

PROGRESS ENERGY FLORIDA

DOCKET NO. 050001-EI

**Fuel and Capacity Cost Recovery
January through December 2006**

**DIRECT TESTIMONY OF
PAMELA R. MURPHY**

Q. Please state your name and business address.

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

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

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

Q. Have your duties and responsibilities remained the same since you last submitted testimony in this proceeding?

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

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present and address PEF's Risk Management Plan for fuel procurement in 2006. In addition, I will address the Company's actions to mitigate price volatility through its hedging strategies.

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FPSC-COMMISSION CLERK

Q. Has PEF developed its Risk Management Plan for fuel procurement in 2006 in accordance with the Resolution of Issues proposed by Staff and approved by the Commission in Order No. PSC-02-1484-FOF-EI, Docket No. 011605-EI?

A. Yes. PEF's Risk Management Plan was prepared in accordance with the Resolution of Issues approved by the Commission and is attached to my prepared testimony as Exhibit No. ____ (PRM-2). Certain information in the exhibit has been redacted, consistent with the Company's request for confidential classification of this information.

Q. What are the objectives of PEF's hedging plans for 2006?

A. The objectives of PEF's natural gas and No. 6 (residual or heavy) fuel oil hedging plans are as follows:

1) Mitigate price risk and volatility, 2) provide gas price certainty to smooth out natural gas prices over time, 3) maintain a diverse portfolio of volumes and prices over time, and 4) where the potential exists and is consistent with our first three objectives, to provide ratepayer savings through lower natural gas and No. 6 heavy oil costs.

Q. Please describe the hedging activities PEF plans for 2006 for its natural gas requirements.

A. PEF will conduct physical and financial natural gas hedging in accordance with the Company's approved natural gas hedging strategy. The Company has hedged approximately 53% of its projected natural gas usage at an average fixed price of \$5.45/MMBtu. The Company also started using financial

products in June 2005 to hedge forward prices. The approved financial products include swaps, options and futures.

Q. Please describe the hedging activities PEF plans for residual oil in 2006?

A. The Company's No. 6 heavy oil hedging strategy was implemented in June 2004. The Company has been and will continue to use financial over-the-counter swaps to hedge its projected No. 6 heavy oil requirements. The Company has hedged approximately 53% of its projected No. 6 heavy oil usage at an average fixed price of \$5.20/MMBtu.

Q. What is PEF's time frame for hedging forward prices of natural gas and residual oil?

A. The Company's current hedging strategy now extends for a current plus 4 year period. This is a change from the previous 2 year rolling seasonal period.

Q. What were the results of PEF's hedging activities during the January through July 2005 period?

A. The Company's hedging activities produced customer savings of approximately \$52 million for natural gas and No. 6 heavy oil. For the seventh-month period from January through July 2005, PEF hedged approximately 68% of its natural gas consumption. For the January-July 2005 time period, PEF hedged approximately 66% of its No.6 residual oil consumption.

Q. Does this conclude your testimony?

A. Yes, it does.

Redacted Document

Progress Energy Florida, Inc.
Risk Management Plan
Fuel Procurement and Wholesale Power Purchases

I. Objective

The objective of Progress Energy Florida, Inc.'s, (PEF) Risk Management plan is to provide the mechanisms to manage PEF's overall fuel costs and wholesale power purchases to provide reliable service to PEF's customers. As a result, this should ultimately reduce the number of mid-course corrections to the fuel factor portion of the customer's bill. The risk management plan allows for the use of various tools to reduce price volatility of natural gas and oil using approved products to hedge either financially and/or physically.

Progress Energy Carolinas, Inc., acts as agent for PEF.

II. Fossil Fuel and Purchased Power Future Needs

A. Fossil Fuel

1. Coal

- PEF plans to burn approximately 5.8 million tons of coal in 2006 and 6.0 million tons in 2007

2. Residual Oil

- PEF plans to burn approximately 9.0 million bbls. of #6 fuel oil in 2006 and 9.7 million bbls. in 2007

3. Distillate Oil

- PEF plans to burn approximately .7 million bbls. of #2 fuel oil in 2006 and .6 million bbls. in 2007

4. Natural Gas

- PEF plans to burn approximately 80.4 Bcf in 2006 and approximately 87.5 Bcf in 2007

- B. Purchased Power - PEF plans to purchase approximately 0.8 million MWH/year in 2006 and 2007 on the economy wholesale market, and sell approximately 0.8 million MWH in 2006 and 0.7 million MWH in 2007 on the economy wholesale market.

