BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

In the Matter of

DOCKET NO. 100007-EI

ENVIRONMENTAL COST RECOVERY CLAUSE.
_________________________________/

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PROCEEDINGS: HEARING

COMMISSIONERS PARTICIPATING: CHAIRMAN ART GRAHAM
COMMISSIONER LISA POLAK EDGAR
COMMISSIONER RONALD A. BRISÉ
COMMISSIONER EDUARDO E. BALBIS
COMMISSIONER JULIE I. BROWN

DATE: Wednesday, January 26, 2011

TIME: Commenced at 1:46 p.m.
Concluded at 1:51 p.m.

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

REPORTED BY: JANE FAUROT, RPR
Official FPSC Reporter
(850) 413-6732

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.

CHARLIE BECK, ESQUIRE, Office of Public Counsel, c/o The Florida Legislature, 111 W. Madison St., 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.

MARY ANNE HELTON, Deputy General Counsel, Florida Public Service Commission, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, Advisor to the Commission.

I N D E X

WITNESSES

EXHIBITS

NUMBER:		ID.	ADMTD.
1-10	(Description of Exhibits 1-10 contained in the Comprehensive Exhibit List, Exhibit 1.)	6	6

P R O C E E D I N G S

CHAIRMAN GRAHAM: We are moving right along to Docket 07. We will open that docket.

Staff, are there any preliminary matters?

MS. BROWN: Mr. Chairman, there are proposed stipulations on all the issues in this docket, and all witnesses have been excused. Parties do not intend to make any opening statements, and FIPUG and FEA have been excused from attendance at this hearing. There are no other preliminary matters that I'm aware of.

CHAIRMAN GRAHAM: Do we have any prefiled testimony that needs to be addressed?

MS. BROWN: We do. We have prefiled testimony of all witnesses identified with an asterisk in Section VI of the Prehearing Order, which is on Page 4. Cross-examination has been waived, and we ask that that testimony be inserted into the record as though read.

CHAIRMAN GRAHAM: We will insert that testimony into the record as though read.

How about exhibits?

MS. BROWN: We have prepared a Comprehensive Exhibit List, Numbers 1 through 10, which we ask that you mark and move into the record.

CHAIRMAN GRAHAM: Let's move the exhibit list, 1 through 10 into the record.

MS. BROWN: Yes.

CHAIRMAN GRAHAM: We'll make that happen.

(Exhibits 1 though 10 marked for identification and admitted into the record.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF TERRY J. KEITH

DOCKET NO. 100007-EI

APRIL 1, 2010

Q. Please state your name and address.

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

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

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

Q. Have you previously testified in this or predecessor dockets?

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 2009.

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

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

- Form 42-1A reflects the final true-up for the period January through December 2009.
- 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 51 through 54 provide the beginning of period and end of period depreciable base by production plant name, unit or plant account and applicable depreciation rate or amortization period for each Capital Investment Project.

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

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

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

A. Form 42-1A, entitled "Calculation of the Final True-up" shows the calculation of the Net True-Up for the period January 2009 through December 2009, an over-recovery of $4,500,429, which I am requesting to be included in the calculation of the ECR factors for the January through December 2011 period.

The actual End-of-Period over-recovery for the period January through December 2009 of $8,074,131 (shown on Form 42-1A, line 3) adjusted for the estimated/actual End-of-Period over-recovery for the same period of $3,602,753 (shown on Form 42-1A, line 6a) and the prior period adjustment of $29,048 (shown on Form 42-1A, line 6b) results in the Net True-Up over-recovery for the period January through December 2009 (shown on Form 42-1A, line 7) of $4,500,429.

Q. Please explain the Adjustment for Prior Period of $29,048 in Schedule 42-1A Line 6b.

A. This prior period adjustment relates to the Space Coast Next Generation Solar Energy Center. In September 2009, an adjustment was recorded to reduce the CWIP ending balance for December 2008 from $7,010,918 to $651,891, in order to properly account for the land lease associated with this project. This adjustment to CWIP, in turn, lowered FPL's return requirements for 2008, including interest, in the amount of $29,048.

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 2009. The End of Period true-up shown on page 2 of 2, lines 5 plus 6 is an over-recovery of $8,074,131. Additionally, Form 42-3A shows the calculation of the Interest Provision of $29,074 which is applicable to the end of period true-up over-recovery of $8,045,057.

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 2009 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 $1,393,805, or 10.9% lower than projected and Form 42-6A shows that total capital investment project costs were $1,307,369 or 1.8% lower than projected. Individual project variances are provided on Forms 42-4A and 42-6A. Return on Capital Investment, Depreciation and Taxes for each project for the actual period January through December 2009 are provided on Form 42-8A.

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

A. The variances in FPL's 2009 O&M expenses and capital expenditures primarily relate to the following projects:

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

Project expenditures were $187,896 or 19.5% higher than previously projected. This variance is primarily due to:

- The Umbilical Cord at Putnam Plant, which transports sample gas to the analyzer as well as calibration gases to CEMS, was repaired temporarily until the replacement equipment could be ordered and received and the outage window could be scheduled. FPL plans to replace the Umbilical Cord during the 60-day planned outage in the Fall of 2010.
- The Martin Plant (PMR) Control Board, which connects the fuel oil system to CEMS, unexpectedly failed and was immediately replaced in order to keep CEMS available for oil operation.

- Estimates associated with the installation of the monorail system on Martin Unit 8 were not included in the 2009 Estimated/Actual filing because engineering and planning activities had not been finalized at the time of the 2009 Estimated/Actual True-up filing.

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

Project expenditures were $392,912 or 28.2% lower than previously projected. The variance is primarily due to:

- Painting projects related to the leased floating roof at Port Everglades Terminal (TPE) jet fuel tanks 901 & 902 were not executed due to:

  1) Safety concerns associated with lower than projected jet fuel levels in the floating roof tank, which created an environment that could lead to a potential explosion or fire from sparks while abrasive sanding of the roof and inner shell were taking place.

  2) The possibility of contaminating the jet fuel in the tank during the high pressure water blasting, which is required to remove loose paint chips.

  Fuel levels and tank conditions cannot be determined until work on the tanks actually begins.

- Competitive prices were obtained through the bid process after the revised 2009 projections were filed, resulting in savings when the work was performed. Following is a list of the activities performed:
  1) Painting projects at Turkey Point Fossil (PTF) Units 1 and 2 Metering Tanks PTF-1M, PTF-2M and Lauderdale Plant (PFL) Tanks PFL-2, PFL-3, PFL-5.
  2) API external inspections at PMR Units 1 and 2 Metering Tanks 1371 A and B.

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

Project expenditures were $7,543 or 54.9% lower than previously projected. The variance is primarily due to the deferral to 2010 of work associated with the relocation of the hazardous waste storage area at the St. Lucie plant, which was scheduled for 2009. The current storage location for hazardous waste at the St. Lucie plant site has very limited covered curbed space; therefore, a larger space at the site is required. The building projected for the larger storage facility did not become available in time to begin relocation activities.

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

Project expenditures were $56,595 or 19.3% higher than previously projected. The variance is primarily due to higher than projected cleaning activities at Plant Sanford in preparation for converting the ash basin to a storm water basin. A permit modification has been submitted to the FDEP to convert the ash basin to a non-equipment contact area stormwater basin while Unit 3 is in inactive reserve.

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

Project expenditures were $883,960 or 30.6% lower than previously projected. The variance is primarily due to delays in the anticipated arsenic remediation activities planned at certain substations located in Dade County. Additional data needed to be gathered for the Remedial Action Plan (RAP) required by the Department of Environmental Resources Management (DERM). The RAP will describe the tasks to be performed by FPL to conduct the remediation activities. The remediation activities will start once the RAP is approved by DERM, which is anticipated late 2010.

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

Project expenditures were $77,940 or 11.2% higher than previously projected. The variance is primarily due to more than expected equipment clearances to repair additional leaking equipment at transmission substations.

7. Amortization of Gains on Sales of Emissions Allowances

Gains are $41,010 or 11.9% lower than previously projected. The variance is primarily due to lower than projected revenue from the Environmental Protection Agency (EPA) annual SO_2 emission allowance auction. Lower market clearing prices for SO_2 emission allowances resulted in lower than projected proceeds from the sale of allowances withheld by EPA.

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

Project expenditures were $117,555 or 46.9% higher than previously projected. The variance is primarily due to the following reasons:

- At PMR the East Positive Displacement Meters malfunctioned, disabling the leak detection capability on the 18" pipeline. Three meter cores were rebuilt, two of which were installed and used immediately and the other is being retained as a spare.
- During June 2009, the Department of Transportation (DOT) conducted an audit that identified discrepancies on the cathodic protection system of the Martin Terminal (TMR) 18" and 30" pipelines. The following measures were taken to address this issue:

  1) The cathodic protection level of the 18" pipeline at TMR Test Station #26 was increased to the National Association of Corrosion Engineers (NACE) recommended and DOT required level of -850 milivolts.

  2) The polarization cells of the TMR 18" and 30" pipelines were replaced due to the age and reliability of the cells. The cells are necessary instruments to prevent corrosion caused by AC induced voltage.

  3) A telemetry system was installed on the TMR 18" pipeline block valve G in order to remotely close the valve from the terminal

control room. Block valve G was added to FPL's system in the mid 1980s and at the time a telephone line, which was not available at the site, was required to install a telemetry system. Due to advances in communication technology telemetry systems are now able to use wireless modems to function properly, allowing FPL to use the full functionality of the system.

4) Activities associated with the Pipeline Awareness Program (PAP) were increased as the result of the May 2009 DOT audit. Activities include updating mailing literature and expanding the mailing distribution to include homeowners, excavation contractors and emergency responders.

5) A Close Interval Survey (CIS) was performed on the TMR 30" pipeline to identify the location and severity of pipeline coating failures. The CIS will provide more detailed information about the TMR 30" pipeline's corrosion activity.

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

Project expenditures were $64,394 or 7.5% lower than previously projected. The variance was primarily due to less than anticipated SPCC compliance inspections as a result of an increase in equipment leak repairs.

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

Project expenditures were $576,783 or 28.1% lower than previously projected. The variance is primarily due to fewer running hours as a result of lower demand for generation. Also, lower natural gas prices resulted in more natural gas and less oil being burned than originally expected at the plant. Consequently, less ash was created with an associated reduction in the use of the chemical injection system, resulting in lower costs of chemicals and ash disposal.

