State of Florida



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CLERK

-M-E-M-O-R-A-N-D-U-M-

DATE:

June 2, 2005

TO:

Director, Division of the Commission Clerk & Administrative Services (Bayó)

FROM:

Division of Economic Regulation (Bohrmann, Harlow, Lester, McNulty, Sickel

VonFossen NY RLT

Office of the General Counsel (Vining)

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RE:

Docket No. 041414-EI - Petition for approval of long-term fuel supply and

transportation contracts for Hines Unit 4 and additional system supply and

transportation, by Progress Energy Fiorida, Inc.

AGENDA: 06/14/05 - Regular Agenda - Posthearing Decision - Participation is Limited to

Commissioners and Staff

**COMMISSIONERS ASSIGNED:** All Commissioners

PREHEARING OFFICER:

Bradley

**CRITICAL DATES:** 

Progress Energy Florida, Inc. has requested a decision by

June 15, 2005.

**SPECIAL INSTRUCTIONS:** 

None

FILE NAME AND LOCATION:

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## Case Background

By Order No. PSC-04-1168-FOF-EI, in Docket No. 040817-EI, issued November 23, 2004, the Commission granted Progress Energy Florida's (PEF) petition for a determination of need for a proposed electrical power plant pursuant to Section 403.519, Florida Statutes, and Rules 25-22.080 and 25-22.081, Florida Administrative Code. The proposed plant is a 517 MW (winter-rated) natural gas-fired, combined cycle unit to be located at the Hines Energy Complex (Hines Unit 4) in Polk County, Florida. The expected commercial in-service date of Hines Unit 4 is December 2007. (TR 12)

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On December 20, 2004, PEF filed a petition for approval of its long-term fuel supply and transportation contracts that will meet the fuel requirements for Hines Unit 4 and also provide additional system supply and transportation to PEF's natural gas portfolio. PEF has entered long-term fuel supply contracts with BG LNG Services, LLC (BG) for the re-gasified liquefied natural gas (LNG) supply for Hines Unit 4, as well as additional fuel for several other units on PEF's system. PEF expects to purchase the re-gasified LNG from BG out of the existing regasification facility at Elba Island, near Savannah, Georgia. Also, PEF has contracted for firm pipeline transportation from Southern Natural Gas Company (SONAT) through an expansion of its existing system (Cypress project) to be built from Elba Island to an interconnection point with the Florida Gas Transmission (FGT) pipeline in Clay County, Florida. Finally, PEF has contracted with FGT for firm pipeline transportation from that interconnection point to the Hines Energy Complex in Polk County, Florida. (TR 11)

PEF is not required to seek approval of these contracts by Commission rule or order. However, PEF seeks Commission approval prior to June 15, 2005. The parties to the several contracts have established Commission approval of those contracts by that date as a condition precedent. Once the conditions precedent is met, the necessary extension and expansion of the gas pipelines can proceed to meet the commercial in-service date for Hines Unit 4.

The Office of Public Counsel (OPC) and BG have intervened in this docket. The Commission acknowledged OPC's intervention on February 9, 2005, and the Pre-hearing Officer granted BG's petition to intervene on April 18, 2005.

This Commission is vested with jurisdiction over the subject matter by the provisions of Chapter 366, Florida Statutes.

#### **Discussion of Issues**

**ISSUE 1:** Did Progress Energy Florida (PEF) adequately solicit potential natural gas providers to provide fuel to the Hines Unit 4 generating unit?

**RECOMMENDATION:** Yes. PEF adequately solicited both natural gas supply and transportation providers for its long-term fuel needs for Hines Unit 4. (VonFossen, Bohrmann)

### **POSITIONS OF THE PARTIES**

<u>PEF</u>: Yes. While a Request for Proposal ("RFP") is not required by law, PEF, through three independent RFPs, solicited bids from 45 credit worthy suppliers that could potentially provide gas supply and/or transportation to Hines 4.