III. Risk Management Profile

A. Risk Identification

* The primary risks PEF has identified with procurement of fossil fuels and purchased power are:

1. Coal

- Plant availability due to unscheduled outages.
- Supply or transport problems due to labor disputes, weather, or other unforeseen delays.
- Coal quality errors.
- Financial strength of suppliers.
- Changes in laws regulating mining, transportation or burning of coal.
- Price volatility.

2. Oil (Residual and Distillate)

- Differences between forecasted/scheduled requirements and actual requirements due to economic changes, overall power demand, weather changes, change in price relationships between competing fuels, plant availability (maintenance/unexpected shutdowns or startups), out-of-economic plant dispatch (e.g., due to transmission system constraints), power market changes, etc.
- Differences between forecasted/scheduled deliveries and actual deliveries due to supply or transport problems, loading and unloading delays, etc.
- Fuel quality problems such as blending errors, off-spec deliveries, changes in SO₂ values, changes in plant fuel handling capability, etc.
- Changes in laws, regulations, plant permits, etc. that affect the amount, cost, testing requirements or quality of oil required.
- General industry changes that impact overall availability/cost/quality of fuel oil.
- Price volatility and fuel oil market related factors.

3. Natural Gas

- Imbalance penalties with interstate pipelines as a result of over/under burns based on differences between forecasted /scheduled gas and actual requirements due to, but not limited to, changes in weather, plant availability, and alert day tolerances.
- Deliveries by interstate pipelines and suppliers impacted by force majeure events, such as pipeline disruptions, production outages, hurricanes, etc.
- Natural gas storage level deviation from expected norms.
- Price volatility and natural gas related factors.

- Degree day deviations from expected monthly norms/
- Defaults by suppliers (e.g. bankruptcy).
- Price risk based on volatility in the natural gas industry caused by commodity funds (technical trading).
- Contractual disputes regarding payment and deliveries.

4. Purchased Power

- Default risk – inability of the supplier to obtain adequate resources to deliver the power per contract or agreement.
- Directional price risk – purchased power contracts in which the price of the purchased power is tied to an index.
- Physical risk – inability of electrical grid to reliably support power transfer.
- Credit risk – inability of contract counterparty to deliver per contract resulting in purchase of higher cost purchased power.
- Basis risk – supplier(s) experiences adverse weather as compared with Florida Power's service territory.

*Acts of terrorism are considered beyond PEF's control.

B. Risk Quantification

- Quantification of various risks, including stop-loss limits and Value-at-Risk (VaR) calculations, are included in Progress Energy's Risk Management Guidelines Appendix 13.

C. Risk Management (Daily Management Activities)

1. Coal

- Review actual conditions and adjust delivery schedules as needed.
- Maintain contacts with plants and suppliers.
- Monitor market prices and spot market options.
- Monitor suppliers' financial strength.
- Build flexibility on volume terms into contracts.
- Develop alternative supply sources whenever possible.

2. Oil

- Monitor actual conditions and consumption levels vs. forecasted levels and update forecasts frequently as conditions change. Adjust delivery schedules as needed.
- Monitor actual delivery status and maintain frequent contact with suppliers and receiving plants to anticipate problems and take corrective action.
- Keep current on market prices and activity. Utilize contract price options, inventory and spot market options as appropriate.
- Hedge no. 6 oil to reduce price volatility for the ratepayers.
- Continue to scrutinize a supplier's financial strength in order to assess ongoing creditworthiness.

3. Natural Gas

- Monitor plant gas burns vs. forecasted gas burns. If gas burn is projected to be out of tolerance on the pipeline, reschedule gas and re-allocate gas to different plants, or switching to alternative fuels, like oil.
- Use fuel oil and purchased power, where applicable, to maintain load.
- Build additional optionality into seasonal/term contracts by specifying the use of a daily or a monthly market index (with the right to select either one), include take or release triggers on volumes to allow added flexibility, as well as the right to mutually agree to a fixed price.
- Implement term contracts that allow swing volumes.
- Hedge natural gas to reduce price volatility for the ratepayers
- Evaluate zero cost collars for physical natural gas requirements in lieu of, or in conjunction with, fixed-price natural gas
- Evaluate the premium cost of purchasing a call option for a percentage of the utility's monthly natural gas requirements
- Use physical fuel oil inventory, where applicable, to dispatch at lowest fuel price. Logistics of physical fuel oil inventory levels must also be managed with this alternative
- Re-market any excess gas supplies/capacity, separately or bundled, on a daily basis
- Continue to scrutinize a supplier's financial strength in order to assess ongoing creditworthiness