11. Selective Catalytic Reduction (SCR) Consumables – O&M (Project 29)

Project expenditures were $59,350 or 20.3% lower than previously projected. The variance is primarily due to a lower than projected industry cost for ammonia in 2009. In addition, the generation from Martin Unit 8 was lower than projected because of lower system demand, which resulted in a lower than projected use of consumables.

12. Hydrobiological Monitoring Program (HBMP) – O&M (Project 30)

Project expenditures were $6,721 or 16.5% higher than previously projected. The variance is primarily due to:

1) The Southwest Florida Water Management District (SWFWMD) requested revisions to FPL's Interpretive Report filed in July, 2009. Revisions included additional information, such as displaying withdrawals on a daily vs. monthly basis and conductivity and salinity trends of the river. This additional information provides the SWFWMD with a greater understanding of the flows in and out of the river. FPL's revised Interpretive Report incorporating the SWFWMD's requested revisions was filed in September, 2009.

2) Due to minimal rainfall in 2009, which created low pond levels, additional time was spent on emergency diversion curves. Emergency diversion curves allow FPL to use water from the Little Manatee River in order to supplement the cooling pond when water levels drop below a certain point.

13. CAIR Compliance – O&M (Project 31)

Project expenditures were $491,803 or 43.8% higher than previously projected, primarily due to the following reasons:

- The planned outage at PMR Unit 2, which impacts the 800MW Unit Cycling Project, changed from September to December 2009. As a result, removal of the bridle piping on the water induction system, which was scheduled for 2010, was performed during the last quarter of 2009.
- The new condenser tubes, which were put in service at the beginning of 2009 at PMR Unit 1, are more susceptible to biological fouling than the previous materials; therefore, unforeseen algal growth took place in the new condenser tubes. In order to prevent future algal growth FPL installed the Martin Plant Upgraded Chlorination System. Material purchases were accelerated into 2009 due to the PMR outage schedule changes in order to install the system during the outage.
- Manatee 1 had a throttle valve stick into position as the result of solid particle erosion, which prevented its closure during operation. A valve was available from PMR and used for repairs. The Manatee throttle

valve was sent to the vendor for refurbishment and application of a Solid Particle Erosion resistant coating and returned to PMR.

- FPL purchased 855 CAIR Ozone season allowances in 2009, which was not projected at the time of FPL's Estimated/Actual True-up filing. The 855 CAIR Ozone season allowances, in addition to the 12,418 allowances allocated to FPL by the EPA, were needed to comply with CAIR requirements for fossil generating unit emissions during the May through September 2009 Ozone Season.
- Legal services related to the CAIR Compliance program were inadvertently omitted from the 2009 Estimated/Actual True-up, filed on August 3, 2009.

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

Project expenditures were $105,499 or 22.1% lower than previously projected. The variance is primarily due to a temporary stop on the project as FPL is waiting for a final biological opinion from the National Marine Fisheries Service (NMFS) and the Nuclear Regulatory Commission (NRC), which is expected during the Summer of 2010.

15. Martin Plant Drinking Water System Compliance – O&M (Project 35)

Project expenditures were $9,718 or 57.2% lower than previously projected, primarily due to lower than projected quarterly maintenance costs associated with vendor pricing for replacement of spent carbon filters, multimedia cartridge filters and cleaning of the reverse osmosis filter system.

16. DeSoto Next Generation Solar Energy Center – O&M (Project 37)

Project expenditures were $92,633 or 39.1% lower than previously projected. The variance is primarily due to the following reasons:

- A lower cost for grounds maintenance was negotiated by contracting on a yearly basis, by month, rather than a per service basis.
- Due to the amount of rainfall received to clean the Photovoltaic (PV) module, washing was not required as anticipated.
- Salary costs were lower than expected since only one of the two engineers included in project estimates was hired due to delays in the hiring process.

17. Space Coast Next Generation Solar Energy Center – O&M (Project 38)

Project expenditures were $13,518 or 44.7% lower than previously projected. These expenditures are applicable to the 1 MW site at Kennedy Space Center and the variance is primarily due to the following reasons:

- Due to the large amount of rainfall cleaning the PV module, washing was not required as anticipated.
- The 1 MW site has operated with very little intervention required. In turn, this reduced O&M expenses.

18. Manatee Temporary Heating System Project – O&M (Project 41)

Project expenditures were $12,500 or 100.0% lower than previously projected. The variance is primarily due to a warmer than projected month of December 2009; therefore, Manatee Observers were not hired because Manatee observations were not required. In addition, during initial start-up test runs of the heating system at Plant Riviera, several equipment failures occurred with the electrical contactors and fuses. These parts have been replaced and the replacement parts were covered under warranty at no cost to FPL.

19. Turkey Point Cooling Canal Monitoring Plan – O&M (Project 42)

Project expenditures were $185,473 or 92.7% lower than previously projected. FPL and the Agencies (South Florida Water Management District, Miami Dade County Department of Environmental Resources Management and Florida Department of Environmental Protection) took longer than expected to agree on the Monitoring Plan and the Fifth Supplemental Agreement. Therefore, FPL delayed hiring the contractor that was selected to assist FPL in project management.

20. SPCC – Spill Prevention, Control and Countermeasures – Capital (Project 23)

Project depreciation and return on investment were $84,739 or 3.2% lower than previously projected. The variance is primarily due to an unexpected internal fault in a transformer, which prevented the completion of oil diversionary structure installations that were already in progress.

21. CAIR Compliance – Capital (Project 31)

Project depreciation and return on investment were $145,275 or 0.7% higher than previously projected. The variance is primarily due to the following reasons:

- Activities such as Boiler and Main Steam Drains, Extraction Control and Mass Blowdown, and Superheat Steam Spray Upgrades associated with the 800MW cycling project were higher than previously estimated due to higher than projected prefabrication costs. Prefabrication estimates of time and materials are provided to FPL by the vendor as the best available estimates at the time the estimate is given; therefore, the estimates are subject to change. In addition, the material in the new condenser tubes that were put in service at the beginning of 2009 in PMR Unit 1 was more susceptible to biological fouling than the previous material; therefore, unforeseen algal growth took place in the new condenser tubes. In order to prevent future biological fouling the Martin Plant Upgraded Chlorination System was added and material purchases were accelerated into 2009 due to Martin outage schedule changes, in order to install the Martin Plant Upgraded Chlorination System during the scheduled outage.
- The structural steel and economizer tubing at Plant Scherer (PSG) Unit 4 was received earlier than originally scheduled, which

resulted in earlier payments than anticipated. A minor offset was created when the installation of the scrubber vessel and stack/liner for the PSG Unit 4 Flue Gas Desulfurization (FGD) were delayed due to unfavorable weather conditions, and therefore delayed the projected 2009 payment to 2010.

- At St. Johns River Power Park (SJRPP), additional field engineering and construction took place to complete unexpected minor scope changes, such as grating and finalizing handrails and valve platforms in order to allow operators to safely operate equipment. These activities were required to complete the construction of the SCRs at SJRPP Units 1 and 2.

22. CAMR Compliance – Capital (Project 33)

Project depreciation and return on investment were $161,355 or 2.4% lower than previously projected. A minor delay in the construction of the baghouse at Plant Scherer, due to unfavorable weather conditions, resulted in lower than projected contract payments.

23. Low-Level Radioactive Waste Storage – Capital (Project 36)

Project depreciation and return on investment were $27,338 or 100% lower than previously projected. The variance is due to changes in the projected in-service dates for the LLW facilities at St. Lucie Plant and Turkey Point Plant from 2009 to 2010 and 2011, respectively.

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

Project depreciation and return on investment were $83,539 or 0.8%

lower than previously projected. The variance is primarily due to beginning the amortization of Investment Tax Credits (ITC) that were not included in the Estimated/Actual True-up filing because the accounting treatment for the ITC had not yet been finalized. The variance was partially offset by the early completion of the project, which increased depreciation in 2009.

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

Project depreciation and return on investment were $348,795 or 25.7% lower than previously projected. The variance is primarily due the $29,048 prior period adjustment, which is explained beginning on line 17 of page 3. The variance was partially offset by a shift of construction costs from 2010 to 2009 to accelerate the project from a June 2010 Commercial Operation Date to an April 2010 Commercial Operation Date. The acceleration did not impact the total project cost.

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

Project depreciation and return on investment were $747,664 or 10.0% lower than previously projected. The variance is primarily due to major materials such as frames, mirrors, drives, and heat exchangers being delivered later than originally forecasted, which drove cash flow from 2009 into 2010. There is no impact to project schedule due to the later deliveries.

27. Manatee Temporary Heating System Project – Capital (Project 41)

Project depreciation and return on investment are estimated to be $21,222 or 92.9% higher than previously projected. The project was completed in November 2009, one month earlier than estimated in the 2009 Estimated/Actual True-up filing.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

SUPPLEMENTAL TESTIMONY OF TERRY J. KEITH

DOCKET NO. 100007-EI

APRIL 15, 2010

Q. Please state your name and address.

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

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

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

Q. Have you previously testified in this docket?

A. Yes, I have.

Q. What is the purpose of your supplemental testimony?

A. My supplemental testimony presents and describes Form 42-9A, which the Commission has directed FPL and other utilities to begin filing this year. Form 42-9A shows the capital structure, components and cost rates FPL used to calculate the revenue requirement rate of return applied to capital investments and working capital amounts included for recovery in the Environmental Cost Recovery (ECR) Clause true-up costs.

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

A. Yes, I have. My Exhibit TJK-2 consists of Form 42-9A for the January through December 2009 true-up period. Thus, Exhibit TJK-2 reflects the capital structure, components and cost rates FPL used to calculate the revenue requirement rate of return applied to ECR capital investments and working capital amounts for the period January through December 2009.

Q. What capital structure, components and cost rates did FPL use to calculate the revenue requirement rate of return for the period January through December 2009?

A. FPL has used the actual 2006 capital structure, components and debt cost rates from the December 2006 Surveillance Report, together with the 11.75% common equity cost rate that was approved for regulatory purposes such as the ECR Clause in FPL's 2005 rate case settlement agreement by Order No. PSC-05-0902-S-EI.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF TERRY J. KEITH

DOCKET NO. 100007-EI

August 2, 2010

Q. Please state your name and address.

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

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

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

Q. Have you previously testified in this docket?

A. Yes, I have.

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

A. The purpose of my testimony is to present for Commission review and approval the Estimated/Actual True-up associated with FPL's environmental compliance activities for the period January 2010 through December 2010.

