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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

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In re: Progress Energy Florida, Inc.'s )  
petition for approval of long-term fuel )  
supply and transportation contracts for )  
Hines Unit 4 and additional system )  
supply and transportation. )

Docket No.: 041414-EI

COMMISSION  
CLERK

Submitted for Filing: May 13, 2005

**PROGRESS ENERGY FLORIDA'S POST-HEARING STATEMENT  
AND BRIEF IN SUPPORT OF ITS PETITION FOR APPROVAL OF  
LONG-TERM FUEL SUPPLY AND TRANSPORTATION  
CONTRACTS FOR HINES UNIT 4 AND  
ADDITIONAL SYSTEM SUPPLY AND TRANSPORTATION**

Progress Energy Florida, Inc. ("PEF" or the "Company"), submits its Post-Hearing Statement of Issues and Positions, Findings of Fact and Conclusions of Law, and Brief in support of its Petition for approval of its long-term fuel supply and transportation contracts for Hines Unit 4 and additional system supply and transportation.

As a result of the addition of Hines Unit 4 to its system in December, 2007, PEF investigated and considered the options available for the fuel supply and transportation needs for Hines Unit 4. Following an extensive and comprehensive review, PEF chose the most cost-effective alternative based on price and non-price factors, the contracts that transport regasified liquefied natural gas ("LNG") to supply fuel to PEF's Hines Unit 4.

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The gas transportation and supply options that PEF considered included the traditional supply of natural gas from the Mobile Bay/Destin area in the Gulf of Mexico using the existing Florida Gas Transmission ("FGT") or Gulfstream Natural Gas System ("Gulfstream") pipelines, and the proposed expansion by Southern Natural Gas Company ("Southern Natural") of its existing natural gas pipeline system (the "Cypress Project") to transport a new source of gas supply for the Company and Florida -- LNG from its Elba

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Island LNG terminal located near Savannah, Georgia to an interconnection with FGT in north Florida. Additional green field LNG projects in the Bahamas were also considered.

After an extensive review and careful analysis of the gas supply and transportation options through a comprehensive request for proposal process, PEF has entered into a series of agreements designed to provide firm natural gas supply and transportation. PEF entered into long-term supply contracts with BG LNG Services, LLC (“BG”) for regasified LNG supply purchased out of the existing Elba Island regasification terminal. In addition, PEF contracted with Southern Natural for firm transportation of the gas supply through the Cypress project to be built from Elba Island to a point of interconnection with the FGT pipeline in Clay County, Florida, and with FGT for transportation from the point of interconnection with Southern Natural to the Hines Energy Complex in Polk County, Florida (hereinafter the agreements are collectively referred to as the “BG/Cypress/FGT contracts”).

As a contractual condition precedent, the BG/Cypress/FGT contracts require approval of each of the contracts by this Commission on or before June 15, 2005. This requirement for Commission pre-approval was required by all parties to the BG/Cypress/FGT contracts because each party wanted advanced assurance that the Commission would find the contracts reasonable and prudent given the magnitude of the project and the large capital costs required to complete the project. Thus, pre-approval of the BG/Cypress/FGT contracts is needed to bring this new, first-of-a-kind LNG supply source into Florida.

The BG/Cypress/FGT contracts that PEF has brought before the Commission in this proceeding are the most cost-effective and beneficial alternative to supply fuel to

Hines 4 and other gas-fired generating units throughout PEF's system. Accordingly, PEF respectfully requests that the Commission approve the BG/Cypress/FGT contracts as reasonable and prudent so that PEF, its ratepayers, and the State of Florida as a whole can benefit from the new sources of gas supply and delivery available under the BG/Cypress/FGT contracts.

**I. Post-Hearing Statement of Issues and Positions.**

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

\*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.\*

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

\*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.\*

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

\*Yes. PEF was able to negotiate favorable terms in the BG/Cypress/FGT contracts which make the 20-year term of the contracts 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.\*

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

\*Yes.\*

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

\*Yes.\*

## **II. Proposed Findings of Fact and Conclusions of Law.**

Based on the undisputed or greater weight of the evidence at the hearing, and the Commission's Rules, Orders, and other applicable law, the Commission finds that:

1. PEF did adequately solicit potential natural gas suppliers and transportation carriers to provide fuel to the Hines 4 generating unit.