**BG**: No position.

**OPC:** Nothing in the record indicates that Progress' RFP process in this case was insufficient.

STAFF ANALYSIS: Between August 2003 and June 2004, PEF conducted a series of three requests for proposal (RFP) to secure a fuel source for Hines Unit 4. PEF issued its initial non-binding RFP to gather market information. The second RFP solicited binding bids for regasified LNG from the existing Elba Island facility or a proposed Bahamas-based facility. The third RFP solicited binding bids from either re-gasified LNG suppliers or domestic natural gas suppliers from the Gulf of Mexico. (TR 31, 39, 56)

PEF maintains an internal list of all creditworthy LNG and domestic gas suppliers. PEF used this list to provide the RFPs to all suppliers with gas rights out of Elba Island, all potential suppliers from the proposed Bahamas-based LNG facilities, and all listed suppliers from the Gulf of Mexico. Through this process, PEF invited over 40 suppliers to bid. No gas supplier or transportation provider has intervened in this docket to complain about exclusion from, or the content of the RFP. Therefore, staff believe that all gas suppliers capable of providing natural gas under PEF's stated requirements were given a fair and adequate opportunity to bid. (TR 39, 64)

<u>ISSUE 2</u>: Is the proposal contemplated in PEF's petition the most cost-effective option considering price and non-price factors?

**RECOMMENDATION:** Yes. The BG/Cypress/FGT contracts are the most cost-effective option for supplying natural gas to Hines Unit 4, considering all price and non-price factors at this time. While the Bahamas-based option appears to be the least-cost alternative, it was reasonable for PEF to eliminate this option due to the significant uncertainty associated with the in-service date of the project. There is sufficient certainty that the Cypress/FGT pipelines can meet the needs of Hines Unit 4 both in quantity and timeliness. PEF estimates that the proposed BG/Cypress/FGT contracts will be slightly more costly than a Gulf of Mexico-based alternative. However, the BG/Cypress/FGT contracts offer geographic advantages for PEF and its ratepayers due to the increase in operational flexibility and supply diversity. (Harlow, Sickel)

# **POSITIONS OF THE PARTIES**

<u>PEF</u>: Yes, PEF's proposal is the most cost-effective option when considering certainty of success of the project, economics and price, operational flexibility, and geographic diversity.

**BG**: No position.

**OPC:** It appears that Progress has appropriately taken into account the pricing and non-pricing factors to determine the most cost-effective option in this case.

STAFF ANALYSIS: As discussed in Issue 1, PEF began its search for fuel and transportation supply for Hines Unit 4 with three RFPs. PEF then narrowed the potential options to three alternatives: the BG/Cypress/FGT LNG alternative, a Bahamas-based LNG alternative, and a Gulf of Mexico-based natural gas alternative. PEF evaluated the impact of each alternative from a price and non-price perspective under four criteria: 1) the certainty of meeting the Hines Unit 4 in-service date; 2) the overall economics; 3) operational flexibility; and, 4) supply diversity. PEF analyzed the economics of each alternative based on a comparable volume of natural gas delivered. PEF analyzed the non-price factors subjectively. Each criterion is discussed below. (TR 31-32, 49-50)

Certainty of Meeting the Hines Unit 4 In-service Date: Witness Murphy stated that a Gulf of Mexico alternative using Gulfstream for transportation "clearly is the most certain." PEF also found that there is significant uncertainty that the Bahamas-based alternative will be placed in-service in time to provide fuel for Hines Unit 4. (TR 27, 76)

PEF provided evidence that there is a high degree of certainty that the BG/Cypress/FGT LNG alternative will meet the expected December 2007 in-service date of Hines Unit 4. The Elba Island regasification facility is an existing facility with enough capacity to meet the contract requirements. The regasification facility and storage tanks are also being expanded. SONAT has received sufficient volume commitments, including the contracted volume with PEF, and is now contractually obligated to go forward with the Cypress project. SONAT has also filed for FERC approval of the Cypress project and completed a large portion of the preliminary right-of-way work for the project. The pipeline will be built adjacent to an existing electric transmission

right-of-way, which reduces the probability of significant public concern. (TR 29, 98-99, 104, 108)

Staff agrees with PEF that there is significant uncertainty that the Bahamas-based alternative will be placed in service in time to provide fuel for Hines Unit 4. There are three competing proposals for regasification facilities in the Bahamas and pipelines into Florida. As of the April 29, 2005, hearing date, none of the three proposals had received approval from the Bahamian government. The Bahamas-based alternative for PEF missed three different milestones for obtaining approval from the Bahamian government. In contrast to Elba Island, a new regasification facility must be built in the Bahamas. Further, it appears that PEF's required volumes would not be sufficient to anchor a Bahamas-based pipeline and regasification facility. (TR 36, 75-76)