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

A. Yes, I have. My exhibit TJK-2 consists of eight forms, PSC Forms 42-1E through 42-8E, included in Appendix I. Form 42-1E provides a summary of the Estimated/Actual True-up amount for the period January 2010 through December 2010. Forms 42-2E and 42-3E reflect the calculation of the Estimated/Actual True-up amount for the period. Forms 42-4E and 42-6E reflect the Estimated/Actual O&M and Capital cost variances as compared to original projections for the period. Forms 42-5E and 42-7E reflect jurisdictional recoverable O&M and Capital project costs for the period. Form 42-8E (pages 13 through 69) reflects return on capital investments, depreciation, and taxes by project.

Q. **Please explain the calculation of the Environmental Cost Recovery Clause (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 2010 through December 2010 is an over-recovery, including interest, of $35,697,142 (Appendix I, Page 4, line 5 plus line 6). This Estimated/Actual True-up over-recovery of $35,697,142 consists of January 2010 through June 2010 actuals and revised estimates for July 2010 through December 2010, 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 two new activities under FPL's St. Lucie Turtle Net Project and CAIR Compliance Project, which are discussed and supported in the testimony of witness Randall R. LaBauve.

Q. Has FPL included any adjustments in this filing?

A. Yes. FPL has included two adjustments in this filing. The first adjustment relates to rate of return and cost structure. For the months of January and February 2010, FPL calculated the clause rate of return using the actual 2006 capital structure and costs from the December Surveillance Report reflecting an 11.75% common equity cost rate per Order No. PSC-05-0902-S-EI issued in Docket No 050045-EI on September 14, 2005. For the period of March 2010 forward, FPL calculated the clause rate of return using a new capital structure and cost rates as mandated in Order No. PSC-10-0153-FOF-EI, issued in Docket Nos. 080677-EI and 090130-EI on March 17, 2010.

The second adjustment relates to the retail separation factors. Order No. PSC-09-0759-FOF-EI issued in Docket No. 090007-EI on November 18, 2009 approved the following jurisdictional separation factors for FPL:

Retail Energy Jurisdictional Factor	99.08384%
Retail CP Demand Jurisdictional Factor	99.09394%
Retail GCP Demand Jurisdictional Factor	100.00000%

These factors were used in determining the amount of ECRC costs to be recovered from retail customers during the period January 2010 through December 2010. These jurisdictional separation factors were based on 2008 actual data, which was the most current 12-month period of actual data available at the time of FPL's 2010 projection filing dated August 28, 2009. FPL's contract with Lee County Electric Cooperative (LCEC) became effective on January 1, 2010, which serves to reduce the amount of ECRC costs to be recovered from retail customers. As a result, FPL has revised the jurisdictional separation factors used in the calculation of the 2010 Estimated/Actual True-up amount to account for the additional load required to serve the LCEC contract, thereby reducing the amount of ECRC costs recovered from retail customers. FPL is using the 2010 jurisdictional separation factor for energy of 98.02710%, for CP demand of 98.03105% and for GCP demand of 100.00000% approved by the Commission in Order No. PSC-10-0153-FOF-EI, issued on March 17, 2010 in Docket Nos. 080677-EI and 090130-EI.

Q. How do the Estimated/Actual project expenditures for January 2010 through December 2010 compare with original projections?

A. Form 42-4E (Appendix I, Page 7) shows that total O&M project costs were $7,331,898 or 24.0% lower than projected and Form 42-6E (Appendix I, Page 10) shows that total capital investment project costs were $22,804,959 or 15.7% lower than projected. Following are variance explanations for those O&M Projects and Capital Investment Projects with significant variances. Individual project variances are provided on Forms 42-4E and 42-6E. Return on Capital Investment, Depreciation and Taxes for each project for the Estimated/Actual period are provided on Form 42-8E (Appendix I, Pages 13 through 69).

O&M Project Variances

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

Project expenditures were $92,014 or 7.4% higher than previously projected. The variance is primarily due to additional run time for Plant Riviera (PRV), Plant Cape Canaveral (PCC) and Port Everglades (PPE) Units 1 and 2 that were in reserve status, which increased emission totals for 2010. Reserve status is based on current system demand and operating needs and is subject to change at any time.

2. Continuous Emission Monitoring Systems (Project No. 3a) – O&M.

Project expenditures were $71,634 or 6.3% higher than previously projected. The variance is primarily due to higher than expected labor costs for the Stack Probe and Umbilical Cord replacement projects at Ft. Lauderdale (PFL) and PPE 3 & 4, partially offset by lower than projected costs of replacement equipment associated with the A/C replacement project at Cutler Plant and Turkey Point Units 1 and 2. Additionally, there were under-runs at Manatee and Ft. Myers due to less calibration gas usage.

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

Project expenditures were $143,319 or 7.0% higher than previously projected. The variance is primarily due to the extended cold weather in January 2010, which caused an increase in the use of No. 2 fuel oil at Ft.

Myers Plant (PFM). Given the lower tank levels, FPL had the opportunity to accelerate the internal inspection of Fuel Oil Storage Tanks (FOST) #1 and #2 to 2010, resulting in a lower cost for the inspection than if it were performed in 2013 as originally scheduled. Additionally, a minor floor leak at FOST #2 was repaired during the internal inspection.

4. RCRA Corrective Action (Project No. 13) – O&M

Project expenditures were $98,298 or 98.3% lower than previously projected. The variance is primarily due to FPL receiving the final Florida Department of Environmental Protection (FDEP) Facility Evaluation Report, which did not require any further remediation at this time under the authority of the Resource Conservation and Recovery Act Program.

5. NPDES Permit Fees (Project No. 14) – O&M

Project expenditures were $14,500 or 10.4% lower than previously projected. The variance is primarily due to renewal permit fees that were included in the original projection. Subsequent review concluded that these costs were not ECRC recoverable and they were not charged to this project.

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

Project expenditures were $778,529 or 31.2% lower than previously projected. The variance is primarily due to delays in the work on this project when vendors were redirected to perform other substation work in response to the unusual cold weather in the beginning of the year and to one major emergency substation equipment failure. In addition, vendor contracts were renegotiated resulting in cost savings.

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

Project expenditures were $103,811 or 13.7% lower than previously projected. The variance is primarily due to delays in the work on this project when vendors were redirected to perform other substation work in response to the unusual cold weather in the beginning of the year and one major emergency substation equipment failure. In addition, vendor contracts were renegotiated resulting in an annual cost savings.

8. Pipeline Integrity Management (Project No. 22) – O&M

Project expenditures were $24,918 or 6.2% higher than previously projected. The variance is primarily due to a public awareness campaign put in place at the Manatee Plant (PMT) resulting from the identification, during the bi-monthly inspections mandated by the Department of Transportation (DOT), of low ground coverage and exposure of portions of the PMT 16" pipeline. FPL is determining the most cost effective and efficient method to cover affected portions of the pipeline. In compliance with DOT's guidelines and in order to avoid any third party damage and to ensure the safety of workers, FPL has placed notification signs along the pipeline.

9. SPCC – Spill Prevention, Control & Countermeasures (Project No. 23) – O&M

Project expenditures were $334,542 or 15.0% higher than previously projected. The variance is primarily due to the following reasons:

- Vendor costs for work required by the revisions to 40 CFR Part 112 Rule were higher than originally projected. Final costs for vendor work were higher than original projections, which were based on preliminary estimates. Vendor work included a survey for FPL's secondary containments at PPE to determine the containment volume for Tanks 903/904 and Metering Tanks 1 through 4 and the removal and replacement of its existing oil traps at PPE with a new, more efficient oil/water separator.
- The Site Drainage Improvement Plan (SDIP) at the PFM Gas Turbine site was reclassified as an O&M activity due to a reduction in project scope. In order to increase efficiency of the drainage system, site earth work, which includes adding ditches, sod and dirt around the tanks, was completed in place of installing concrete containment around each tank.
- Upon review of the conceptual design of the oil berm at the St. Lucie plant, which is used to catch any spilled oil upon delivery, it was discovered that further structural reinforcement was needed in order for it to be fully operational and in compliance with the plant's Conditions of Certification. This includes design, engineering and subsequent installation of rebar and core bore.

10. Port Everglades ESP (Project No. 25) – O&M

Project expenditures were $1,386,474 or 59.1% lower than previously projected. The variance is primarily due to the addition of West County Units 1&2 eliminating the need to run PPE Units 1&2 and reducing the need to run PPE Units 3&4 on oil, which subsequently required lower demand for generation from PPE in 2010. Also, lower natural gas prices resulted in more natural gas and less oil being burned than originally expected at the plant. Consequently, less ash was created with an associated reduction in the use of the chemical injection system, resulting in lower cost of chemicals and ash disposal.

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

Project expenditures were $240,783 or 84.5% lower than previously projected. The delay in the release of EPA's final rule has postponed planned work and hiring 316(b) specialists.

12. SCR Consumables (Project No. 29) – O&M

Project expenditures were $23,849 or 6.8% higher than previously projected. The variance is primarily due to maintenance work that was identified during a required inspection of the Manatee site ammonia tank, performed in 2010. As a result of the inspection, unplanned maintenance work was required, which included replacement of hydrostatic pipe, drain valve maintenance and replacement, rust removal, painting, and storage and replacement of ammonia during the maintenance outage. Project expenditures were partially offset as a result of lower than projected market price of ammonia. In addition, lower than projected operation of affected units subsequently reduced ammonia usage.

13. HBMP (Project No. 30) – O&M

Project expenditures were $14,422 or 42.4% lower than previously projected. The variance is primarily due to contractors not having to do any additional monitoring or reporting due to a sufficient amount of rainfall in the area. The amount of rainfall kept the cooling pond at acceptable levels, which prevented FPL from pulling water from the Little Manatee River to fill the cooling pond, in turn reducing the amount of time spent on developing emergency diversion curves.

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

Project expenditures were $562,872 or 18.0% lower than previously projected. The variance is primarily due to the following reasons:

- Modifications to the water plant at the Martin 800 MW cycling project were re-classified from O&M to capital per FPL's capitalization policy.
- Projections for condenser cleanings were reduced due to an updated chlorinization system. In prior years the chlorinization system was not fully operational and repairs were postponed due to delays in receiving the work permit to repair the chlorinization system. FPL was issued the work permit and the chlorinization system has been repaired.

- At St John's River Power Park (SJRPP), actual costs of ammonia were lower than projected due to reduced usage that resulted from lower than projected operation of the affected units.

15. CAMR Compliance (Project No. 33) – O&M

Project expenditures were $833,627 or 25.2% lower than previously projected. The variance is primarily due to lower than projected use of Powdered Activated Carbon (PAC) at the Plant Scherer Unit 4 baghouse, which resulted in changes to PAC injection rates to achieve required Mercury (Hg) removal.