2. The 20-year term of the BG/Cypress/FGT contracts presented for approval in PEF's petition is reasonable and prudent.

3. The industry, market-based price index and fixed adder used for gas pricing in the BG supply contract at issue in this proceeding are reasonable and prudent.

4. The negotiated rates used in the Cypress/FGT transportation contracts at issue in this proceeding are reasonable and prudent.

5. The volumes of natural gas for which PEF has contracted under the BG supply contract at issue in this proceeding are reasonable and prudent.

6. The general terms and provisions of the BG/Cypress/FGT contracts presented for approval in PEF's petition are reasonable and prudent.

7. The BG/Cypress/FGT contracts presented for approval in PEF's petition represent the most cost-effective option to provide fuel to Hines 4 and other gas-fired generating units on PEF's system, considering price and non-price factors.

8. The BG/Cypress/FGT contracts are reasonable and prudent.

9. PEF's Petition for Approval of Long-Term Fuel Supply and Transportation Contracts for Hines Unit 4 and Additional System Supply and Transportation should be granted and the BG/Cypress/FGT contracts approved.

**III. PEF's Brief in Support of Its Petition for Approval of Long-Term Fuel Supply and Transportation Contracts For Hines Unit 4 and Additional System Supply and Transportation.**

**A. Introduction.**

In this docket, PEF is asking the Commission to approve the BG/Cypress/FGT contracts as reasonable and prudent. As a result of Hines 4 coming on line in December, 2007, PEF considered several alternatives to supply natural gas to Hines 4, as well as to other generating units within the Company's system. PEF utilized an extensive request for proposal ("RFP") process to solicit bids to supply and transport natural gas to Hines 4.

After receiving responses to its three requests for proposals, PEF narrowed the field of its potential suppliers to three possible options: a Bahamas-based alternative, a Gulf of Mexico-based alternative, and the BG/Cypress/FGT contracts at issue here. PEF used four criteria: (1) certainty of project's success; (2) price; (3) geographic diversity; and (4) operational flexibility, to make a detailed comparison of the alternatives. After analyzing each of these potential alternatives based on those factors, PEF determined that the BG/Cypress/FGT contracts represented the most cost-effective alternative to supply Hines 4 based on both price and non-price factors. PEF further determined that the 20-year term of the BG/Cypress/FGT contracts provided PEF and its ratepayers the additional benefits of having a diversified supply portfolio and long-term commitments for gas supply and transportation at highly competitive terms and prices.

The BG/Cypress/FGT contracts represent a first-of-a-kind project to bring regasified LNG into Florida. (Tr. p. 136, L. 7-10). While other domestic and international gas suppliers have considered prospective LNG supply projects to provide natural gas supply to Florida, the BG/Cypress/FGT project is the first with the actual

capability to provide LNG to the State. (Tr. p. 35, L. 9-11). By providing a source of LNG supply and delivery, the BG/Cypress/FGT project will open Florida to the world market for liquefied natural gas and will increase the supply of natural gas into Florida. This, in turn, will increase natural gas competition and will logically put downward pressure on natural gas prices within the State. (Tr. p. 136, L. 10-12).

Given the magnitude of the BG/Cypress/FGT project and the large capital costs required to complete the expansions called for in that project, each of the parties to the BG/Cypress/FGT contracts required, as a condition precedent to performance, approval of each of the contracts by this Commission on or before June 15, 2005. (Confidential Ex. 15, PRM-1, p. 16; PRM-2, p. 16; PRM-3, p. 12). This requirement for Commission pre-approval was required by all parties to the BG/Cypress/FGT contracts because each party wanted advanced assurance that the Commission would find the contracts to be reasonable and prudent. (*See id.*). Under this requirement for Commission pre-approval, PEF asks that the Commission pre-approve: (1) the 20-year term of the BG/Cypress/FGT contracts; (2) the industry, market-based price index and fixed adder used for gas pricing in the BG supply contract; (3) the negotiated rates used in the Cypress/FGT transportation contracts; (4) the volumes of natural gas for which PEF has contracted under the BG supply contract; and (5) the general terms and provisions of the BG/Cypress/FGT contracts.

