



ORIGINAL

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PROGRESS ENERGY SERVICE COMPANY, LLC

September 9, 2004

VIA HAND DELIVERY

Ms. Blanca S. Bayó, Director
Division of the Commission Clerk
and Administrative Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

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COMMISSION
CLERK

Re: Docket No. 040001-EI

Dear Ms. Bayó:

Enclosed for filing in the subject docket on behalf of Progress Energy Florida, Inc., are an original and fifteen copies each of the prepared direct testimony and exhibits of Michael F. Jacob, Pamela R. Murphy, Javier Portuondo, and Samuel S. Waters.

Please acknowledge your receipt of the above filing on the enclosed copy of this letter and return to the undersigned. Also enclosed are two 3 1/2 inch diskettes containing the above-referenced testimonies in Word format and the exhibits in Word or PDF formats. Thank you for your assistance in this matter.

Very truly yours,

James A. McGee

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cc: Parties of record

DN #s 09894-04 Jacob
09895-04 Murphy
09896-04 Portuondo
09897-04 Waters

PROGRESS ENERGY FLORIDA

DOCKET NO. 040001-EI

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true copy of the prepared direct testimony and exhibits of Michael F. Jacob, Pamela R. Murphy, Javier Portuondo, and Samuel S. Waters on behalf of Progress Energy Florida has been furnished to the following individuals by regular U.S. Mail the 9th day of September, 2004.

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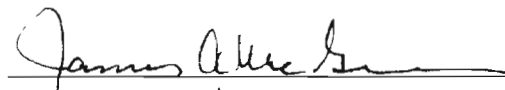
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1 PROGRESS ENERGY FLORIDA

2 DOCKET NO. 030001-EI

3
4 Fuel and Capacity Cost Recovery

5 Final True-Up for the Period

6 January through December, 2003

7
8 DIRECT TESTIMONY OF

9 PAMELA R. MURPHY

10
11
12 **Q. Please state your name and business address.**

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

15
16 **Q. By whom are you employed and in what capacity?**

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

19
20 **Q. Have your duties and responsibilities remained the same since you
21 last submitted testimony in this proceeding?**

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

25
26 **Q. What is the purpose of your testimony?**

27 A. The purpose of my testimony is to present and address Progress Energy's
28 Risk Management Plan for fuel procurement in 2005.

DOCUMENT NUMBER - DATE
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1 address the Company's actions to mitigate price volatility through its
2 hedging strategies.

3
4 **Q. Has Progress Energy developed its Risk Management Plan for fuel**
5 **procurement in 2005 in accordance with the Resolution of Issues**
6 **proposed by Staff and approved by the Commission in Docket No.**
7 **011605-EI?**

8 A. Yes. Progress Energy's Risk Management Plan was prepared in
9 accordance with the Resolution of Issues approved by the Commission in
10 Docket No. 011605 – EI and is attached to my prepared testimony as
11 Exhibit No. ____ (PRM-1). Certain information in the exhibit has been
12 redacted, consistent with the Company's request for confidential
13 classification of this information.

14
15 **Q. What are the objectives of Progress Energy's hedging plans for 2005?**

16 A. The objectives of Progress Energy's natural gas and No. 6 (heavy oil) fuel
17 oil hedging plans are as follows:

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

23
24 **Q. Please describe the hedging activities Progress Energy plans for 2005**
25 **for its natural gas requirements.**

26 A. Progress Energy has been conducting and will continue to conduct gas
27 physical hedging in accordance with the Company's approved natural gas
28 hedging strategy. As reflected in the August 2004 generation fuel forecast

1 for 2005, the Company hedged approximately 39% of its projected natural
2 gas usage at a fixed price of \$4.79/MMBtu.

3
4 **Q. Please describe the hedging activities Progress Energy's plans for**
5 **No. 6 heavy oil in 2005?**

6 A. The Company's No. 6 heavy oil hedging strategy was implemented in June
7 2004. The Company will be using financial over-the-counter swaps to
8 hedge its projected No. 6 heavy oil requirements. To date for 2005, the
9 Company has hedged approximately 42% of its projected No. 6 heavy oil
10 usage at a fixed price of \$4.43/MMBtu. Due to the small amount of hedges
11 executed prior to the August 2004 generation fuel forecast, they were not
12 included in that forecast.

13
14 **Q. What is Progress Energy's time frame for hedging forward prices of**
15 **natural gas and residual oil?**

16 A. The Company's current hedging strategy extends for a two-year rolling
17 seasonal period. For example, in the summer of 2004, Progress Energy
18 will consider hedges forward through the summer of 2006.