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

Project expenditures were $357,078 or 26.4% lower than previously projected. Due to favorable weather, costs associated with the contingency for potential weather delays during the diving period were not incurred. Additionally, newly negotiated diving labor rates were lower than projected.

17. Martin Plant Drinking Water System Compliance (Project No. 35) – O&M

Project expenditures were $8,000 or 47.1% higher than previously projected. The variance is primarily due to delays in billing from FPL's new vendor for the Drinking Water System (DWS). During the fourth quarter of 2009, FPL was due to be billed by the vendor for components purchased for the DWS;

however, FPL did not receive the invoice for the components until early 2010. As this delay was unexpected, the cost of the components for which FPL was being billed for were not included in the 2010 original projections and therefore created a variance.

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

Project expenditures were $247,402 or 19.6% lower than previously projected. The variance is primarily due to the amount of rainfall received, which helped clean the Photovoltaic (PV) module so that washing was not required as anticipated. In addition, actual costs of materials, equipment and services are now better understood after several months of operation allowing for a more accurate estimate of O&M costs going forward.

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

Project expenditures were $67,184 or 13.1 % lower than previously projected. The variance is primarily due to the amount of rainfall received, which helped clean the PV module so that washing was not required as anticipated. In addition, actual costs of materials, equipment and services are now better understood after several months of operation allowing for a more accurate estimate of O&M costs going forward.

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

Project expenditures were $9,000 or 18.0% higher than previously projected. The variance is primarily due to higher than originally projected costs for software that will be used to manage and report FPL Greenhouse Gas (GHG) emission data to the EPA in response to the EPA Mandatory Reporting Rule (40 CFR Part 98) promulgated on October 30, 2009.

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

Project expenditures were $1,204,920 or 35.4% lower than originally projected. The variance is primarily due to several capital activities being delayed, which subsequently delayed O&M activities such as well water quality sampling, hiring project management personnel, ecological monitoring and the installation of the data management system.

22. NESHAP Information Collection Request Project (Project No. 43) – O&M

Project expenditures were $2,136,953 or 64.2% lower than previously projected. The variance is primarily due to cost reductions that resulted from changes to the sampling and stack testing requirements included in the Final ICR issued on December 24, 2009. Projected costs for emission stack testing were lower than expected due to the following reasons:

- Reductions in the number of units and facilities requiring stack testing as a result of negotiations between FPL and EPA to avoid testing units being retired for repowering and allowing FPL to replace some unit tests with those at facilities that EPA had already identified in the ICR.

- EPA changes reducing the number of pollutants requiring analysis during stack emission testing of the oil-fired units.
- Changes to fuel oil sampling requirements that resulted in fewer required laboratory analyses.

Capital Project Variances

23. Low NOx Burner Technology (Project No. 2) – Capital

Project depreciation and return on investment were $352,225 or 48.1% lower than previously projected. The variance is primarily due to the FPSC decision on capital recovery schedules in Order No. PSC-10-0153-FOF-EI, issued on March 17, 2010, in Docket Nos. 080677-EI and 090130-EI. Due to the modernizations at the Riviera and Cape Canaveral plants, a capital recovery schedule was requested to accelerate the recovery of the existing assets at these plants in order to have them fully recovered when the modernized units go into service. Some assets associated with the Riviera and Cape Canaveral plants were included in this ECRC project. The FPSC decision to cover the unrecovered asset value using the theoretical reserve surplus in that case eliminated the need for future recovery of these assets in this case. Therefore, the related assets which are being recovered through the capital recovery schedules were transferred to base.

24. Continuous Emission Monitoring Systems (Project No. 3b) – Capital

Project depreciation and return on investment are estimated to be $180,436 or 19.8% lower than previously projected. The variance is primarily due to the FPSC decision on capital recovery schedules in Order No. PSC-10-0153-FOF-EI, issued on March 17, 2010, in Docket Nos. 080677-EI and 090130-EI. Due to the modernizations at the Riviera and Cape Canaveral plants, a capital recovery schedule was requested to accelerate the recovery of the existing assets at these plants in order to have them fully recovered when the modernized units go into service. Some assets associated with the Riviera and Cape Canaveral plants were included in this ECRC project. The FPSC decision to cover the unrecovered asset value using the theoretical reserve surplus eliminated the need for future recovery of these assets through the clauses. Therefore, the related assets which are being recovered through the capital recovery schedules were transferred to base.

25. Maintenance of Stationary Above Ground Fuel storage Tanks (Project No. 5b) – Capital

Project depreciation and return on investment are estimated to be $466,606 or 29.0% lower than previously projected. The variance is primarily due to the FPSC decision on capital recovery schedules in Order No. PSC-10-0153-FOF-EI, issued on March 17, 2010, in Docket Nos. 080677-EI and 090130-EI. Due to the modernizations at the Riviera and Cape Canaveral plants, a capital recovery schedule was requested to accelerate the recovery of the existing assets at these plants in order to have them fully recovered when the modernized units go into service. Some assets associated with the Riviera and Cape Canaveral plants were included in this ECRC project. The FPSC decision to cover the unrecovered asset value using the theoretical reserve surplus eliminated the need for future recovery of these assets through the clauses. Therefore, the related assets which are being recovered through the capital recovery schedules were transferred to base.

26. Oil Spill Clean-up/Response Equipment (Project No. 8b) – Capital

Project depreciation and return on investment are estimated to be $24,879 or 18.6% lower than originally projected due to less than projected use of FPL owned Oil Spill Response equipment and more use of contractor equipment and resources in the event of an incident. The cost benefit includes not only the initial purchase, but also a reduction in maintaining stockpiled equipment that has a determined shelf life and associated maintenance overhead costs.

27. Wastewater Discharge Elimination & Reuse (Project No. 20) – Capital

Project depreciation and return on investment are estimated to be $85,603 or 37.0% lower than previously projected. The variance is primarily due to the FPSC decision on capital recovery schedules in Order No. PSC-10-0153-FOF-EI, issued on March 17, 2010, in Docket Nos. 080677-EI and 090130-EI. Due to the modernizations at the Riviera and Cape Canaveral plants, a capital recovery schedule was requested to accelerate the recovery of the existing assets at these plants in order to have them fully recovered when the modernized units go into service. Some assets associated with the Riviera and Cape Canaveral plants were included in this ECRC project. The FPSC decision to cover the unrecovered asset value using the theoretical reserve surplus eliminated the need for future recovery of these assets through the clauses. Therefore, the related assets which are being recovered through the capital recovery schedules were transferred to base.

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

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

29. SPCC – Spill Prevention, Control and Countermeasures (Project No. 23) – Capital

Project depreciation and return on investment were $595,983 or 22.3% lower than previously projected. The variance is primarily due to the following reasons:

- The variance is primarily due to the FPSC decision on capital recovery schedules in Order No. PSC-10-0153-FOF-EI, issued on March 17, 2010, in Docket Nos. 080677-EI and 090130-EI. Due to the modernizations at the Riviera and Cape Canaveral plants, a capital recovery schedule was requested to accelerate the recovery of the existing assets at these plants in order to have them fully recovered when the modernized units go into service. Some assets associated with the Riviera and Cape Canaveral plants were included in this ECRC project. The FPSC decision to cover the unrecovered asset value using the theoretical reserve surplus eliminated the need for future recovery of these assets through the clauses. Therefore, the related assets which are being recovered through the capital recovery schedules were transferred to base.

- The Site Drainage Improvement Plan at the PFM Gas Turbine site was reclassified as an O&M activity due to a reduction in project scope. In order to increase efficiency of the drainage system, site earth work, which includes adding ditches, sod and dirt around the tanks, was completed in place of installing concrete containment around each tank.
- Implementation of additional secondary containment around PPE Metering Tanks require further evaluation to determine the safest and most efficient methods for containment.

30. Manatee Reburn (Project No. 24) – Capital

Project depreciation and return on investment are estimated to be $910,789 or 20.5% lower than previously projected. The variance is primarily due to FPL calculating the clause rate of return using a new capital structure and cost rates as mandated in Order No. PSC-10-0153-FOF-EI, issued in Docket

Nos. 080677-EI and 090130-EI on March 17, 2010.

31. Pt. Everglades ESP Technology (Project No. 25) – Capital

Project depreciation and return are estimated to be $2,299,202 or 21.1% lower than previously projected. The variance is primarily due to FPL calculating the clause rate of return using a new capital structure and cost rates as mandated in Order No. PSC-10-0153-FOF-EI, issued in Docket Nos. 080677-EI and 090130-EI on March 17, 2010.

32. CAIR Compliance (Project No. 31) - Capital

Project depreciation and return are estimated to be $2,885,742 or 7.2% lower than previously projected. The variance is primarily due to work associated with the scrubber project originally scheduled for 2010 being rescheduled to 2011 as a result of impacts to the construction schedule at Plant Scherer. A portion of the variance was offset by changes in the SCR construction schedule moving planned work from 2011 to 2010.

33. CAMR Compliance (Project No. 33) – Capital

Project depreciation and return are estimated to be $728,803 or 5.9% lower than previously projected. The variance is primarily due to timing differences of project activities originally scheduled to be completed and placed in-service in the fourth quarter of 2009 being postponed to the second quarter of 2010, in order to complete work during the Scherer Unit 4 Outage scheduled for January through April 2010.

34. Low-Level Radioactive Waste Storage (Project No. 36) – Capital

Project depreciation and return on investment were $753,553 or 97.5% lower than previously projected. The variance is due to changes in the projected in-service dates for the LLW facilities at St. Lucie Plant and Turkey Point Plant from 2009 to 2010 and 2011, respectively.

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

Project depreciation and return were $3,008,279 or 14.0% lower than previously projected. The variance is primarily due to (1) the change in capital structure, as mandated in Order No. PSC-10-0153-FOF-EI, issued in Docket Nos. 080677-EI and 090130-EI on March 17, 2010. FPL adjusted the annual rate of return for both debt and equity on the investment using the new capital structure and (2) inclusion of the Investment Tax Credit (ITC) into the investment expense calculation.

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

Project depreciation and return were $805,068 or 9.3% lower than previously projected. The variance is primarily due to (1) the project being completed under budget and ahead of schedule, (2) the change in capital structure, as mandated in Order No. PSC-10-0153-FOF-EI, issued in Docket Nos. 080677-EI and 090130-EI on March 17, 2010. FPL adjusted the annual rate of return for both debt and equity on the investment using the new capital structure and

(3) inclusion of the Investment Tax Credit (ITC) into the investment expense calculation.