4. Purchased Power

- Assess each supplier's ability to deliver power based on historical reliability as a supplier (default risk) and credit ratings.
- Utilize both fixed price contracts (next day purchases) and variable price contracts tied to a specific counterparty's incremental cost.

- Utilize firm transmission paths where available for reliable purchased power.

5. Portfolio Management

- PEF manages its risks associated with meeting its forecasted load requirements by maintaining a generation fleet with the capability of fuel switching, contracting for a diverse fuel supply and transportation portfolio, and using of sales and purchases of energy to and from outside sources.

D. Acceptable Level of Risk

1. Oil and Coal - The amount of risk considered acceptable is based on past experiences with what has been successful and evaluating the risk profile of any problems or opportunities based on this experience.
2. Natural Gas - Decisions regarding acceptable risk are based on the circumstances at the time natural gas is purchased. The circumstances at the time may include scenarios involving all or a part of the following: force majeure events, fuel oil inventories, competitive fuel pricing, supply constraints, forward pricing trends etc. For example, if PEF views a strong directional market trend for natural gas based on industry reports, events in the marketplace, demand, national storage levels, etc., PEF would consider implementing the risk management tools identified for managing natural gas risk.
3. Purchased Power- Considerations for purchasing power on a long term and mid-term basis include, but are not limited to the following:
 - Price curves – directional price risk associated with fuel and power.
 - Plant outages.
 - Load forecast.
 - Physical risk associated with transfer capability of the transmission system.
 - Credit worthiness of potential supplier(s).
 - Default risk of potential supplier(s).
 - Basis risk – supplier(s) experiences adverse weather as compared with PEF's service territory.

IV. Fuel Procurement and Wholesale Purchased Power Plans for 2005

1. Coal
 - The current strategy calls for [REDACTED] of purchases be made on mid-term contracts in 2006 and [REDACTED] in 2007. 1
2
2. Oil
 - The majority of the fuel oil is covered by mid-term (1-4 years) supply contracts with flexible volume provisions and market based pricing. The spot market is utilized when contracts allow as a supplemental source of supply.
3. Natural Gas
 - Approximately [REDACTED] of the natural gas requirements for 2006 are currently covered by long-term (greater than 3 years) contracts. PEF will be initiating an RFP in second half of [REDACTED] to contract for additional gas for [REDACTED] under long-term contracts. The remaining natural gas requirements for [REDACTED] will be covered by short term and spot market contracts. 3
4
5
4. Purchased Power
 - Long-term firm purchased power is usually solicited by a request-for-proposal from credible counterparties. Mid-term purchased power is usually solicited via a survey of credible counterparties by requesting bids for the nomination and terms for the product needed.
 - Short-term firm purchased power is obtained through market assessment of bids and offers and negotiation with credible counterparties.

V. Guidelines

1. The Board of Directors has established a Risk Management Policy which directs the Risk Management Committee (RMC) to oversee PEF's management of financial risks. The Risk Management Policy states the RMC shall regularly report on activities related to and carried out under the Policy to the Chief Executive Officer (CEO), the Board of Directors and the Finance Committee. The CEO is ultimately responsible for the company's management of risk.
2. The Risk Management Committee Guidelines identify the roles, responsibilities and decision making process of the RMC and its agents.
3. PEF's Regulated Commercial Operations and Regulated Fuels Risk Management Guidelines provide a methodology to assess, report, and mitigate risk associated with trading and marketing activities and procurement for the regulated fleet. In addition, there is a product approval process to provide a structure to validate that all significant product risks have been identified and integrated into the risk control structure.

4. Corporate Credit Risk Management Guidelines provide a methodology to evaluate, measure, mitigate, and report credit risk associated with regulated trading, marketing, and procurement activities as well as providing credit governance and oversight on an enterprise-wide basis.