19
20 **Q. What were the results of Progress Energy's hedging activities during**
21 **the January through July 2004 period?**

22 A. In addition, the Company's hedging activities produced customer savings of
23 approximately \$26 million. For the seven-month period from January
24 through July 2004, Progress Energy hedged approximately 53% of its
25 natural gas consumption. For No. 6 heavy oil, the hedging program was
26 implemented in June 2004. Approximately 16% of the June-July 2004 No.6

1 residual oil consumption was hedged. The Company's hedging activities
2 for natural gas for the period resulted in reducing price volatility 23 percent,
3 providing customer savings of approximately \$26 million.

4
5 **Q. Does this conclude your testimony?**

6 A. Yes, it does.

Exhibit of Pamela R. Murphy

“CONFIDENTIAL”

Filed Under Separate Cover

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. PEF has adopted Progress Ventures' risk management policies and practices.

II. Fossil Fuel and Purchased Power Future Needs

A. Fossil Fuel

1. Coal

- PEF plans to burn approximately 6.4 million tons of coal in 2005 and in 2006

2. Residual Oil

- PEF plans to burn approximately 10.7 million bbls. of #6 fuel oil in 2005 and 10.8 million bbls. in 2006

3. Distillate Oil

- PEF plans to burn approximately 1.3 million bbls. of #2 fuel oil per year in 2005 and 1 million bbls. in 2006

4. Natural Gas

- PEF plans to burn approximately 76 Bcf in 2005 and approximately 73 Bcf in 2006

- B. Purchased Power** - PEF plans to purchase approximately 0.5 million MWH/year and sell approximately 1.2 million MWH/year on the wholesale market in 2005 and 2006.

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
- Impact of regulatory, management, internal and external audit reviews
- 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
- Crude oil prices
- Degree day deviations from expected monthly norms
- Defaults by suppliers (for example, 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 – e.g., 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 – e.g., supplier(s) can experience 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 Ventures 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 etc., into agreements**
- **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. PEF is currently hedging its projected No. 6 residual requirements to reduce price volatility for the ratepayers using financial over-the-counter swaps.
- 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, 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
- PEF is hedging 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

- PEF assesses each supplier's ability to deliver power based on historical reliability as a supplier (default risk) and credit ratings

- PEF utilizes both fixed price contracts (next day purchases) and variable price contracts tied to a specific counterparty's incremental cost
- PEF utilizes firm transmission paths where available for reliable purchased power

5. Portfolio Management

- PEF will manage 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 the use 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 the utility views a strong directional market trend for natural gas based on industry reports, events in the marketplace, demand, national storage levels, etc., the utility 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
 - Generator outages
 - Load forecast
 - Physical risk associated with transfer capability of transmission system
 - Credit worthiness of potential supplier(s)
 - Default risk of potential supplier(s)
 - Basis risk – e.g., supplier(s) can experience adverse weather as compared with PEF's service territory

IV. Fuel Procurement and Wholesale Purchased Power Plans for 2005

1. Coal
 - Approximately [REDACTED] of purchases are made on mid-term contracts in 2005 and [REDACTED] in 2006.
2. Oil
 - The majority of the fuel oil is covered by [REDACTED] 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 2005 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.
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 Progress Energy'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. Progress Ventures Regulated Commercial Operations 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 Ventures trading, marketing, and procurement activities as well as Corporate Credit provides 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 Fuels' Coal Purchasing Procedures provide the procedures utilized to implement PEF's risk management plan. To date, "Zainet" is PEF's natural gas and power transaction software system utilized to track and verify natural gas and power transactions. Zainet is the system of record to track and verify natural gas, oil financial hedges and power transactions. "FMS" (Fuel Management System) is the system used to track and verify coal and physical oil transactions.

VII. Risk Reporting (Middle Office)

Risk control generates reports and distributes 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, et cetera. 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 utilized 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

- Identifies, assesses, and monitors corporate financial risks
- Approves:
 - (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
- Reviews:
 - (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
- Presents 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
 - Creates sub-committees to provide greater attention to risk issues in various company activities
2. Trading, Marketing and Fuels Sub-Committee - The Trading, Marketing and Fuels Subcommittee's objective is to review market and credit risk exposure and business development and proposal opportunities associated with trading, marketing and procurement activities.

Sub-Committee Members

- VP – Regulated Commercial Operations
- VP – Ventures Finance
- VP and Chief Risk Officer
- Director – RCO Power Trading Operations
- Director – Gas and Oil Trading
- Director or Manager – Enterprise Risk Management
- Controller – RCO

Sub-Committee Responsibilities - Reviews, at a minimum:

- Commodity market trends
- Trading, hedging, procurement and marketing strategies
- Aggregate commodity risk exposures
- Market and credit exposure versus defined limits
- New products and services for RMC approval
- Model and model assumptions
- Key operational controls
- Credit exposure versus defined limits
- Pricing methodologies
- Summary exception reports
- Conducts special studies requested by the RMC
- Approves liquidity limits

3. Auditing Department – 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