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

Project depreciation and return were $9,348,173 or 23.6% lower than previously projected. The variance is primarily due to (1) actual/projected costs are anticipated to be below the original project budget, (2) costs were incurred later than planned within the project, (3) the change in capital structure, as mandated in Order No. PSC-10-0153-FOF-EI, issued in Docket Nos. 080677-EI and 090130-EI on March 17, 2010. FPL adjusted the annual rate of return for both debt and equity on the investment.

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

Project depreciation and return were $367,182 or 51.9% lower than previously projected. The variance is primarily due to FPL calculating the clause rate of return using a new capital structure and cost rates as mandated in Order No. PSC-10-0153-FOF-EI, issued in Docket Nos. 080677-EI and 090130-EI on March 17, 2010.

Q. Does this conclude your testimony?

A. Yes, it does.

ERRATA SHEET

Direct testimony of Terry J. Keith. Environmental Cost Recovery Estimated/Actual for the period January 2010 through December 2010, filed on August 2, 2010 in Docket No. 100007-EI.

10/13/2010 Terry J. Keith
DATE TERRY J. KEITH

PAGE/LINE	ERROR OR AMENDMENT	REASON FOR CHANGE
2/14	Strike "$35,697,142" on line 14. Replace with "$35,720,891".	Removal of projected costs associated with FPL's proposed Scherer Unit 4 Steam Turbine Upgrade Project from the 2010 estimated/actual true-up amount.
2/16	Strike "$35,697,142" on line 16. Replace with "$35,720,891".	Removal of projected costs associated with FPL's proposed Scherer Unit 4 Steam Turbine Upgrade Project from the 2010 estimated/actual true-up amount.
2/22	Strike text on line 22 "two new activities under".	Removal of projected costs associated with FPL's proposed Scherer Unit 4 Steam Turbine Upgrade Project from the 2010 estimated/actual true-up amount.
2/23	Strike text on line 23 "and CAIR Compliance Project, which are".	Removal of projected costs associated with FPL's proposed Scherer Unit 4 Steam Turbine Upgrade Project from the 2010 estimated/actual true-up amount.
4/16	Strike "$22,804,959" on line 16. Replace with "$22,829,170".	Removal of projected costs associated with FPL's proposed Scherer Unit 4 Steam Turbine Upgrade Project from the 2010 estimated/actual true-up amount.
19/11	Strike "$2,885,742" on line 11. Replace with "$2,909,953".	Removal of projected costs associated with FPL's proposed Scherer Unit 4 Steam Turbine Upgrade Project from the 2010 estimated/actual true-up amount.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

SUPPLEMENTAL TESTIMONY OF TERRY J. KEITH

DOCKET NO. 100007-EI

AUGUST 13, 2010

Q. Please state your name and address.

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

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

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

Q. Have you previously testified in this docket?

A. Yes, I have.

Q. What is the purpose of your supplemental testimony?

A. My supplemental testimony presents and describes Form 42-9E, which the Commission has directed FPL and other utilities to begin filing this year. Form 42-9E shows the capital structure, components and cost rates FPL used to calculate the revenue requirement rate of return applied to capital investments and working capital amounts included for recovery in the Environmental Cost Recovery (ECR) Clause 2010 Estimated/Actual true-up costs.

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

A. Yes, I have. My Exhibit TJK-3 consists of Form 42-9E for the January 2010 through December 2010 true-up period. Thus, Exhibit TJK-3 reflects the capital structure, components and cost rates FPL used to calculate the revenue requirement rate of return applied to ECR capital investments and working capital amounts for the period January 2010 through December 2010.

Q. What capital structure, components and cost rates did FPL use to calculate the revenue requirement rate of return for the period January 2010 through December 2010?

A. For January and February 2010, FPL has used the actual 2006 capital structure, components and debt cost rates from the December 2006 Surveillance Report, together with the 11.75% common equity cost rate that was approved for regulatory purposes such as the ECR Clause in FPL's 2005 rate case settlement agreement by Order No. PSC-05-0902-S-EI. For March 2010 through December 2010, FPL uses the capital structure and cost rates approved in FPL's 2009 rate case per Order No. PSC-10-0153-FOF-EI.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF TERRY J. KEITH

DOCKET NO. 100007-EI

AUGUST 27, 2010

Q. Please state your name and address.

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

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

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

Q. Have you previously testified in this docket or any other predecessor dockets?

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 2011 through December 2011 period.

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

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

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

A. Yes. Exhibit TJK-4 consists of eight documents, PSC Forms 42-1P through 42-8P 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 2011 ECRC factors. Form 42-8P provides the capital structure, components and cost rates relied upon to calculate the revenue requirement rate of return applied to capital investments and working capital amounts included for recovery through the ECRC for the period January 2011 through December 2011.

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 2011 through December 2011. Total environmental requirements, adjusted for revenue taxes, are $134,661,393 (Appendix I, Page 2, Line 5) and include $174,762,078 of environmental project revenue requirements (Appendix I, Page 2, Line 1c) decreased by the estimated/actual true-up over-recovery of $35,697,142 for the January 2010 - December 2010 period (Appendix I, Page 2, Line 2), and by the final true-up over-recovery of $4,500,429 for the January 2009 – December 2009 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 71) 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 72 through 132) 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 133) 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 134) presents the calculation of the proposed 2011 ECRC factors by rate class.

Q. Please describe Form 42-8P.

A. Form 42-8P (Appendix I, Page 135) presents the capital structure, components and cost rates relied upon to calculate the revenue requirement rate of return applied to capital investments and working capital amounts included for recovery through the ECRC for the period January 2011 through December 2011.

Q. Are all costs listed in Forms 42-1P through 42-8P attributable to Environmental Compliance projects previously approved by the Commission?

A. Yes, with the exception of the Section 112 MACT ESP Project and the Martin Plant Barley Barber Swamp Iron Mitigation Project, for which FPL is now petitioning for approval and which are discussed and supported in the testimony of Randall R. LaBauve.

Q. Does this conclude your testimony?

A. Yes, it does.

ERRATA SHEET

Direct testimony of Terry J. Keith. Environmental Cost Recovery Projections for the period January 2011 through December 2011, filed on August 27, 2010 in Docket No. 100007-EI.

10/13/2010
DATE

Terry J. Keith
TERRY J. KEITH

PAGE/LINE	ERROR OR AMENDMENT	REASON FOR CHANGE
2/23	Strike "$134,661,393" on line 23. Replace with "$134,189,315".	Removal of projected costs associated with FPL's proposed Scherer Unit 4 Steam Turbine Upgrade Project from the 2011 projections and FPL's proposed ECRC factors for January 2011 through December 2011.
2/24	Strike "$174,762,078" on line 24. Replace with "$174,314,088".	Removal of projected costs associated with FPL's proposed Scherer Unit 4 Steam Turbine Upgrade Project from the 2011 projections and FPL's proposed ECRC factors for January 2011 through December 2011.
3/2	Strike "$35,697,142" on line 2. Replace with "$35,720,891".	Removal of projected costs associated with FPL's proposed Scherer Unit 4 Steam Turbine Upgrade Project from the 2011 projections and FPL's proposed ECRC factors for January 2011 through December 2011.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF RANDALL R. LABAUVE

DOCKET NO. 100007-EI

AUGUST 2, 2010

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 or predecessor dockets?

A. Yes, I have.

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

A. The purpose of my testimony is to present for Commission review and approval a new activity that FPL must undertake starting in 2010 for its approved St. Lucie Turtle Net Project. I also present a new activity for FPL's approved Clean Air Interstate Rule (CAIR) Compliance Project and discuss EPA's proposed Transport Rule that is intended to replace CAIR.

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

A. Yes. I am sponsoring the following exhibits included in Appendix II:

- RRL-1 – Proposed design of new barrier structure
- RRL-2 – EPA Transport Rule Fact Sheet

St. Lucie Turtle Net – Modification

Q. What is the new activity associated with the St. Lucie Turtle Net Project for which FPL is requesting recovery?

A. As I will explain in more detail, the St. Lucie Turtle Net Project will require the construction and installation of a new barrier structure due to damage to the existing structure resulting from an unforeseen intrusion of large quantities of algae, which occurred in 2009.

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 No. 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 of the generating units. The existing net had become deformed to the point that it could trap turtles when influxes of algae and jellyfish entered the intake canal. The net replacement and enhancement of the net system was performed in 2002. In 2007, the antifoulant and protective coating on the existing 5-inch net deteriorated and was allowing marine growth to adhere to the net material. At that time, the net had also experienced UV damage and needed to be replaced. FPL received Commission approval to recover costs associated with the purchase and installation of a new 5-inch net in Order No. 07-0922-FOF-EI, issued on November 16, 2007.

Q. Please describe the events requiring the new activities.

A. Throughout the month of October 2009, the primary 5-inch barrier net experienced mostly light loads of algae, in line with what FPL had previously experienced. On October 20, moderate to heavy loads of algae began entering the canal, which threatened the integrity of the net. The current structure was designed for 50% blockage. On October 22, the algae created a blockage of approximately 80% of the primary 5-inch barrier net. This resulted in failure of the net due to system hardware breaking loose from the north concrete piling, submerging the north half of the net 2 – 5 feet underwater. The net was inspected the same day in order to look for turtles that may have been caught under the net and assess the cause of the failure. Additionally, FPL increased turtle surveillance and capture efforts to include areas west of the primary net.

On October 23, the primary net was lowered completely in order to safely inspect and begin removing algae. On October 25, large float buoys were installed on the primary barrier net creating an effective temporary barrier. On October 28, a thorough inspection of the primary net was completed, which included the concrete pilings, hardware, and cables. During this inspection, a ¾ inch stainless steel cable was found to be severed, sheave support bolts were broken and both the north and south concrete pilings had experienced significant cracking and delamination. In addition, activities associated with cleaning and repairing the floats on the 8-inch barrier net were initiated. The floats performed as designed and effectively kept turtles from moving further down the canal.

Q. What is the current condition of the net and supporting structures?

A. The net is currently in a temporary configuration, relying on large float buoys to hold it in place and create an effective temporary barrier for the turtles.

