

**PROGRESS ENERGY FLORIDA**

**DOCKET No. 050001-EI**

**Fuel and Capacity Cost Recovery  
Final True-Up for the Period  
January through December, 2004**

**DIRECT TESTIMONY OF  
PAMELA R. MURPHY**

**April 1, 2005**

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.

4

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

6 A. I am employed by Progress Energy Carolinas in the capacity of Director,  
7 Gas & Oil Trading.

8

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 (Progress Energy or the Company)  
13 have remained the same.

14

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

16 A. The purpose of my testimony is to summarize the results of Progress  
17 Energy's Risk Management Plan for 2004, and to provide the information  
18 required by Order No. PSC-02-1484-FOF-EI, which approved the resolution

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

3  
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.

10  
11 **Q. Did Progress Energy encounter any force majeure events in 2004?**

12 A. Yes, Progress Energy encountered two force majeure events. Tropical  
13 Storm Bonnie and Hurricane Ivan entered the Gulf of Mexico and disrupted  
14 a portion of our contracted natural gas supplies.

15  
16 **Q. What measures did Progress Energy take during these force majeure  
17 events to maintain the load of its customers?**

18 A. As discussed in my testimony of March 1, 2005, Progress Energy took the  
19 following measures to mitigate gas supply interruptions during the storm-  
20 related force majeure events: 1) purchased replacement supplies, 2)  
21 purchased supplies from third party storage accounts, 3) utilized a parking  
22 agreement on Gulfstream, 4) utilized No. 2 fuel oil to the extent necessary  
23 for reliability purpose, and 5) worked with Gulfstream Natural Gas and  
24 Florida Gas Transmission (FGT) to use a portion of the excess gas in their  
25 pipelines to meet load.

1 **Q. What measures did Progress Energy undertake to minimize other**  
2 **risks identified in its Risk Management Plan?**

3 A. Progress Energy continued to perform its daily management activities  
4 outlined in the Plan to monitor and, to the extent possible, mitigate risks to  
5 customers.

6  
7 **Q. Did Progress Energy follow the processes and guidelines outlined in**  
8 **the Plan?**

9 A. Yes, all processes and guidelines were followed and no trading or credit  
10 violations occurred.

11  
12 **Q. What hedging activities did Progress Energy undertake for fuel and**  
13 **wholesale power?**

14 A. Progress Energy did not hedge wholesale power and coal prices for 2004.  
15 However, the Company did make economic purchases as well as  
16 wholesale power sales to third parties that resulted in overall savings to its  
17 customers of approximately \$27.2 million. With respect to natural gas,  
18 Progress Energy met all of its hedging strategy objectives to 1) mitigate  
19 price risk and volatility, 2) provide gas price certainty, 3) maintain a diverse  
20 portfolio, and 4) provide potential for ratepayer's savings. To that end, the  
21 following transactions were entered into by Progress Energy:

22 1) Progress Energy had several fixed price contracts that resulted in  
23 additional savings to customers of approximately \$51.06 million. As of  
24 December 31, 2004, the fixed priced contracts had a favorable  
25 marked-to-market value through 2010 of approximately \$131 million.

1           2) The Company used financial swaps to fix the price on a portion of the  
2           residual oil used in 2004, which resulted in a net cost to customers of  
3           approximately \$.76 million.

4           To summarize, the Company met its 2004 hedging objectives including the  
5           objective of providing a savings to the ratepayers. A total savings to  
6           customers of approximately \$50.3 million was attained in addition to  
7           approximately \$27.2 million in economic power purchases and excess  
8           power generation sales.

9  
10       **Q. Please describe Progress Energy's process for procuring natural gas,  
11       at market prices.**

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

1 FGT Zone 3 or Platts Gas Daily, daily price survey midpoint for the day of  
2 flow for FGT Zone 3.

3  
4 **Q. Please describe Progress Energy's process for procuring residual oil**  
5 **and distillate oil at market prices.**

6 Progress Energy purchases residual and distillate fuel oil primarily through  
7 term contracts. Some supplies are purchased in the spot market to  
8 supplement contract supply as needed. Fuel oil prices for the term  
9 contracts are generally based on the U.S. Gulf Coast or New York Harbor  
10 market index quotes for the particular grade of fuel oil. The delivered price  
11 includes charges for transport, handling, inspection and taxes. For spot  
12 supplies, the prices are based on either a fixed delivered price, market  
13 index quotes or supplier rack postings plus transport, handling, inspection  
14 and taxes.

15  
16 **Q. Does this conclude your testimony?**

17 **A. Yes, it does.**

## 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 2004:

### I. Risk Identification – Force Majeure Events

- A. Tropical Storm Bonnie – (August 10-13) – During the force majeure event, PEF purchased replacement supplies, utilized a parking agreement for 200,000 Dth's on Gulfstream, utilized fuel oil to the extent necessary for reliability purposes, and worked with Gulfstream Natural Gas (Gulfstream) and Florida Gas Transmission (FGT) to use a portion of the existing gas in the pipelines to meet load.
- B. Hurricane Ivan – (September 13–October 5) – During the force majeure event, PEF, purchased replacement supplies, purchased supplies from third party storage accounts, utilized a parking agreement for 200,000 Dth's on Gulfstream, utilized fuel oil to the extent necessary for reliability purposes, and worked with Gulfstream and FGT to use a portion of the existing gas in the pipelines to meet load.

### II. Daily Management Activities

- A. Fuel Oil – 9.3 million barrels of #6 oil were projected vs. an actual of 10.8 million Barrels. For #2 oil, .7 million barrels were projected vs. an actual of 1.0 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. The monthly imbalances on FGT were a result of balancing actual burns versus nominations with FGT 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 purchasing coal in the spot market.
- 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 150 MW monthly transmission position for the period July through August, and a 50 MW monthly transmission position in October to improve diversity and availability of economic purchase opportunities.
- E. Daily dispatch continues on an economic basis for its 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 being 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 being 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 being 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 – Progress Energy 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's savings. Progress Energy had several fixed price contracts that resulted in stabilizing prices for a portion of its natural gas requirements for the ratepayers and provided a savings to the ratepayers of \$51,068,145. Additionally, as of December 31, 2004, the fixed priced contracts had a favorable marked-to-market value through 2010 of approximately \$131 million.
- B. Wholesale Power – Savings from wholesale sales & purchases for 2004 were as follows:
  - 1. Sales - \$5,330,652
  - 2. Purchases - \$21,833,340

C. Fuel Oil – For 2004, PEF exercised a contractual option to fix the price on 1,950,000 barrels of residual oil, which resulted in a net cost to customers of \$758,433.

D. Total Value Created: **\$77,473,704**

**V. Process and Guidelines**

A. The Mid Office ensures compliance with internal audit, corporate risk policies, procedures and guidelines, Sarbox, FAS 133, 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. It 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 2004 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 2004 had no major findings.

C. PEF natural gas, fuel oil, and wholesale power processes/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 and no trading and/or credit violations occurred in 2004.



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 2004 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 2004 Hedged	Volume	Avg Period of Hedge	Total Cost of Hedge
Fixed Price Swaps	Heavy Oil	1,950,000	bbls**	Month	\$0
Fixed Price Contact	Natural Gas	36,496,438	mmbtu*	daily	\$0

\* Physical Only

\*\* Financial