Overall Economics: PEF analyzed the economics of each alternative based on a comparable volume over the twenty-year life of the proposed contracts. Strictly on a cost basis, PEF determined that the Bahamas-based alternative was the least-cost option; however, PEF eliminated the Bahamas-based alternative from consideration because PEF was uncertain that the project would be placed in service in time to serve Hines Unit 4. Staff agrees that it was reasonable to eliminate the Bahamas-based option due to uncertainty of completion. PEF provided evidence demonstrating that the Bahamas-based project is too uncertain for PEF to be able to use purchased power to meet the needs of Hines Unit 4 if the project is substantially delayed.

The BG contract price is indexed to Henry Hub, an industry-wide market index, and includes a fixed basis adder. The fixed basis adder represents a small percentage of the contract costs. This is comparable to a Gulf of Mexico-based gas commodity contract. According to Witness Murphy, this basis adder "represents three-quarters of one percent of the overall price of the Cypress contracts." Because the BG contract is tied to the Henry Hub index, any increase or decrease in market prices for Gulf of Mexico natural gas would be mirrored in the LNG pricing from BG. The proposed transportation contracts contain negotiated rates and are priced based on the standard format of a fixed monthly reservation charge, expressed on a dollar per MMBtu basis. (TR 30, 54-55)

PEF estimated that the BG/Cypress/FGT alternative has a net present value cost of \$226,000 more than the Gulf of Mexico alternative over the life of the contracts. Transportation costs are higher for the proposed Cypress/FGT contracts compared with the Gulf of Mexico alternative. However, PEF estimates that the total commodity costs will be lower under the BG contract compared to gas from the Mobile Bay/Destin area. PEF assumed that commodity costs would be higher from the Mobile Bay/Destin area because these contracts would be shorter term, exposing PEF to the risk of increasing basis adders over time. According to Witness Murphy, PEF has experienced an increasing basis adder for gas obtained from the Mobile Bay/Destin area over the last several years. (TR 50, 80)

Along with the indexed pricing for the gas commodity, the proposed contracts include several provisions designed to reduce economic risk for PEF and its ratepayers. The BG contract has pricing options which allow PEF, with agreement from BG, to alter the pricing index used. This provision would allow PEF to take advantage of changing market conditions. If BG does

not agree to change the index, PEF could buy gas futures or other derivative instruments in the financial markets to "lock in" the price. However, PEF's petition in this docket does not request pre-approval of any future price hedging activity under the contracts. (TR 18, 47)

PEF negotiated contract provisions which exclude events that may restrict gas supplies, such as potential shipping problems, in an area upstream of a confidential location from meeting BG's force majeure standard. When BG can neither claim force majeure nor provide replacement gas, BG must pay PEF's incremental costs for replacement gas or for replacement fuel oil. The force majeure provisions of the BG contract appear to be more favorable than those in the bids from the Mobile/Destin based gas suppliers. (TR 43, 46, 92)

Operational Flexibility: The Hines Energy Complex is currently served solely by the Gulfstream and FGT pipelines. The proposed pipeline will add additional gas transportation which can be used to serve all units at the Hines site. In addition, according to Witness Caldwell, PEF "will be able to transport gas from Elba Island to other generating stations on our system, such as Anclote and Suwannee, as well as to support our long-term power purchase agreement of the Shady Hills generating plant in Pasco County." The BG contract also provides PEF with an option to purchase additional gas in the future. PEF agrees that such additional gas quantities would be subject to approval in the annual fuel adjustment clause proceeding. (TR 13, 48, 78)

The contracts have two provisions which reduce risk if re-gasified LNG is not available from BG. The SONAT contract allows PEF to "go upstream onto the Southern Natural system to other receipt points" to obtain replacement gas. PEF will also have rights to the storage capacity at the Elba Island regasification facility. (TR 84-85)

