Our resource planning process is an integrated approach to finding the most cost-effective alternatives to meet each company's obligation to serve, in terms of long-term price and reliability. We examine both supply-side and demand-side resources available and potentially available to the Company over its planning horizon, relative to the Company's load forecasts. In my capacity as Director of System Planning, I oversaw the completion of the PEF's most recent TYSP document filed in April 2007.

Q. Please summarize your educational background and employment experience.

A. I graduated from Duke University with a Bachelor of Science degree in Engineering in 1974. From 1974 to 1985, I was employed by the Advanced Systems Technology Division of the Westinghouse Electric Corporation as a consultant in the areas of transmission planning and power system analysis. While employed by Westinghouse, I earned a Masters Degree in Electrical Engineering from Carnegie-Mellon University.

I joined the System Planning department of Florida Power & Light Company (FPL) in 1985, working in the generation planning area. I held a number of positions within FPL, assuming the position of Director, Resource Planning in 2000.

I joined Progress Energy in January of 2004. I became Director, System Resource Planning for both PEC and PEF in 2006. I assumed my current position in April of this year. I am a registered Professional Engineer in the states of Pennsylvania and Florida, and a Senior Member of the Institute of Electrical and Electronics Engineers, Inc. (IEEE).

Q. Have you previously testified before this Commission?

A. Yes. I have testified in several dockets related to resource planning and the need for power.

Q. What is the purpose of your testimony?

A. In Order No. PSC-05-0998-PAA-EI, the Commission found that costs for complying with the new Clean Air Interstate Rule (CAIR) and Clean Air Mercury Rule (CAMR) are eligible for recovery through the ECRC subject to PEF's demonstration that costs for specific projects are reasonable and prudent as they are submitted for recovery in the annual ECRC proceedings. In last year's annual ECRC proceeding, Docket No. 060007-EI, PEF submitted the report entitled "Progress Energy Florida – Integrated Clean Air Compliance Plan", dated March 31, 2006, along with supporting testimony. The purpose of my testimony is to present an updated version of that report and discuss the results of new analyses that are based on revisions to the alternative plans and changes cost assumptions.

Q. Are you sponsoring any exhibits with your testimony?

A. Yes. I am sponsoring Exhibit No. __ (SSW-1), a report entitled "Progress Energy Florida - Integrated Clean Air Compliance Plan", dated June 1, 2007, which I will refer to as the "Updated Clean Air Report" or "Updated Report." The Updated Clean Air Report, which is being submitted separately with my pre-filed testimony, details the Company's Integrated Clean Air Compliance Plan and supporting analyses. I am also sponsoring Exhibit No. __ (SSW-2), "Summary of Alternative Environmental Compliance Plans – 2006", Exhibit No. __ (SSW-3), "Summary of Alternative Environmental Compliance Plans – Current", Exhibit No. __ (SSW-4), "Comparison of

Cumulative Present Value of Revenue Requirements" and Exhibit No. __, (SSW-5), Impact of Allowance Price Uncertainty".

Q. Would you please summarize the report submitted by the Company in 2006?

A. The 2006 report described an evaluation of five alternative environmental compliance plans for Progress Energy Florida developed to meet the standards imposed by CAIR, CAMR and the Clean Air Visibility Rule (CAVR), then recently promulgated by the Environmental Protection Agency. The five alternative compliance plans evaluated in the 2006 report are summarized in my Exhibit No. __ (SSW-2).

As shown in the exhibit, the five plans considered a variety of compliance options including different types of control technologies, fuel switching and allowance trading. The projected capital costs of the alternative plans shown in the original report ranged from $570 million to $1.2 billion, excluding AFUDC. The alternative plans were compared on a revenue requirements basis, including capital carrying charges, fuel impacts, non-fuel O&M impacts, and allowance costs.

Q. Which of the alternative plans proved to be the lowest cost?

A. The plan identified as Plan D had the lowest projected total costs when all factors were considered, including allowance purchases, incremental O&M and fuel switching. Plan D can be summarized as:

SO_2 Controls

- Installation of wet scrubbers at Crystal River Units 4 and 5

- Fuel Switching at Crystal River Units 1 and 2 to burn low sulfur coal
- Fuel switching at Anclote Units 1 and 2 to burn low sulfur oil and natural gas
- Purchases of SO_2 allowances

NO_x Controls

- Installation of low NO_x burners and selective catalytic reduction systems (SCRs) at Crystal River Units 4 and 5
- Installation of low NO_x burners and separated over-fire air (LNB/SOFA) at Anclote Units 1 and 2
- Purchase of annual and ozone season allowances

Mercury Controls

- Installation of wet scrubbers and SCRs at Crystal River Units 4 and 5 will provide co-benefit of reducing mercury emissions
- Installation of powdered activated carbon injection on Crystal River Unit 2

The plan selected represented a balance between reducing emissions by adding controls to the largest and newest coal units on the PEF system and making use of the allowance markets. The total cost of Plan D was more than $100 million, NPV lower than the next lowest cost alternative plan.

Q. What changes have occurred since the original analysis, necessitating revision of the analyses and report?

A. There are several changes. First, project cost projections have increased since the original analysis was performed. The increases are significant enough that they require a second look at the alternative plans. In addition, for the reasons discussed by Mr. Cornell, the schedules have changed for the planned FGD and SCR installations at Crystal River Unit 4. The other significant change from the original study, which affects Plans D and E, was to eliminate the use of natural gas at the Anclote Plant. In the 2006 report, the Anclote Plant was assumed to burn 40% natural gas after 2010 in Plans D and E. At that time, pipeline capacity was assumed to be available to deliver the gas at no additional cost. This assumption is no longer valid, as all available pipeline space is currently reserved, and any additional capacity would result in additional cost.

