

**PROGRESS ENERGY FLORIDA**

**DOCKET NO. 060001-EI**

**Fuel and Capacity Cost Recovery  
Final True-Up for the Period  
January through December, 2005**

**DIRECT TESTIMONY OF  
PAMELA R. MURPHY**

**April 1, 2006**

1 **Q. Please state your name and business address.**

2 A. My name is Pamela R. Murphy. My business address is P. O. Box 1551,  
3 Raleigh, North Carolina 27602.

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

6 A. I am employed by Progress Energy Carolinas, Inc., as Director, Gas & Oil  
7 Trading.

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9 **Q. Have your duties and responsibilities remained the same since you**  
10 **last testified in this proceeding?**

11 A. Yes, my responsibilities for the procurement and trading of natural gas and  
12 oil on behalf of Progress Energy Florida (PEF or the Company) have  
13 remained the same.

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

16 A. The purpose of my testimony is to summarize the results of PEF's Risk  
17 Management Plan for 2005, and to provide the information required by  
18 Order No. PSC-02-1484-FOF-EI, which approved the resolution of the

1 hedging-related issues pending before the Commission in Docket No.  
2 011605-EI.

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4 **Q. Have you prepared exhibits to your testimony?**

5 A. Yes, I have prepared Exhibit No. \_\_\_\_ (PRM-1T), a three-page summary of  
6 the results of the Company's Risk Management Plan for the true-up period,  
7 and Exhibit No. \_\_\_\_ (PRM-2T), a one-page listing of the hedging  
8 information required by the Commission-approved resolution of issues in  
9 Docket No. 011605-EI, both of which are attached to my prefiled testimony.

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11 **Q. Did PEF encounter any force majeure events in 2005?**

12 A. Yes, PEF encountered four force majeure events. Tropical Storm Cindy,  
13 Hurricane Dennis, Hurricane Katrina and Hurricane Rita entered the Gulf of  
14 Mexico and disrupted a portion of our contracted natural gas supplies.

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16 **Q. What measures did PEF take during these force majeure events to  
17 maintain the load of its customers?**

18 A. As discussed in my testimony of March 1, 2006 related to the 2005 storms,  
19 PEF took the following measures to mitigate natural gas supply  
20 interruptions during the storm-related force majeure events: 1) purchased  
21 replacement supplies, 2) purchased supplies from third party storage  
22 accounts, 3) utilized three different 10-day storage daily call options, 4)  
23 utilized No. 2 fuel oil to the extent necessary for reliability purposes, and 5)  
24 worked with Gulfstream Natural Gas (Gulfstream) and Florida Gas  
25 Transmission (FGT) to use excess gas in their pipelines to meet load.

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**Q. What measures did PEF undertake to minimize other risks identified in its Risk Management Plan?**

A. PEF continued to perform its daily management activities outlined in the Plan to monitor and, to the extent possible, mitigate risks to its customers.

**Q. Did PEF follow the processes and guidelines outlined in the Plan?**

A. Yes, all processes and guidelines were followed.

**Q. What hedging activities did PEF undertake for fuel and wholesale power?**

A. PEF did not hedge wholesale power for 2005. With regard to coal prices, PEF did secure coal under fixed price term contracts for 2005. PEF did make economic purchases, as well as wholesale power sales to third parties that resulted in overall savings to customers of approximately \$46 million. With respect to natural gas, PEF met all of its hedging strategy objectives to: 1) mitigate price risk and volatility, 2) provide gas price certainty, 3) maintain a diverse portfolio, and 4) provide potential for ratepayer savings. To that end, the following transactions were entered into by the Company:

- 1) PEF had several fixed price contracts that resulted in additional savings to customers of approximately \$121.7 million. As of December 31, 2005, these fixed priced contracts had a favorable marked-to-market value through 2010 of approximately \$519.7 million.

1           2) The Company used financial swaps to fix the price on a portion of the  
2           residual oil used in 2005 that resulted in a net savings to customers of  
3           approximately \$70.3 million.