Q. Can the temporary net system remain in its current condition?

A. No. FPL notified the Florida Fish and Wildlife Conservation Commission (FWC) and the National Marine Fisheries Service (NMFS) that the net had failed via the monthly report on November 5, 2009. In every monthly report since then, an update on the status of the net has been included. In March 2010, FPL held a conference call with FWC and NMFS personnel to discuss plans for permanently fixing the net. In subsequent discussions held in May 2010 with both agencies (FWC and NMFS), they reminded FPL that the analysis and extent of taking endangered species contemplated by the biological opinion under Appendix B to the Facility Operating License for St. Lucie Unit 2 is based on the assumption that the 5-inch barrier net will be effective, as well as the other minimization and mitigation measures ongoing at the plant. In view of the problems with the net that FPL experienced in 2009, the agencies recommended that FPL create a more robust barrier structure that can withstand significant algal events and similar environmental challenges, so that the net can continue to perform its intended function. FPL concurs with the agencies' recommendation.

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

A. The St. Lucie Turtle Net Project will require the construction and installation of a more robust barrier structure that can withstand significant algal events and similar environmental challenges. Planned activities include the mobilization of barges for the removal of damaged piles and installation of new piles and a support structure to effectively secure the net. The new support structure will include flow holes, as shown on Exhibit RRL-1, to address potential blockage associated with future environmental challenges, such as jellyfish, algae and sea grass events. Engineering for the new support structure is expected to begin during the last quarter of 2010. Once the engineering design is complete, FPL will present the net support structure to the FWC and NMFS. FPL will need approval from the agencies before moving forward with construction, which, if approved, is expected to start the second quarter of 2011.

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

A. FPL projects to incur $1.4 million of capital costs, which include the engineering and construction and installation of the new net support structure. Currently there are no O&M costs projected for these activities.

Q. Has FPL estimated its 2010 ECRC recovery amount for the proposed activities?

A. Yes. The capital costs for 2010 are estimated to be $195,000 and are associated with Engineering and Project management costs.

Q. Has FPL estimated its 2011 ECRC recovery amount for the proposed activity?

A. Yes. The capital costs for 2011 are estimated to be $1,185,000 and are associated with project implementation costs, which include mobilization of barges and cranes, removal of damaged structure, turbidity control, labor and material costs associated with installation of 26 concrete piles, concrete wing walls and net.

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

A. Consistent with our standard practice for all contractor services procurements, FPL will competitively bid all of the activities performed by outside firms to ensure costs are prudently incurred. FPL will revise project estimates as specific costs become available through contractor specific bids and costs. FPL will continue to perform due diligence over the life of this project to minimize costs.

Q. Is FPL recovering the costs of these activities through any other mechanism?

A. No.

<u>Clean Air Interstate Rule (CAIR) Compliance Project Update</u>

Q. Please briefly describe FPL's currently approved CAIR Compliance Project.

A. FPL's CAIR Compliance Project currently consists of the installation of Selective Catalytic Reduction (SCR) controls and Flue Gas Desulfurization (FGD) on Plant Scherer Unit 4, operation of SCR controls that were installed on St. John's River Power Park (SJRPP) Units 1 and 2 for CAIR compliance, and the 800 MW Cycling Project for the Manatee and Martin 800 MW units. FPL had also purchased, and subsequently surrendered for compliance, CAIR NOx emission allowances and installed Continuous Emission Monitoring Systems (CEMS) at FPL's Gas Turbine Peaking Units in 2008 to comply with CAIR requirements.

Q. Does FPL propose a new activity to be included as part of the approved CAIR Compliance Project?

A. Yes. On July 9, 2010 in its *Preliminary List Of New Projects To Be Submitted For Cost Recovery,* FPL provided notice to the Commission of an update to its CAIR and CAMR Compliance Project. As a result of the installation of pollution controls on Scherer Unit 4 to comply with the CAIR and Georgia Multipollutant Rule requirements, approximately 35 MW of generation output is lost to station service. FPL, in cooperation with Georgia Power Company has identified an opportunity to improve the performance and efficiency of the steam turbine, which is projected to result in a gain in unit output of 35 MW. The upgrade to the steam turbine will substantially offset the additional parasitic loads imposed by the baghouse, scrubber and SCR. In the *Preliminary List,* FPL identified approximately $5 million - $7 million of capital costs for the steam turbine upgrade and stated that the upgrade would result in fuel savings of approximately $30 million - $35 million on an NPV basis.

Q. What costs does FPL expect to incur in 2010 for the turbine upgrade?

A. [redacted] In July's filing FPL identified that potential impacts from the EPA Tailoring Rule may necessitate beginning installation of the steam turbine components prior to July 2011. [redacted] FPL will provide the 2011 projected costs for the steam turbine upgrade in its projection testimony to be filed on August 27, 2010.

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

A. Georgia Power Company, as FPL's operating agent for Scherer Unit 4, competitively bids activities performed by outside firms to ensure that costs are reasonable and prudent. FPL routinely participates in, and provides funding for, annual Scherer joint ownership reviews and audits of costs incurred by Georgia Power Company on behalf of FPL and the other joint owners.

Q. Is FPL recovering the costs of this activity through any other mechanism?

A. No. FPL is proposing to recover only the capital costs associated with the steam turbine upgrade. FPL will recover O&M costs associated with maintenance through its base rates as is being done for the existing steam turbine.

Q. Has EPA proposed changes to the Clean Air Interstate Rule?

A. Yes. On July 6, 2010, EPA made public its proposed 1,361 page Transport Rule in response to the remand of CAIR by the U.S. Court of Appeals for the District of Columbia in December 2008. The Court's instructions to EPA included direction to remove the Fuel Adjustment Factors, which had been challenged by FPL as beyond EPA's authority.

Q. Please briefly describe EPA's proposed Transport Rule.

A. EPA proposes that the Transport Rule be implemented on January 1, 2012 to comply with statutory requirements for implementation of several National Ambient Air Quality Standards (NAAQS). Until that date, EPA proposes to leave the existing CAIR compliance requirements in place to temporarily preserve the environmental benefits addressed by CAIR. The Transport Rule, similar to CAIR, will address the impacts of emissions of SO2 and NOx by fossil fuel-fired Electric Generating Units (EGUs) on areas which have been designated as not attaining the 8-hour ozone and/or fine particle (PM2.5) NAAQS. The Transport Rule requires further reductions, which will be needed to attain the standards that have been revised since CAIR was promulgated. Unlike CAIR, the Transport Rule also addresses EGU interference with an area's ability to maintain attainment with a NAAQS. As a result, implementation of the Transport Rule reductions required in 2012 will affect additional states that were not previously included in CAIR and changes to NOx and SO2 state budgets for allowance allocations to EGUs. EPA's preferred approach under the Transport Rule allows intrastate trading and limited interstate trading among power plants but assures that each state will address its own impacts on downwind non-attainment or interference with maintenance of NAAQS, rather than addressing those topics regionally as in CAIR. Under the Transport Rule, state budgets for SO2, annual NOx, and ozone season NOx are directly linked to the measurement of each state's significant contribution and interference with maintenance.

EPA proposes that the Transport Rule be implemented in two phases, which are projected to apply to different groups of states. During the first phase, EPA intends to require power plants in both Group 1 and Group 2 states to operate the control equipment that was installed for CAIR compliance purposes. EPA expects that operating those controls will generally satisfy the emission reduction requirements under the first phase budgets for SO2 and NOx, although additional NOx controls, such as Selective Catalytic Reduction (SCR) systems, may be necessary at some EGUs.

In the second phase, which will be effective starting in January 2014, EPA proposes to further reduce the SO2 budgets for those states whose EGUs impact the more severe non-attainment areas in downwind states (Group 1 states only). To comply with the second phase, EPA anticipates that additional scrubbers (Flue Gas Desulfurization) will be required on coal EGUs within the Group 1 states. The Transport Rule proposes that Florida will be a Group 2 state, although EPA has asked for comments on whether Florida should be added to Group 1 because of a small remaining contribution to non-attainment in the area around Birmingham, Alabama using the emission controls required under the first phase of the Rule. The proposed Transport Rule includes Georgia as a Group 1 state, which would apply to Scherer Unit 4.

Consistent with its approach in other recent rulemaking efforts, EPA has identified its preferred approach to the structure and implementation of the rule but is also soliciting comments on alternatives to this approach. EPA's summary of the Proposed Transport Rule is provided as Exhibit RRL-2.

Q. **Is FPL evaluating the impact of the proposed Transport Rule on its CAIR Compliance Project?**

A. Yes. FPL is currently evaluating impacts to its EGUs from the Transport Rule if promulgated as currently proposed. I should also point out that

FPL must continue to comply with CAIR until the Transport Rule becomes effective on January 1, 2012. Some of FPL's activities in the CAIR Compliance Project, including construction and implementation of SCRs and FGDs at Scherer Unit 4 are required under state regulations and must continue regardless of changes that result from implementation of the Transport Rule. Additionally, installation of the pollution controls currently underway on Scherer Unit 4 would satisfy requirements for additional emission reductions that are proposed in the second phase of the Transport Rule.

Q. **What is EPA's schedule for promulgating the final Transport Rule?**

A. EPA made public its proposed Transport Rule in a July 6, 2010 press conference and subsequently posted the proposed rule, summary and some of the technical support documents it used in development of the rule. EPA expects that the proposed rule will be published in the Federal Register in July of this year, starting the 60-day public comment period on the proposed rule. EPA intends to hold three public hearings on the proposed rule. EPA has stated that they will continue to work with states, tribes, the public, environmental groups and industry to address comments and to implement the rule when final. EPA expects that a final rule will be promulgated in late spring 2011 with implementation of the first phase beginning January 1, 2012. FPL plans to file comments with EPA on the proposed rule.

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

A. Yes.

ERRATA SHEET

Direct testimony of Randall R. LaBauve. Environmental Cost Recovery Estimated/Actual for the period January 2010 through December 2010, filed on August 2, 2010 in Docket No. 100007-EI.

10/13/10
DATE

RANDALL R. LABAUVE

PAGE/LINE	ERROR OR AMENDMENT	REASON FOR CHANGE
1/18	Strike text on line 18 "present a new activity for".	Removal of projected costs associated with FPL's proposed Scherer Unit 4 Steam Turbine Upgrade Project from the 2010 estimated/actual true-up amount.
1/19	Strike line 19.	Removal of projected costs associated with FPL's proposed Scherer Unit 4 Steam Turbine Upgrade Project from the 2010 estimated/actual true-up amount.
7/3-24	Strike lines 3 – 24.	Removal of projected costs associated with FPL's proposed Scherer Unit 4 Steam Turbine Upgrade Project from the 2010 estimated/actual true-up amount.
8/1-24	Strike lines 1 – 24.	Removal of projected costs associated with FPL's proposed Scherer Unit 4 Steam Turbine Upgrade Project from the 2010 estimated/actual true-up amount.
9/1-9	Strike lines 1 – 9.	Removal of projected costs associated with FPL's proposed Scherer Unit 4 Steam Turbine Upgrade Project from the 2010 estimated/actual true-up amount.