PEF presented the Commission with the most cost-effective and beneficial alternative to supply fuel to Hines 4 and other gas-fired generating units throughout PEF's system. In seeking pre-approval, PEF has only asked the Commission to approve terms and conditions of the BG/Cypress/FGT contracts that will not change over time and

that are ripe for review now. Thus, based on the evidence presented at the hearing, the law, and sound regulatory policy, the Commission should approve the BG/Cypress/FGT contracts as reasonable and prudent.

**B. PEF Utilized an Extensive, Reasonable, and Prudent Process to Solicit Bids from Potential Natural Gas Suppliers and Transporters.**

To solicit bids to supply fuel to Hines 4 and other gas-fired generating units on PEF's system, PEF sent out three requests for proposals, dated August 2003, April 2004, and June 2004.<sup>1</sup> (Tr. p. 56, L. 1-2). In all, 45 potential suppliers were solicited. (Tr. p. 64, L. 24). In those requests for proposals, PEF sought to find the most competitive contractual supply terms over a long-term basis. Specifically, PEF designed its RFPs to gather market intelligence and to obtain firm offers from potential suppliers and transportation carriers who could meet the Hines 4 expected in-service date. Those RFPs were designed to elicit competitive pricing terms and contractual terms that offered PEF maximum operational flexibility and favorable "supply interruption" protections. (Tr. p. 31, L. 8-15). Such factors were important to PEF to ensure a timely fuel supply to Hines 4, and because it was PEF's objective to find the best overall deal for itself and its ratepayers, as well as to provide the maximum benefit to PEF's overall fuel portfolio and operational flexibility.

Through the evidence presented to the Commission, PEF has demonstrated that it allowed both domestic gas suppliers and LNG suppliers alike an adequate opportunity to submit bids to supply natural gas to Hines 4. Indeed, for the June 2004 RFP, which was specifically targeted at domestic suppliers, PEF sent requests to no less than 41 domestic

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<sup>1</sup> While there is no rule or statutory requirement that PEF issue an RFP for fuel, PEF in this instance nonetheless chose to use an RFP process.

suppliers. (Tr. p. 65, L. 7). Additionally, in the June 2004 RFP, the volume of gas required by PEF was lower than that required in the earlier two RFPs, because PEF was aware that the Gulf of Mexico domestic suppliers would likely be unwilling to commit to a higher volume. (Tr. p. 61, L. 13-20). These facts show that PEF was comprehensive in its RFP process and that PEF tailored its RFPs to be attractive to all potential suppliers so that PEF would receive the most bids possible based on its needs.

Of the bids that PEF did receive, PEF determined that most of them were not suitable to provide natural gas supply and transportation to Hines 4. For example, certainty that the project would be completed before the Hines 4 in-service date was an important factor in PEF's analysis of the bids received. However, some of the Gulf of Mexico responses indicated that their planned LNG projects would not be completed in advance of Hines 4's in-service date. (Tr. p. 57, L. 11-15). If a supplier's bid did not provide PEF with assurances that an anticipated project would be timely completed, PEF reasonably eliminated that bid from further consideration.

It is also important and advantageous for PEF to maintain a varied portfolio of short-term, intermediate, and long-term fuel supply contracts. Long-term contracts, like the BG/Cypress/FGT contracts, provide stability and allow operational flexibility. In reviewing responses to its RFPs, PEF also removed from final consideration suppliers who were not willing to commit to a twenty-year contract term. (Tr. p. 59, L. 23-24).

Another factor PEF used to narrow the field of bids to the final three was price. Some of the responses from the Gulf of Mexico suppliers included significantly, even as much as three times, higher price premiums than other bids PEF received from its three RFPs. (Tr. p. 60, L. 24-25; p. 61, L. 1-2). Because price was another factor in PEF's



decision to supply natural gas to Hines 4, PEF could not give serious consideration to bids with such high prices, especially when compared to the other bids PEF received.

Finally, it is in PEF's best interest to choose the deal which provides the most protection from force majeure events. Accordingly, PEF used this factor to further narrow the proposals received to the three final choices: a Bahamas-based alternative, a Gulf of Mexico-based option, and the BG/Cypress/FGT contracts. Some of the proposals that PEF received contained less favorable force majeure provisions than others, meaning that some parties were not willing to assume more of the risk associated with force majeure events. (Tr. p. 59, L. 20-23). Therefore, PEF narrowed the responses received based on an evaluation of how much "supply interruption" risk that the responding suppliers were willing to assume.