4           To summarize, PEF met its 2005 hedging objectives including the objective  
5           of providing a savings to ratepayers. A total savings to customers of  
6           approximately \$192 million was attained in addition to approximately \$46  
7           million in economic power purchases and excess power generation sales.

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9           **Q. Please describe PEF's process for procuring natural gas at market**  
10           **prices.**

11           A. PEF buys virtually all of its term natural gas at market index prices. It  
12           purchases most of its gas supply on either a short-term or long-term basis  
13           using a Request for Proposal process to identify suppliers that can meet  
14           the Company's needs. The resulting contracts identify market indices to  
15           establish daily or monthly gas prices. The Company also builds in price  
16           flexibility to be able to change a floating market index price to a fixed price  
17           for a certain amount of time to implement its phased hedging strategy to  
18           reduce price volatility for its ratepayers. Some supplies are purchased at a  
19           fixed price initially to hedge physical natural gas to execute PEF's hedging  
20           strategy mentioned above. For the most part, natural gas prices are  
21           determined by the market index at the location of the PEF's receipt points  
22           to its firm transportation capacity. For example, gas purchased at FGT  
23           Zone 3 is priced based on either Platts Inside FERC, Gas Market Report,  
24           first of the month posting for FGT Zone 3 or Platts Gas Daily, daily price  
25           survey midpoint for the day of flow for FGT Zone 3.

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**Q. Please describe PEF's process for procuring residual oil and distillate oil at market prices.**

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

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A. Yes

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## SUMMARY OF THE SUCCESS OF RISK MANAGEMENT PLAN

Progress Energy Florida's (PEF) Risk Management Plan (Plan) was developed in mid-2002 to identify certain risks associated with fossil fuel and wholesale power requirements. The Plan also identified, among other things, the controls, oversight, risk reporting, and processes that PEF would follow to carry out its Plan. To that end, the following summarizes the various items listed above for 2005:

### I. Risk Identification – Force Majeure Events

- A. Tropical Storm Cindy – (July 5-7) – During the force majeure event, PEF purchased replacement supplies from the spot market, purchased gas supplies from third party storage accounts, utilized fuel oil to the extent necessary for reliability purposes, and worked with Gulfstream Natural Gas (Gulfstream) and Florida Gas Transmission (FGT) to use existing gas in the pipelines to meet load.
- B. Hurricane Dennis – (July 8–13) – During the force majeure event, PEF purchased replacement supplies from the spot market, purchased gas supplies from third party storage accounts, utilized term gas supply daily call options for the 2005 hurricane season, utilized fuel oil to the extent necessary for reliability purposes, and worked with Gulfstream Natural Gas (Gulfstream) and Florida Gas Transmission (FGT) to use existing gas in the pipelines to meet load.
- C. Hurricane Katrina/Hurricane Rita – (August 26– October 17) – During the force majeure event, PEF purchased replacement supplies from the spot market, purchased gas supplies from third party storage accounts, utilized term gas supply daily call options for the 2005 hurricane season, utilized fuel oil to the extent necessary for reliability purposes, and worked with Gulfstream Natural Gas (Gulfstream) and Florida Gas Transmission (FGT) to use existing gas in the pipelines to meet load.

### II. Daily Management Activities

- A. Fuel Oil – 11.0 million barrels of #6 oil were projected vs. an actual of 10.3 million barrels. For #2 oil, 1.3 million barrels were projected vs. an actual of 1.1 million barrels. Month-to-month variances were handled by working with suppliers to change delivery schedules as necessary. Deliveries were interrupted several times in late summer due to the multiple hurricane impacts on Florida as well as the Gulf of Mexico supply sources and transport routes. This was managed by a combination of measures including procuring supplemental supplies and utilizing inventories.