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF RANDALL R. LABAUVE

DOCKET NO. 100007-EI

AUGUST 27, 2010

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 or predecessor dockets?

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 two new environmental projects – the Section 112 Maximum Achievable Control Technology (MACT) Electrostatic Precipitator (ESP) Project and the Martin Plant Barley Barber (BBS) Swamp Iron Mitigation Project.

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

A. Yes. I am sponsoring the following exhibits included in Appendix II:

- RRL-3 – Environmental Protection Agency – Proposed Consent Decree, Clean Air Act Citizen Suit, October 28, 2009
- RRL-4– EPA's January 30, 2004 proposed National Emission Standards for Hazardous Air Pollutants (NESHAP) 40 CFR Parts 60 and 63
- RRL-5– FPL Letter to FDEP regarding Martin Plant Industrial Wastewater Facility Permit No. FL0030988 – Administrative Order AO-15-TL – Engineering Feasibility Study Report dated July 16, 2009

<u>800 MW Units MACT Compliance Project</u>

Q. Please describe the law or regulation requiring the 800 MW Units MACT Compliance Project.

A. The Environmental Protection Agency (EPA) regulates Hazardous Air Pollutants (HAPs) through authority granted to the agency under Section 112 of the Clean Air Act (CAA). In December 2000, EPA issued its regulatory finding on emissions of HAPs from electric utility steam generating units pursuant to section 112 (n) (1) (A), determining that it was appropriate and necessary to promulgate standards. After extensive litigation on the appropriate mechanism to regulate HAP emissions, EPA entered into a Consent Decree on October 28, 2009 satisfying a Clean Air Act Citizens Suit filed in December 2008. This Consent Decree is included as Exhibit RRL-3. The Consent Decree established a timeline for EPA's proposal of Maximum Achievable Control Technology (MACT) standards for coal- and oil-fired electric utility steam generating units, requiring a proposed rule no later than March 16, 2011 and a final rule no later than November 16, 2011.

To establish MACT emission standards for existing units, EPA must evaluate and assess the emissions from affected units setting the standard at emission limitations achieved by the best-performing 12% of sources for which EPA has data. In an effort to gather new data to establish MACT standards for coal- and oil-fired units, EPA issued a NESHAP Information Collection Request (ICR) in December of 2009. The ICR required all coal and oil-fired electric utility steam generating units to submit facility operating data; and for a specified list of affected units, to perform fuel sampling and stack emission testing of all HAPs of concern. FPL is presently recovering the costs of complying with the ICR pursuant to Commission approval in Order No. PSC-09-0759-FOF-EI, issued in Docket No. 090007-EI. EPA's evaluation of the fuel and stack test data collected from coal- and oil-fired electric utility steam generating units will be used to establish MACT standards of performance for existing units.

Q. **What regulatory compliance action is required by the MACT Rulemaking?**

A. Under the timetable of EPA's Consent Decree and Section 112's requirement that generating units be in compliance with HAP requirements within three years from their adoption, FPL anticipates that

EPA's MACT rule will require oil-fired steam units to be in compliance with new HAP standards of performance by November 16, 2014. For oil-fired electric utility steam generating units currently in operation, FPL expects that compliance will require the installation and operation of electrostatic precipitators (ESPs), because ESPs are currently used on the low-emitting oil-fired units that will define what constitutes MACT for such units. FPL also anticipates, based on prior experience, that any electric generating units that want the flexibility to operate with more than de minimis percentages of fuel oil, will be characterized by EPA as "oil-fired" and thus will be required to install ESPs as MACT.

Q. Why does FPL believe that the installation of ESPs will achieve the MACT emissions performance standards required for oil-fired electric utility steam generating units?

A. FPL anticipates that data collected from the ongoing NESHAPs ICR will identify that the best emissions-controlled 12% of oil-fired facilities tested in the country will be represented by those units that have ESPs. In the previous proposal of EPA's NESHAPs EPA states in the Preamble:

> *"The Utility RTC [Report to Congress] emissions test data support the conclusion that the same control techniques used to control fly ash PM [particulate matter] will also indiscriminately control Ni and that the effective removal of PM indicates removal of Ni, for a given control device. Therefore, EPA believes that ESP technology represents the MACT floor for Ni for the proposed rule."* (Please see Exhibit RRL-4).

At the time the January 30, 2004 NESHAP was published, EPA proposed to only regulate nickel as the HAP of concern for oil-fired electric generating units. Even if the ICR testing that is currently ongoing in the industry identifies additional HAPs of concern (e.g. chromium), ESPs would continue to be the most effective method for reducing these emissions at oil-fired electric generating units. Therefore, FPL will have to install ESPs at the Martin and Manatee plants to ensure the continued option to operate these facilities burning high percentages of fuel oil.

Q. **Why is it necessary for FPL's Martin and Manatee plants to maintain the option to burn high percentages of fuel oil?**

A. Of FPL's 13 oil-fired electric generating units, Martin Units 1 and 2 and Manatee Units 1 and 2 must maintain the option of operating on a high percentage of fuel oil to provide generation reliability. Several factors support the need to maintain oil-firing capability at these facilities:

- The boiler design of each unit results in a derate for any fuel mix that is less than 70% oil and that increases to a loss of 246 MW per unit when firing on 100% natural gas.
- FPL analysis indicates that the loss of 984 MW as a result of 100% gas firing at the four Martin and Manatee units would require the addition of a new 3-on-1 combined cycle natural gas-fired plant in year 2020 to compensate for the lost generation capacity.
- To be able to meet the electricity demand of our customers during high peak periods, it is imperative that FPL be able to burn fuel

oil, because there is not enough gas supply into our system to meet demand. Just this year in January, FPL burned 967,000 bbls of fuel oil compared to our planned usage of only 4,300 bbls. Year-to-date FPL has burned 5.4 million bbls of fuel oil compared to our planned usage of 1.1 million bbls. This drastic increase in oil consumption has been due in part to the inability to deliver enough gas to meet the high loads FPL has been experiencing in periods of extreme weather. Had we not been able to burn oil, there were days that we could not have met that demand.

- Fuel oil is the Martin and Manatee plants' secondary fuel supply providing:
  - generation reliability in the event of a natural gas pipeline disruption;
  - hedging against higher natural gas prices; FPL analysis indicates that the #6 fuel oil switching option provides a $24 million dollar per year benefit; and
  - optimum access to the electric transmission system on both coasts of Florida.

Q **Why is it necessary to begin construction of the ESPs prior to publication of the final MACT rule?**

A As I noted above, it is clear that the performance standard for electric generating units burning high percentages of fuel oil will require the installation of ESPs. It is also clear that the EPA Consent Decree and Section 112 deadlines dictate a compliance deadline in November 16,

2014. The optimum, least-cost configuration for the Martin and Manatee units is to place the ESPs in between the emission stacks and the boilers at each plant. In order to facilitate this schedule, FPL proposes to begin construction of the first unit ESP in October 2011. Without the extended outages and 2011 construction start date inactive reserve units will have to be brought back on line early at significant cost. Once the first unit ESP is completed, the second unit outage will begin. Following startup of FPL's West County Energy Center Unit 3 in 2011 and Cape Canaveral Energy Center Unit 3 in 2013, the third and fourth unit ESP outages can be overlapping and maintain the necessary reserve margin while still meeting the anticipated November 16, 2014 compliance requirement.

Based on this construction schedule, engineering, and material acquisition must begin in spring of 2011, after publication of EPA's proposed MACT Rule. Failure to begin ESP construction in 2011 risks missing the 2014 MACT compliance date resulting in limitations on the operation of the 800 MW units on oil.

Additionally, FPL believes that there are market benefits of starting this project in 2011 while the material, vendor and engineering design costs are low. The workload for vendors and contractors is down due to the economy, which should provide lower costs and better contract terms if we can lock in contracts prior to an improved market. Due to several new EPA rules, FPL does anticipate that the demand for materials and services will increase over the next several years. While we have not attempted to quantify the economic value of moving prior to the anticipated market increase, we do believe that the value is real and substantial.

Q. Is FPL recovering through any other mechanism the costs for the Section 112 MACT ESP Project for which it is petitioning for ECRC recovery?

A. No. FPL is only requesting recovery of incremental activities associated with the Section 112 MACT ESP Project compliance with EPA requirements. Costs associated with similar activities required to comply with existing state and federal regulations are not included in FPL's estimates for this project.

Q. Has FPL estimated the cost of the Section 112 MACT ESP Project?

A. Yes, FPL has solicited bids from prospective contractors for the design, supply and erection of the ESPs. In addition, FPL Engineering and Construction has estimated the costs for other Balance of Plant activities, such as the new dry ash handling system that will replace the current wet sluicing method of ash handling, foundation pilings, concrete and steel for foundations and changes to electrical power supply and steam coils required as part of the ESP project. The total estimated capital cost for the addition of ESPs at the four 800 MW generating units is $303 million. The first year (2011) capital expenditures are estimated to be $48.3 million in year 2011.

Although FPL does have capital cost estimates, annual O&M costs for operating the ESPs cannot be reliably estimated at this time. The O&M cost will be estimated based on the final design of the ESPs. FPL will not begin to incur any O&M costs until the ESPs become operational during the 2012 - 2014 period.

Q **Has FPL compared the costs of installing ESPs at the Martin and Manatee plants to the option of not installing ESPs and operating these units subject to the severe constraints that would place on oil firing?**

A. Yes, FPL's analysis comparing the installation of ESPs vs. no-ESPs results in an estimated benefit of $487 million CPVRR (over the first 20 years after installation) for adding the ESPs, which includes an estimated $24 million per year fuel switching benefit for adding the ESPs and maintaining the option to burn oil. Notably, the economics of this analysis are driven by the costs of new combined cycle natural gas-fired generating capacity that would be required to make up the lost 984 MW of capacity at the 800 MW steam units in the no-ESP case. The additional combined cycle unit would be required in 2020 to meet reserve margins.

Q. **How will FPL ensure that the costs incurred for this project are prudent and reasonable?**

A. Consistent with our standard practice for all contractor services and procurements, FPL has competitively bid the design, supply and erection of the ESPs that will be performed by outside firms. Further, we will also seek competitive bids for the design, supply and construction of the dry ash handling system and Balance of Plant for each facility. FPL will revise project estimates as specific costs become available through contractor specific bids and costs.