PEF's RFP process resulted in the best alternatives from which PEF could choose to supply fuel to Hines 4. After evaluating the responses to PEF's RFPs, PEF narrowed its potential options to a Bahamas-based alternative, a Gulf of Mexico-based option, and the BG/Cypress/FGT contracts. PEF conducted a thorough analysis to compare the three choices and determine the most beneficial one based on price and non-price factors. PEF concluded that the BG/Cypress/FGT contracts presented the most cost-effective option to supply fuel to Hines 4 and the system based on price and non-price factors.

**C. The BG/Cypress/FGT Contracts Represent the Most Cost-Effective Option to Supply Hines Unit 4 and Other Units on PEF's System Based on Price and Non-Price Factors.**

PEF considered four major criteria in evaluating its three final alternatives: (1) certainty of project completion to meet the in-service date of Hines 4; (2) economics; (3) geographic diversity; and (4) operational flexibility. Based on these price and non-price

factors, PEF concluded that the BG/Cypress/FGT Contracts represented the most cost-effective option to supply Hines 4 and other units on PEF's system.

1. **The BG/Cypress/FGT Contracts Provide a High Degree of Certainty that the Project will be Timely Completed.**

A primary concern for PEF was that a fuel supply alternative for Hines 4 be certain enough to meet the commercial in-service date for Hines 4 in December, 2007. (Tr. p. 57, L. 19-25). Naturally, it is important for PEF to know that fuel suppliers and transporters will actually be able to provide fuel to Hines 4 when that generation unit goes on line.

In evaluating the three potential final alternatives available to provide fuel to Hines 4, PEF found that the Cypress pipeline expansion, which will bring a new pipeline into Florida from Elba Island, has a high degree of certainty of being completed in advance of the commercial in-service date for Hines 4. First, the Elba Island facility is an existing and functional regasification site. (Tr. p. 107, L. 13-14). Second, the Cypress pipeline expansion will link the Southern Natural pipeline system with FGT in Clay County, Florida. (Tr. p. 107, L. 15-19). Third, much of the Cypress pipeline route has already been sited, and initial feedback from the Federal Energy Regulatory Commission ("FERC") suggests that the FERC approval process for the Cypress expansion may be shorter than the timeframe anticipated in Southern Natural's project schedule. (Tr. p. 98, L. 14-18; p. 108, L. 16-20). Finally, Southern Natural is a major interstate transportation provider that has successful experience in completing projects of a similar magnitude within similar timeframes. (Tr. p. 108, L. 11-13).

The BG/Cypress/FGT project is currently on-schedule. The project's timeline is consistent with Southern Natural's successful experience with other similarly-sized

projects, and Mr. Hughes testified that the project is on track with that timeline. (Tr. p. 108, L. 11-13; p. 108, L. 6-8). Further, Mr. Hughes also explained that he has every reason to believe that the Cypress pipeline expansion project will be completed in time to supply natural gas transportation to Hines 4. (Tr. p. 123, L. 4-8).

The ability to successfully deliver gas to Hines 4 in time for its commercial in-service date was a critical factor for PEF in evaluating potential fuel supply options. The BG/Cypress/FGT contracts provide PEF with a high degree of certainty that the Cypress project will be completed in advance of the in-service date for Hines 4, thereby making the BG/Cypress/FGT alternative a reasonable and logical choice for PEF's fuel supply needs.

**2. The BG/Cypress/FGT Contracts Contain Competitive Pricing Terms.**

PEF has negotiated very favorable pricing terms under the BG/Cypress/FGT contracts. For the BG supply contract, the price is tied to an industry market index, with a fixed basis adder that is highly competitive based on real world market data and responses that PEF received in the RFP process. (Tr. p. 80, L. 5-20). Given the fact that basis adders have consistently increased from 2000 to 2004 at Mobile Bay/Destin in the Gulf of Mexico, PEF's fixed basis adder, by comparison, is extremely competitive and is highly likely to benefit PEF's ratepayers over the course of the contract term. (Tr. p. 80, L. 13-18; p. 83, L. 14-20). In addition, pricing alternatives are available to PEF under the contract to afford PEF the ability to hedge future market prices if deemed desirable by PEF. These hedging mechanisms will allow PEF to reduce price volatility and provide rate certainty for its ratepayers. (Tr. p. 40, L. 9-12; p. 48, L. 3-8). Further, if certain

force majeure events<sup>2</sup> occur in the LNG supply route, BG must pay the difference in incremental cost to PEF to acquire gas from an alternate source if it is unable to supply PEF with gas. (Tr. p. 46, L. 4-7). All these factors make the pricing terms in the BG supply contract advantageous to PEF and its customers. (Tr. p. 93, L. 14-17).