Supply Diversity: Natural gas generation in Florida is projected to increase from approximately 30 percent to over 50 percent over the next ten years, placing added pressure on current supplies and transportation capacity. Currently, most gas supplied to PEF and the state of Florida comes from the Mobile Bay/Destin area, and is transported through two major pipelines. The proposed contracts will add a new source of gas supply and transportation to the state. The resulting increase in fuel diversity can have a positive impact on gas supply economics and reliability. This is especially important given the projected increase in natural gas-fired generation. (TR 129-130)

Staff agrees with Witness Caldwell that "[t]he Cypress and FGT expansions and the opportunities they open for additional purchases of LNG should have a dampening impact on fuel price and transportation price over the long term." Any downward pressure in commodity rates will be reflected in the BG contract, because the contract is priced on the Henry Hub index. (TR 14)

The contracts introduce a third pipeline into the state, and the Cypress pipeline will be the first pipeline to serve the state from the East coast. From a system-wide perspective, transporting gas from the East coast should reduce the risk of gas supply interruptions due to hurricanes in the Gulf of Mexico or other catastrophic events. Staff agrees with Witness Murphy that the contracts will also increase reliability by providing "additional options for meeting future supply and transportation needs as our system expands." (TR 27, 132)

Conclusion: The BG/Cypress/FGT contracts are the most cost-effective option for supplying natural gas to Hines Unit 4, considering all price and non-price factors at this time. If non-price factors are not considered, the Bahamas-based alternative is the least-cost option to meet the needs of Hines Unit 4. However, staff agrees that it was reasonable for PEF to eliminate the Bahamas-based alternative from consideration due to the significant uncertainty associated with the in-service date of the project. There is sufficient certainty that the Cypress/FGT pipelines can meet the needs of Hines Unit 4. PEF estimates that the proposed BG/Cypress/FGT contracts will be slightly more costly than a Gulf of Mexico-based alternative. However, staff believes that the BG/Cypress/FGT contracts offer important geographic advantages for PEF and its ratepayers due to the increase in operational flexibility and supply diversity.

**ISSUE 3:** Is the 20-year term of the contracts contemplated in PEF's petition appropriate?

**RECOMMENDATION:** Yes. (VonFossen, Bohrmann, Lester)

#### **POSITIONS OF THE PARTIES**

**PEF:** Yes. PEF was able to negotiate favorable terms in the BG/Cypress/FGT contracts which make the 20 year term of the contract at issue both appropriate and favorable. A twenty-year term is appropriate to ensure long-term commitments for all parties involved. The term also provides portfolio diversity.

**BG**: No position.

**OPC:** Progress has clarified that it is not seeking pre-approval of the fuel costs associated with these contracts which have been traditionally addressed as part of the annual fuel clause proceedings. In particular, Progress is not seeking approval for hedging and daily optimization activities. OPC has no concerns regarding the long-term contract in this instance.

STAFF ANALYSIS: Prior to PEF issuing its RFPs, PEF desired to replace its only two long-term natural gas contracts, which would expire in the near future, with another long term contract to diversify its gas portfolio with various contract lengths. Through its initial non-binding RFP, PEF learned that no Gulf of Mexico supplier would enter into a 20 year contract. Additionally, PEF stated that both BG and SONAT required 20 year contracts for gas supply and transportation from Elba Island. To obtain the goals of geographic diversity, operational flexibility and portfolio diversification, in a cost effective manner, and have gas available by the Hines Unit 4 in service date, Elba Island and its required 20 year contracts became PEF's only viable option. (TR 60, 66-68; EXH 2)

Staff does have some concerns that a 20-year period represents a long-term commitment when uncertainty exists regarding a new fuel type and delivery mechanism. This new fuel type and delivery mechanism may expose PEF and its ratepayers to new risks that may not be fully mitigated in PEF's contract with BG. These new risks include: single point of delivery risk, host country risk, and event risk. Fortunately, the PEF-BG contract has several provisions which provide PEF and its ratepayers some level of protection from these risks. Staff presents a non-exhaustive list of these protections below: (EXH 5)