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

A. No.

<u>Martin Plant Barley Barber Swamp Iron Mitigation Project</u>

Q. **Please provide a brief description of the Barley Barber Swamp at FPL's Martin Plant.**

A. The Barley Barber Swamp (BBS) is a 400-acre freshwater cypress preserve located in Western Martin County adjacent to the Martin cooling pond. During the planning of the Martin cooling pond in the 1970s, FPL made the decision to preserve this unique ecosystem, which includes centuries old cypress trees and a variety of plants and wildlife in a swamp of slowly moving water. Later, a mile-long boardwalk was constructed in the swamp and tours were made available to the public until the events of September 11, 2001, after which the boardwalk was closed for security reasons. FPL plans to reopen the boardwalk to the public in the winter of 2010-2011.

Q. **Please describe the historical permit conditions that impact the water level and discharge limits in the BBS.**

A. In the early 1980s, FPL installed a series of sumps around the cooling pond to collect the seepage water that migrates through the cooling pond embankment, to discharge it to surrounding water bodies. In 1983, FPL entered into a water use agreement with the South Florida Water Management District (SFWMD) that included a requirement to hydrate the BBS to maintain the ecological function of the swamp. To comply with the requirement to hydrate the BBS, the discharge from six of these sumps is routed to the BBS. Pursuant to the SFWMD agreement, FPL retained a consultant, who suggested that certain water levels be maintained within the BBS during certain periods, using the cooling pond seepage as the source of water, to restore the hydrologic regime in the swamp to conditions that are as close as possible to natural hydrologic conditions.

As part of the plant's industrial wastewater discharge permit issued in 1991, the Martin Plant was required to monitor the discharge of all of the sumps to evaluate the presence of various pollutants, including iron. This monitoring showed that three of the sumps that discharged into the BBS were above the industrial wastewater permit limit for iron, which is 1.0 mg/L. FPL then conducted a study of the iron discharge, which concluded that the source of the iron was the soil in the embankment and that the iron discharge would not adversely affect the BBS. FPL applied for a variance for the iron discharge and submitted data to the Florida Department of Environmental Protection (FDEP) to support an alternative discharge limit of 4.8 mg/L. This limit would accommodate the discharge from all the sumps to the BBS without further controls. Thereafter, the

Martin Plant received a modification to its Industrial Wastewater Permit that included a variance for the iron discharge, which set the discharge limit at 4.8mg/L.

Q. Please describe the law or regulation requiring the Martin Plant Barley Barber Swamp Iron Mitigation Project.

A. As part of the renewal process for the wastewater permit with FDEP in 2005, FPL applied for a renewal of the variance for iron in the sump discharges to the BBS. In response, FDEP indicated that they, and EPA, would no longer grant a variance for the iron discharge but agreed to issue an Administrative Order (AO) allowing FPL time to find a remedial solution to comply with an iron limit (based on the Florida Water Quality Standards) of 1.0 mg/L.

On June 11, 2008, the Martin Plant received the renewed Industrial Wastewater Facility Permit No. FL0030988 from the FDEP, which included AO-15-TL. The AO addresses the need for the Martin Plant to comply with the Class III Fresh water quality standard for iron at the outfall of the BBS and establishes an interim limitation of 4.8 mg/L, which will expire on June 11, 2011, the compliance deadline for the AO. Following the compliance deadline, FPL will be required to maintain the iron levels at the BBS at or below 1.0 mg/L. As noted in the July 16, 2009 letter to FDEP, FPL agreed to a study schedule, which required an initial Plan of Study to evaluate potential engineering options and monitoring from November 1, 2008 to May 1, 2010 to confirm which option would best meet the compliance requirements. FPL's letter to FDEP is included as Exhibit RRL-5. The schedule required that FPL review the monitoring data and make a decision by June 1, 2010 and thereafter select a contractor and implement the project by the compliance deadline of June 11, 2011.

Q. Has FPL conducted an engineering evaluation as required by the AO?

A. Yes. As required by the AO, FPL submitted a Plan of Study that has been approved by the FDEP. The study included an initial evaluation of potential options to meet the AO requirements and the collection of additional iron data over 18 months to determine which of those options would best meet the compliance requirements. Based on analysis of the data collected, FPL concluded in May 2010 that the iron levels for two of the sump discharge points were still above the allowable iron limit and a third sump discharge point was elevated, thus requiring that we take remedial action to meet the new iron limit.

Q. What options did FPL consider to bring the iron levels at the BBS in compliance with the AO?

A. FPL considered three options. The first was to "turn around" two or three of the sumps, which exhibited elevated iron values. In this option, the water from the sumps would be returned to the cooling pond, rather than discharging to the BBS. In order to be able to keep the BBS properly hydrated, a siphon would be set up to withdraw water from the cooling pond replacing water that was previously discharged from the sumps to the BBS.

The second option that was considered was to turn around all six of the sumps and install siphons. This option would “fix” the iron issue and also enhance FPL’s ability and flexibility in providing water to the BBS. Additionally, it would reduce future expenditures if new water quality standards (such as the proposed nutrient standards) required discharges from the remaining four sumps to be returned to the cooling pond.

The third option, which was suggested by the FDEP, involved turning around all six pumps and adding a pipe manifold connecting the pumps to allow mixing of sump and pond water. It was decided that this option added unnecessary complexity to the system with little or no environmental gain.

Q. **Please briefly describe how FPL proposes to comply with the AO requirements of the renewed wastewater permit.**

A. To comply with the new requirements set forth by the AO and based on the engineering study and comments from FDEP, FPL is implementing option 1, which will redirect the existing flow of the three sumps exhibiting the highest iron values from the BBS discharging collected water back into the cooling pond. This will require the engineering and installation of a new discharge piping system, and a siphon from the cooling pond to the BBS to replace the flow loss resulting from reversing the flow from the existing sumps. The siphon will move water from the pond that has low iron levels into the BBS replacing embankment seepage water having higher iron levels. Future modifications of the remaining sumps will be evaluated if future action is required by new permit limits.

Q. When does FPL plan to begin work on this project?

A. Currently, FPL plans to begin construction during the first quarter of 2011 and the project is expected to be completed by March 1, 2011, which will provide enough time to meet the compliance deadline of the AO.

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

A. FPL projects it will incur $250,000 in capital costs, which will include pipe and siphon engineering and installation and $5,000 in ongoing O&M costs, for the inspection, maintenance and repair of valves and piping components.

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

A. Consistent with our standard practice for all contractor services procurements, FPL will competitively bid all of the activities performed by outside firms to ensure costs are prudently incurred. FPL will revise project estimates as specific costs become available through contractor specific bids and costs. FPL will continue to perform due diligence over the life of this project to minimize costs.

Q. Is FPL recovering the costs of these activities through any other mechanism?

A. No. FPL has only recently concluded what measures need to be taken, and had no basis for projecting the compliance costs in its 2009 rate case

MFRs.

Q. Does this conclude your testimony?

A. Yes.

CHAIRMAN GRAHAM: Decision time.

MS. BROWN: There are proposed stipulations on all issues in the case. We suggest that you could make a bench decision, and we recommend that you approve the stipulations identified in Section VIII of the Prehearing Order, Pages 4 through 11. Those are Issues 1 through 8, and 9A through 9G. And we note that OPC, FIPUG, and FEA join the stipulations on Issues 5, 8, 9D and 9F, and they take no position on the other proposed stipulations.

CHAIRMAN GRAHAM: All right. So you guys want to stipulate this one, too, huh? You don't want for us to hash it out or change anything?

MS. BROWN: That's correct, Mr. Chairman.

CHAIRMAN GRAHAM: Are you sure Florida Power and Light doesn't want to add anything here?

MR. BUTLER: Tempting, but I'll resist the temptation.

CHAIRMAN GRAHAM: All right. Commissioner Edgar.

COMMISSIONER EDGAR: Thank you, Mr. Chairman.

I will note a thank you to our staff and to the parties who on all dockets, obviously, with the stipulated issues worked together. And on this one in particular, I think there was one remaining issue up until just the last day or two that they were still working on, and obviously were able to come to agreement.

And as you have said, that made my job as Prehearing Officer certainly easier, as well. So with that, thank you to all the parties for working together. I would move that we approve the proposed stipulations for Issues 1 through 8 and Issues 9A through 9G, as reflected in the Prehearing Order.

CHAIRMAN GRAHAM: It has been moved and seconded to approve the Stipulated Issues 1 through 8 and 9A through 9G. Are there any further discussion on the motion?

Seeing none, all in favor say aye.

(Vote taken.)

CHAIRMAN GRAHAM: Those opposed?

By your action you have approved the motion -- the stipulations as moved.

Anything else, staff, to be addressed in Docket 07?

MS. BROWN: Post-hearing filings will not be necessary now, and the final order will be issued no later than February 1st.

CHAIRMAN GRAHAM: I see here February 15th.

MS. BROWN: Yes. That was my mistake early on, and in briefings with Commissioner Brown earlier that was brought to my attention. We need to have these orders issued by February 1st in order that there will be 30 days before they go into effect. I apologize.

CHAIRMAN GRAHAM: That's quite all right. I just wanted to make sure that they were correct on the record. All right.

A point of personal privilege. Once again, I'm glad that you guys were able to sit down and hash this out and come to an agreement. As at least three of us know that went through this just a month or so ago, that this could be a long onerous process, and I'm glad that you guys hashed it out on your own.

I think that's the direction I'd like to see this Commission going towards, and I do thank you guys for your effort. I thank Florida Power and Light for your effort, and the Intervenors for their effort, as well. And is there anything else to be added?

Commissioner Edgar.

COMMISSIONER EDGAR: Thank you.

I would just also like to add a special thank you to our staff, particularly our legal staff. As Commissioner Balbis and others have pointed out, these dockets have just voluminous technical data and documents, and our staff worked particularly hard to help me go ahead and dispose of a number of the requests for confidentiality, and that took an extra push at the end, and I'm appreciative of that effort.

CHAIRMAN GRAHAM: Anything else?

Once again, thank you very much. And first we will adjourn Docket Number 07. And if there is nothing else to add, we will adjourn this meeting as a whole.

We are adjourned. Thank you.

(The hearing concluded at 1:51 p.m.)

STATE OF FLORIDA)

: CERTIFICATE OF REPORTER

COUNTY OF LEON)

I, JANE FAUROT, RPR, Chief, Hearing Reporter Services Section, FPSC Division of Commission Clerk, 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' attorney or counsel connected with the action, nor am I financially interested in the action.

DATED THIS 28th day of January, 2011.

Jane Faurot

JANE FAUROT, RPR
Official FPSC Hearings Reporter
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