With respect to pricing terms in the BG supply contract, PEF is asking the Commission to pre-approve the industry, market-based pricing index and fixed basis adder used for gas pricing as reasonable and prudent. As demonstrated by the evidence in this case, the pricing terms in the BG supply contract are highly competitive and beneficial to PEF and its customers. Therefore, the Commission should approve those terms as reasonable and prudent.

The pricing structure under the transportation contracts in the Cypress alternative is also quite favorable to the ratepayers. (Tr. p. 93, L. 22-24). The pricing provisions in these contracts are based on negotiated rates which provide competitive transportation prices. (Tr. p. 41, L. 1-4). PEF is asking the Commission to pre-approve the negotiated transportation rates used in the Cypress/FGT contracts as reasonable and prudent because those terms are set for the entire course of the contracts and they will not change. The pricing terms in the Cypress/FGT transportation contracts are competitive and beneficial to PEF and its customers, especially when coupled with the BG supply contract. Therefore, the Commission should approve those pricing terms as reasonable and prudent.

In addition, the general terms and conditions in each of the BG/Cypress/FGT contracts are substantially the same as the general terms and conditions in typical fuel

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<sup>2</sup> These force majeure events are described in Section 12 of Confidential Ex. 5, PRM-1.

supply and transportation contracts that PEF enters into, including its existing contracts with Gulf of Mexico domestic suppliers. The general provisions in the BG supply contracts are equivalent to the general contract provisions in typical short-term and intermediate supply contracts that PEF has entered into with Gulf of Mexico domestic suppliers that have been previously approved by this Commission. (Tr. p. 95, L. 8-9). The Cypress and FGT transportation contracts, moreover, are FERC-approved transportation service provider agreements, and the terms and conditions are on par with existing PEF transportation agreements that have been previously approved by this Commission. (Tr. p. 95, L. 9-12). Thus, the general terms and conditions under all three contracts are based on standard industry terms that have consistently been recognized as reasonable and prudent. (Tr. p. 95, L. 4-6). The general terms of the BG/Cypress/FGT contracts are also set for the twenty-year duration of those contracts and they ensure future reliability for PEF's system. Therefore, the Commission should pre-approve those terms as reasonable and prudent based on the evidence presented.

The combined BG/Cypress contracts benefit PEF's ratepayers by locking in highly competitive prices for a 20-year term while, at the same time, providing a pricing mechanism to hedge future gas supply prices over the contract term. As Ms. Murphy testified, there is a risk, especially considering the rising basis adder trend at the Mobile Bay/Destin area, that at the expiration of a shorter-term contract, PEF would be forced to enter into a new contract with higher prices. (Tr. p. 82, L. 16-23). PEF has substantially reduced this risk by negotiating a favorable price basis adder for the entire 20-year period of the BG/Cypress/FGT contracts. In the same way, PEF has locked in the other favorable contract terms, such as the force majeure provisions in the BG supply contract,

for the entire twenty-year term of the contracts. For these reasons, the 20-year term of the BG/Cypress/FGT contracts is reasonable and prudent. (Tr. p. 94, L. 17-20).

In summary, PEF has asked the Commission to pre-approve the industry, market-based price index and fixed basis adder used for gas pricing in the BG supply contract, the negotiated rates used in the Cypress/FGT transportation contracts, and the general terms and conditions under all three Cypress contracts because those provisions will not change over the course of the contracts, nor are they dependent on any facts or information that will only be known in the future. Since all of these provisions are ripe for the Commission's consideration now, the Commission, based on the evidence presented in this proceeding, should approve them as reasonable and prudent.