VI. Processes (Front Office)

PEF's Oil Process Analysis, PEF's Natural Gas Process Analysis, and Progress Energy Carolina's Coal Purchasing Procedures provide the procedures utilized to implement PEF's risk management plan. Zainet is PEF's system of record to track and verify natural gas, oil financial hedges and power transactions. FMS (Fuel Management System) is PEF's system used to track and verify coal and physical oil transactions.

VII. Risk Reporting (Middle Office)

Risk Control generates reports and distributes them to both trading and senior management on a daily basis. This is the primary mechanism to communicate group performance to management, the RMC, and the Board of Directors. The reports include all current positions and updates according to the markets. Market changes include pricing, correlation, volatility, etc.. In addition, as conditions differ from day-to-day, Gas Scheduling updates deals with best-available information to correctly reflect how much gas is received and delivered at their respective delivery and receipt points.

A. Risk Control manages all of the following activities:

1. Forward Curves - Forward curves provide prices for delivery of products at future dates. Forward curves provide the critical data necessary to calculate mark-to-market, value-at-risk, and stress testing. These curves are generated daily.
2. Market Pricing – Daily prices received from index providers are updated on a daily basis to settle or to mark all positions to the correct market price as of close of business.
3. Mark-to-Market (MTM) - MTM is a methodology used to value all physical and financial instruments, including those associated with assets. MTM measures unrealized gains and losses (forward positions) prior to contract settlement by calculating the difference between the transaction price and the forward curve.
4. Stress Testing - Stress testing is used to simulate extreme market conditions (e.g., hurricane), and the results are delivered in the daily reports.

VIII. Controls and Oversight

1. The Risk Management Committee (RMC) – The RMC oversees Progress Energy’s management of financial risks.

Committee Members

- Chief Financial Officer - Progress Energy, Inc. (Chair)
- President – Progress Energy Service Company, LLC
- President – Energy Supply
- President – Progress Ventures
- President – Energy Delivery
- SVP & General Counsel – Progress Energy, Inc.
- Chief Risk Officer (CRO)

Committee Members Responsibilities

- Identify, assess and monitor corporate financial risks.
- Approve:
 - (i) Risk guidelines for various company activities.
 - (ii) New and existing trading, marketing, procurements and hedging products.
 - (iii) Analytical methodologies, models and assumptions.
 - (iv) Organization structure to ensure adequate segregation of duties.
- Review:
 - (i) Aggregate market and credit capital for approval by the BOD.
 - (ii) Summary positions and financial reports.
 - (iii) Broad trading, marketing, hedging, and procurement strategies.

- (iv) General business conditions, market and credit risk exposures.
 - Present to the CEO, BOD and Finance Committee:
 - (i) Recommended aggregate market and credit limits and modifications for approval.
 - (ii) Summary positions and financial reports.
 - (iii) Summary of valuation methods, key controls, limit exceptions and violations.
 - (iv) Special studies as requested.
 - Create sub-committees to provide greater attention to risk issues in various company activities.
2. Utility Commercial Operations Risk Subcommittee (UCORS) - The UCORS objective is to review market and credit risk exposure and business development and proposal opportunities associated with trading, marketing and procurement activities.

Subcommittee Members

- VP – Regulated Commercial Operations
- VP – Regulated Fuels
- Chief Risk Officer
- VP and General Counsel – Progress Energy
- VP – Corporate Planning
- Director – RCO Power Trading Operations
- Director – Gas and Oil Trading
- Director or Manager – Enterprise Risk Management

Subcommittee Responsibilities

Review, at a minimum:

- (i) Commodity market trends.
 - (ii) Trading, hedging, procurement and marketing strategies.
 - (iii) Aggregate commodity risk exposures.
 - (iv) Market and credit exposure versus defined limits.
 - (v) New products and services for RMC approval.
 - (vi) Model and model assumptions.
 - (vii) Key operational controls.
 - (viii) Credit exposure versus defined limits.
 - (ix) Pricing methodologies.
 - (x) Summary exception reports.
- Conduct special studies requested by the RMC.
 - Approve liquidity limits.

3. Audit Services – Audit Services provides independent assurance and consulting services that ensure regulatory compliance, effective corporate governance, operational excellence and appropriate risk management for all major activities including fuel procurement. Activities are audited based on relative priority rather than a fixed cycle. Within that framework, Audit Services' oversight of fuel procurement risk management activities is addressed from the following perspectives:

- Compliance
- Trading and procurement
- Operational