- B. Natural Gas – Month-end gas imbalances were either traded with third-party counterparties or cashed out by FGT and Southern Natural Gas System (Sonat). The monthly imbalances on FGT and Sonat were a result of balancing actual burns versus nominations with FGT and Sonat that could not be mitigated due to alert day restrictions and/or end-of-month timing. Month-end gas imbalances on Gulfstream are mitigated using PEF's Operational Balancing Agreement. PEF is allowed to carryover monthly imbalances to the next month without penalty.
- C. Coal – Multiple hurricanes and tropical storms impacting Florida and the Gulf of Mexico during the summer and fall interrupted the delivery of coal to Crystal River. This was managed by a combination of measures including utilizing inventory and diverting purchases of water delivered foreign coal to alternate terminals for transport to Crystal River.
- D. PEF purchased daily transmission on an as available basis to support economy purchases. In addition, PEF purchased a 100 MW annual transmission position, an additional 100 MW monthly transmission position for the period May-June, 150 MW for July-August and 100 MW for September to improve diversity and availability of economic purchase opportunities.
- E. Dispatch is done on an economic basis. This ensures that lower fuel and purchased power costs are passed to ratepayers. This dispatch is updated twice daily for next-day projected load forecasts. This process may, on occasion, deviate from economic dispatch due to operational problems at plant sites or forces beyond our control.

### III. Monitoring of Industry Events

- A. Weekly gas storage injection/withdrawal amounts published by Energy Information Administration (EIA) are followed to determine short- and long-term effects to future gas prices. In addition, rig counts are also followed to monitor the increase/decrease of drilling activity for replacement reserves.
- B. Weekly EIA oil inventory reports are followed to determine short and long-term effects to future oil prices.
- C. Defaults by suppliers based on bankruptcies or announcements to exit the market are monitored by our credit section, as well as the respective front office personnel.
- D. Various daily coal price reports are followed to determine the short and long-term effect to future coal prices. In addition, coal transportation costs are monitored.

**IV. Price Risk Mitigation**

- A. Natural Gas – PEF met all of its hedging strategy objectives to: 1) mitigate price risk and volatility, 2) provide gas price certainty, 3) maintain a diverse portfolio, and 4) provide potential for ratepayer savings. PEF had several fixed price contracts that resulted in stabilizing prices for a portion of its natural gas requirements, and provided a savings to the ratepayers of \$121.7 million. Additionally, as of December 31, 2005, physical and financial hedged contracts had a favorable marked-to-market value through 2010 of approximately \$519.7 million.
- B. Wholesale Power – Savings from wholesale sales and purchases for 2005 were as follows:
1. Sales - \$1.7 million
  2. Purchases - \$45.6 million
- C. Fuel Oil – For 2005, PEF financially hedged the price of residual fuel oil which resulted in a net savings to customers of \$70.3 million.
- D. Total Value Created: \$239.3 million

**V. Process and Guidelines**

- A. The Mid Office ensures compliance with internal audit, corporate risk policies, procedures and guidelines, Sarbanes-Oxley (Sarbox), FAS 133 and process requirements of the Regulatory, Tax and Treasury groups, by providing appropriate and periodic analysis and reporting. Mid Office provides reports to middle and upper management. Mid Office also provides daily reporting of marked-to-market and stress testing on all gas and oil hedging activities.
- B. Audit Services continues to provide the services outlines in the Plan for fuel and wholesale power purchases. Their audits in 2005 included various aspects related to compliance, trading and procurement and operational perspectives for portfolio management, fuel procurement and wholesale power purchases. The audits completed in 2005 had no major findings.
- C. PEF natural gas, fuel oil, and wholesale power processes and procedures continue to be refined as part of our overall effort to improve business practices.
- D. The guidelines referenced in the Plan have been adhered to in 2005.



Progress Energy Florida, Inc.

Docket No. 050001-EI

Witness: Murphy

Exhibit No. PRM-2T

**PROGRESS ENERGY FLORIDA, INC.**

Hedging information provided as part of the 2005 Fuel Clause Final True-up Filing as required by Order No. PSC-02-1484-FOF-EI, Issued October 30, 2002 in Docket No. 011605-EI

Hedging Instrument	Fuel Type	Total 2005 Hedged	Volume	Avg Period of Hedge	Total Cost of Hedge
Fixed Price Swaps	Heavy Oil	6,570,000	bbls*	Month	\$0
Fixed Price Contact	Natural Gas	43,403,224	mmbtu**	daily	\$0

\* Financial

\*\* Total physical delivered gas hedges