**3. The BG/Cypress/FGT Contracts Provide Geographic Diversity.**

To maintain a reliable source of natural gas supply to Hines 4, PEF's system, and ultimately the state of Florida, PEF also considered geographic diversity as a major factor in choosing the BG/Cypress/FGT contracts. Considering the impact that hurricanes and other natural or man-made disasters that will interrupt the supply of gas can have and have had on the supply of natural gas from the Gulf of Mexico, PEF reasonably and prudently looked at alternatives to reduce the Company's reliance on natural gas from the Gulf of Mexico. Because nearly all of the natural gas supply in Florida comes from or through the Gulf of Mexico, this region is vulnerable to interruptions from a common source or event, like a hurricane. (Tr. p. 135, L. 22-25; p. 136, L. 1-4). When a hurricane approaches the Gulf of Mexico, natural gas platforms may, and have, shut down for some period of time. An interruption in this source of natural gas, depending on the severity of the interruption, is likely to result in the curtailment of electricity production from gas-

fired generation facilities. (Tr. p. 131, L. 22-25; p. 132, L. 1-3). By having an additional supply of natural gas that originates from a different geographic region, a catastrophe, like a hurricane, will usually not affect both locations at the same time and thus reduce the risk of significant supply disruptions for PEF gas-fired generation facilities that is currently the case when the supply of natural gas comes from one source. (Tr. p. 132, L. 8-10).

At the hearing in this matter, Staff raised two issues regarding geographic diversity. First, Staff questioned whether geographic diversity is really a benefit to PEF and its customers. Second, Staff questioned whether the BG/Cypress/FGT contracts actually provide geographic diversity. As the undisputed evidence in this matter showed, however, Staff's concerns were unfounded.

Staff suggested the incremental costs savings of geographic diversity, with respect to Hurricane Ivan, might not justify the importance that PEF placed on this factor in evaluating potential fuel supply options. (Tr. p. 73, L. 18-23). Specifically, Hurricane Ivan cost PEF's ratepayers over \$6.5 million in incremental fuel costs due to supply disruption from the Gulf of Mexico. (Ex. 2, Composite Stip-2, Bates No. 000027, PEF's Response to Interrogatory No. 72). As an initial matter, \$6.5 million is not an insignificant amount of costs in PEF's view. For that reason, Staff's attempt to compare that amount to PEF's total fuel costs for 2004 misses the point that PEF's customers still incurred \$6.5 million in additional costs.

Further, simply focusing on the incremental costs associated with one hurricane also misses the point. There is an inherent risk in obtaining all of PEF's gas supply needs from one location. The unfortunate reality is that at some point in the future, other

devastating storms, or other disasters, may hit the Gulf of Mexico and cause significant costs to PEF's ratepayers due to gas supply disruptions. (Tr. p. 131, L. 20-22). PEF's proposal to bring another pipeline into Florida, providing an alternate source of natural gas, will at the very least alleviate some of the effects such a storm or disaster would have. (Tr. p. 136, L. 5-7). And the prospect of such a hurricane is not a far-fetched concept. As Mr. Waters testified, if Hurricane Ivan had hit just a few months earlier last year when load was not reduced by three prior hurricanes, the incremental costs would likely have been much higher, and it would have been much more difficult to maintain the power supply. (Tr. p. 143, L. 12-15). PEF, by negotiating the BG/Cypress/FGT contracts, has demonstrated foresight to avoid potential problems with total dependence on the Gulf of Mexico as the sole source of natural gas.

Staff also asked whether "upstream" supply risks would diminish the geographic diversity that the BG/Cypress/FGT contracts provide. (Tr. p. 88, L. 5-10). Staff pointed to several potential "upstream" risks, such as fires and supply interruptions from the host country, associated with LNG coming to the Elba Island terminal. As Ms. Murphy testified, however, PEF adequately protected the ratepayers from multiple, potential upstream supply risks by negotiating terms in the BG contract that shift such risks to BG. (Tr. p. 93, L. 1-10). These force majeure terms are more favorable than what PEF usually sees in force majeure provisions. (Tr. p. 92, L. 6-13). Also, the force majeure risks for "downstream" occurrences under the BG contract are no greater than the risks PEF would experience from a Gulf of Mexico supplier. (Tr. p. 92, L. 14-21).

Staff next questioned whether there was any risk to geographic diversity based on potential problems at the Elba Island regasification facility. (Tr. p. 114, L. 21-25).