- 1. Section 3: If conditions warrant, PEF and BG may agree to a different pricing mechanism rather than using the Henry Hub index. If BG does not consent, PEF may purchase a financial derivative to achieve the same impact on its natural gas costs;
- 2. Section 4: Indicates that PEF and BG will use commercially reasonable efforts to avoid imbalance charges. If BG causes imbalance charges to be incurred, then BG shall pay such imbalance charges or reimburse PEF, if necessary;
- 3. Section 5: BG must provide PEF with re-gasified LNG that meets the gas quality requirements as set forth by SONAT;

- 4. Section 12: Sets forth the events in which BG can and cannot invoke force majeure;
- 5. Section 13: Sets forth what remedial actions BG must follow if BG does not deliver the contracted quantity of gas due to a non-force majeure event; and
- 6. Section 19: Sets forth the actions PEF may pursue in the event the price index that establishes the contract price becomes temporarily or permanently unavailable.

As staff addressed in Issue 2, PEF's goals of achieving both geographic diversity and operational flexibility seem well founded. Furthermore, because more than 50 percent of Florida's electric generation will otherwise rely on Gulf of Mexico gas by 2013, a long-term contract to establish a third pipeline into Florida appears to be a reasonable management decision. Notwithstanding staff's concerns noted earlier, we believe that the 20 year term is appropriate for PEF to achieve its stated goals for the benefit of its customers. (TR 135)

**ISSUE 4**: Based on the resolution of the foregoing issues, should the Commission grant PEF's petition?

**RECOMMENDATION:** Yes. Staff recommends that Commission approve PEF's long-term supply and transportation contracts. The delivered cost and volumes of re-gasified LNG specified in PEF's contracts, as well as the contracts' terms and conditions, appear reasonable for planning purposes. PEF will present the costs incurred under the three contracts for recovery through the fuel and purchased power cost recovery clause on an annual basis. Staff recommends that the Commission permit recovery of these costs subject to a finding that PEF has managed the contracts in a reasonable and prudent manner. (Bohrmann)

# **POSITIONS OF THE PARTIES**

PEF: Yes.

**BG**: No position.

**OPC:** While OPC does not endorse the contracts, OPC does not find any concerns which have not been addressed by the Company that should preclude approval of the contracts at this time.

STAFF ANALYSIS: PEF's petition sought approval of the terms and conditions of its contracts for re-gasified LNG supply and transportation with BG, SONAT, and FGT. Commission approval by June 15, 2005, is a condition precedent for each contract. Specifically, PEF is seeking approval of the following: 1) market-based pricing index and the basis used for gas pricing in the re-gasified LNG supply contract; 2) the negotiated transportation rates from SONAT and FGT; 3) the volume of gas that PEF will accept under the re-gasified LNG supply contract; and, 4) the duration of the contracts. PEF is not requesting Commission approval for any actions that PEF may take under certain terms and conditions of these contracts. These actions include hedging activity to minimize risks and PEF's day-to-day management of its resources. (TR 17-18, 48)

In Issue 1, staff recommended that PEF adequately solicited offers to sell natural gas through its RFP process. In Issue 2, staff recommended that the contracts between PEF and BG, SONAT, and FGT are the most cost effective, considering price and non-price factors, compared with the other alternatives PEF analyzed. In Issue 3, notwithstanding some concerns, staff recommended that the long-term contracts are appropriate. Therefore, staff recommends that the delivered cost and volumes of re-gasified LNG specified in the contracts appear reasonable for planning purposes based on record information at this time.

On an annual basis, PEF will present the actual costs incurred under the three contracts for recovery through the fuel and purchased power cost recovery clause. PEF has stated its intention to enforce the contracts' provisions vigorously to protect its ratepayers from any undue and excessive costs; however, as the contracts provide a new fuel source and delivery mechanism, PEF has little experience in managing the risks associated with re-gasified LNG. Accordingly, the Commission should require PEF to respond, as market conditions and events warrant, proactively and prudently to minimize risk and costs borne by its ratepayers.

**ISSUE 5**: Should this docket be closed?

**<u>RECOMMENDATION</u>**: The docket should be closed after the time for filing an appeal has run. (Vining)

# **POSITION OF THE PARTIES**

PEF: Yes.

**BG:** No position.

**OPC:** Yes.

**STAFF ANALYSIS**: This docket should be closed 32 days after issuance of the order, to allow the time for filing an appeal to run.