Q. Were there any other changes to the revised analysis?

A. Yes. An additional plan, designated Plan F, was added to the analysis. Plan F is similar to Plan A, in which environmental controls are added to all four Crystal River units, but in Plan F, controls are added to Units 1 and 2 on a delayed basis. In Plan F, FGD and SCR controls are added to Crystal River Unit 1 [redacted] and to Unit 2 [redacted] The addition of this plan to the analyses provides two additional insights. First, it tests the plan which controls all units to see if delaying any of the controls improves the economics of the Plan, and second, it provides some insight into what might happen to Plan D if controls are imposed on Crystal River Units 1 and 2 at some later date. This is possible if the "Beyond BART" requirements of the Clean Air Visibility Rule are invoked, as described in Chapter 4 of Exhibit __ (SSW-1), or in the case where allowance prices turn out to be much higher than forecasted and adding controls results in the lower cost alternative. All six of the plans evaluated in the current analysis are shown in Exhibit No. __(SSW-3).

Q. What were the results of the revised economic analysis of the alternative plans?

A. The results of the economic comparisons of the alternative plans are shown in Exhibit No. __ (SSW-5). As was the case in the original analysis, Plan D remains the most cost effective compliance plan, with an approximately $200 million cost advantage, NPV, over the next most cost-effective plan, Plan C. And as was the case in the 2006 analysis, the higher CPVRR cost of Plans A, B, C are largely due to the capital costs associated with the emissions controls installed. Plan F, which as described above is similar to Plan A, shows a higher CPVRR for the same reason. Plans A and F are higher cost than Plans B and C, as they have controls on all four Crystal River Units while B and C control only three units.

Plan E, which has controls only on the two smaller Crystal River units, shows a much higher cost than Plan D, which controls the two larger Crystal River units. This higher cost results from the large number of emissions allowances that must be obtained in Plan E to meet emissions limits for the system.

Q. What sensitivity analyses were conducted as part of the quantitative evaluation?

A. As was discussed in the original report, the greatest remaining uncertainty is the cost of emissions allowances over time. Since each of the alternative plans is dependent to at least some degree on the price of allowances bought and/or sold, significant changes to the assumed price might impact the results of the analyses. Thus, it is important to determine the sensitivity of the results to changes in the allowance price projections.

Q. What were the results of the sensitivity analysis of allowance costs?

A. Exhibit No. __ (SSW-6) presents the CPVRR of the alternative plans assuming low and high allowance prices. The figures shows Plan D is the lowest costs plan under the base and low allowance price assumptions. Assuming high allowance prices, Plan A is the most economic plan. This is because Plan A has SO_2 and NOx emissions below the number of allowances received and can; therefore, sell allowances, reducing the overall cost of the plan. Because Plan E relies on significant allowance purchases, the costs associated with Plan E are highly variable when exposed to low and high allowance prices. By contrast, Plan D is impacted to a smaller degree by allowance prices. Under a high forecast scenario, Plan A becomes the lowest cost plan, since it relies the least on purchases of allowances.

Q. What do you conclude from these analyses about which plan is the most appropriate environmental compliance plan for PEF?

A. As in the 2006 study, the economic analyses identify Plan D as the most cost effective alternative to meet all applicable environmental standards. Not only is Plan D the most cost effective alternative under base planning assumptions, it is the most robust plan over a range of possible allowance prices, representing the best balance between increased capital expenditures for added controls and increased allowance prices. I believe that Plan D is the most appropriate environmental compliance plan for PEF.

Q. How does the Plan D meet PEF's planning objectives?

A. First, the Plan meets the requirements of CAIR, CAMR and CAVR, as well as other state and federal environmental requirements.

Second, the plan manages risks and provides flexibility by striking a good balance between reducing emissions and making limited use of allowance markets. Should it appear that allowance prices are going to be higher than currently projected, the Plan provides PEF with the ability to install additional controls on the Crystal River units at a future date, potentially taking advantage of any technology improvements that develop in the interim. Additionally, should PEF experience higher load growth than expected, or if plans for future baseload units change, PEF could then add controls on Crystal River Units 1 and 2, if necessary.

Finally, Plan D controls costs. As shown in Exhibit No. __ (SSW-5), the CPVRR for Plan D are projected to be approximately $200 million less that the next lowest cost plan under the base assumptions. As discussed above, Plan D is also the lowest cost plan when allowance price uncertainties are factored into the analysis. Thus, the Plan is the most cost-effective means of achieving compliance at the lowest reasonable cost to PEF's customers.

Q. What action should the Commission take at this time regarding PEF's Integrated Clean Air Compliance Plan?

A. As discussed above, PEF's Integrated Clean Air Compliance Plan (designated Plan D) is the most cost-effective alternative for complying with CAIR, CAMR, CAVR and related regulations. It also manages risks and provides flexibility by striking a good balance between reducing emissions and making limited use of allowance markets. For these reasons, the Commission should find that PEF's Integrated Clean Air Compliance Plan is reasonable and prudent, and that costs incurred to implement that plan would be permitted subject to a finding of reasonableness and prudence at the time the specific expenses are presented for cost recovery.

Q. Does this conclude your testimony?

A. Yes, it does.

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 16th day of November, 2007.

Linda Boles

LINDA BOLES, RPR, CRR
FPSC Official Commission Reporter
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