Specifically, Staff questioned whether potential problems at the Elba Island regasification facility could lessen the geographic diversity that the BG/Cypress/FGT contracts provide. The undisputed testimony during the hearing in this matter showed that Elba Island provides PEF with a highly reliable source of natural gas regasification and transportation. Southern LNG's safety record is "outstanding." (Tr. p. 119, L. 16). Since Elba Island went operational in 2001, there have been no instances at the Elba Island terminal in which Southern LNG was unable to meet service. (Tr. p. 115, L. 1-6). Also, as explained by Mr. Hughes, a soon-to-be completed expansion of the Elba Island complex will result in a total of four LNG tanks and three docking facilities that will further enhance Elba Island's reliability. (Tr. p. 111, L. 1-23). These new storage tanks will provide Elba Island with increased capacity to store LNG that can be used to mitigate possible supply disruptions. (Tr. p. 111, L. 4-8). Further, the new docking facilities at Elba Island will allow LNG transportation tankers to have three possible docking options in case one of the three docks is temporally unable to provide service. (Tr. p. 111, L. 21).

Finally, Staff questioned whether "source country" supply interruptions could threaten geographic diversity. (Tr. p. 118, L. 23-25; p. 119, L. 1). As the evidence shows, however, any interruption in LNG supply from one host country will not greatly affect the Elba Island terminal. As described by Mr. Hughes, BG LNG Services has supply rights to sources of LNG from several countries. (Tr. p. 117, L. 7-12). Further, there are plans in numerous countries to develop additional LNG liquefaction projects, which will greatly increase the number of supply sources to the North American market. (Tr. p. 117, L. 10-19). Given multiple supply sources, the effect of interruption in one

supply source obviously decreases. There are also storage tanks at Elba Island, so even if host country supply is curtailed, PEF will still have access to a portion of the nine days supply of natural gas storage at Elba Island. (Tr. p. 85, L. 11-14).

With respect to geographic diversity, the ultimate point is that if PEF has all its natural gas supply coming from a single source, PEF has no geographic diversity at all and is subject to a significant supply failure in the event of a problem with that single fuel source location. As Mr. Waters testified, if natural gas supply under the BG/Cypress/FGT contracts is curtailed and PEF is unable to get natural gas along that pipeline, it will still be able to secure gas from its existing supply and transportation sources from the Gulf of Mexico. The effect of losing the BG/Cypress/FGT source is not as great in that scenario because losing that one supply source does not result in the loss of the entire system's supply source. (Tr. p. 147, L. 6-11). Likewise, if PEF loses its existing supply source from the Gulf of Mexico, extra natural gas can possibly be procured from Elba Island through the BG/Cypress/FGT contracts to cover some, if not all, the difference lost from the Gulf of Mexico supply. (Tr. p. 147, L. 12-13). But, if PEF's sole source of natural gas is from the Gulf of Mexico and that supply is curtailed, then PEF could possibly lose its entire supply because that supply comes from a single source. (Tr. p. 147, L. 13-16). Mr. Waters' testimony simply, but eloquently, explains why geographic diversity was a major factor in PEF's analysis of its fuel supply and transportation alternatives for Hines 4.

4. **The BG/Cypress/FGT Contracts Afford Operational Flexibility to PEF's System.**

Finally, PEF considered operational flexibility an important factor in deciding on the fuel alternatives for Hines 4 and PEF's system. Operational flexibility is important to

allow PEF to manage its generation fleet and to react to natural gas supply situations that may arise in the future. (Tr. p. 141, L. 1-5). The additional pipeline from Elba Island affords PEF added flexibility in providing fuel supply to Hines 4 as well as other gas-fired generating units on PEF's system. (Tr. p. 141, L. 13-14). By bringing a new pipeline into the State of Florida, PEF will have options to fuel not only Hines 4, but also other current and future generating units. (Tr. p. 136, L. 19-21). PEF can utilize different combinations of supply from Elba Island and Gulfstream to maximize efficiency and achieve the lowest price for the ratepayers. (Tr. p. 132, L. 20-25). PEF will also be able to make short and long term decisions to vary supply sources based on pricing and availability. (Tr. p. 134, L. 4-6). Additionally, with another source of natural gas, PEF can blend fuel supplies to better ensure reliability for PEF's system. (Tr. p. 132, L. 23-24).

The BG/Cypress/FGT contracts also provide PEF operational flexibility because each of the three contracts have a twenty-year term. The length of the term is beneficial to PEF because, among other things, it allows PEF to maintain a mixed portfolio of short, intermediate, and long-term supply contracts. (Tr. p. 140, L. 7-14). PEF currently has two other long-term contracts, with fifteen- and twenty- year terms, that are set to terminate prior to the Cypress contracts. (Tr. p. 67, L. 15-16). As Mr. Waters testified, a varied portfolio is important to ensure stability, in that some supply is guaranteed for a longer period of time, and also to provide flexibility, meaning that as shorter-term contracts expire, PEF will be able to re-assess its fuel needs and react to changes that have occurred. (Tr. p. 141, L. 10-15). And, because Hines 4 and other gas-fired generation units have an expected generating life of at least 25 years, it is reasonable and

prudent from a planning perspective to have a portion of firm natural gas supply for most of that 25 year life. (Tr. p. 140, L. 4-14).

Finally, the BG/Cypress/FGT contracts provide PEF operational flexibility because the volumes that PEF will take under the BG supply contract were carefully designed to meet PEF's system needs and requirements. They are sculpted to meet PEF's actual demand. Essentially, PEF will take a higher volume of supply in the summer, when load forecasts are higher, than in the winter. (Tr. p. 94, L. 5-11). The BG/Cypress/FGT option that PEF selected was the only alternative that offered PEF sculpted volumes at competitive prices and terms. In addition, PEF has the option to sell any excess natural gas that Hines 4 does not need, and the natural gas can be used at other gas-fired generating units within PEF's system. (Ex. 2, Composite Stip-2, Bates No. 000030, PEF's Response to Interrogatory No. 75(B)). For these reasons, the volumes under the BG supply contract provide PEF with optimal supply flexibility. (Tr. p. 94, L. 5-7).

The undisputed evidence in the proceeding shows that the volumes of gas taken under the BG supply contract meet PEF's needs. The evidence also shows that the BG contract was the only option that offered PEF sculpted gas volumes at competitive prices, which allows PEF to maximize its operational flexibility. These contracted volumes are reasonable and prudent, and the Commission should approve them. (Tr. p. 94, L. 5-7).

In summary, the BG/Cypress/FGT contracts meet all of PEF's requirements and were the only contracts that provide PEF with all the benefits of operational flexibility. By providing PEF enhanced operational flexibility that is not available with other alternatives, the BG/Cypress/FGT contracts represent a reasonable and prudent option to

meet PEF's fuel supply needs for Hines 4 and for other gas-fired generating units on PEF's system.

5. **The BG/Cypress/FGT Contracts are the Best Deal for PEF and its Ratepayers Compared to the Bahamas- and Gulf of Mexico-Based Options.**

The BG/Cypress/FGT contracts were selected over the Gulf of Mexico and Bahamas alternatives because the Cypress alternative provided PEF and its ratepayers with the most reasonable and prudent deal based on price and non-price factors. Turning specifically to the four factors that PEF used to evaluate the three final fuel supply options available for Hines 4, the BG/Cypress/FGT alternative was on par with the Gulf of Mexico alternative on price and project certainty, but clearly outweighed the Gulf alternative on supply diversity and operational flexibility. When compared to the Bahamas-based alternative, the BG/Cypress/FGT alternative was on par in providing supply diversity to PEF's gas portfolio but the BG/Cypress/FGT alternative clearly outweighed the Bahamas option on project certainty. **Based on these factors, the BG/Cypress/FGT alternative emerged as the best overall deal for PEF and its ratepayers.**

(A). **The Bahamas-Based Project.**

When the BG/Cypress/FGT alternative is compared to the Bahamas-based option, the BG/Cypress/FGT alternative is vastly more certain. The BG/Cypress/FGT contracts involve the Elba Island terminal, an existing LNG facility. (Tr. p. 107, L. 13-14). By contrast, there is no existing LNG terminal in the Bahamas, and there has never been a firm date as to when the Bahamas-based parties would begin construction of the terminal and undersea pipeline. (Tr. p. 58, L. 9-11). Indeed, as Ms. Murphy testified, two different locations proposed by the Bahamas parties to site an LNG terminal have been

rejected by the Bahamian government, and one of the Bahamas suppliers missed several deadlines throughout the negotiation process with PEF. (Tr. p. 75, L. 24-25; p. 76, L. 3-6).

Despite the lack of certainty surrounding the Bahamas-based LNG project, as well as the speculative nature of potential plans by domestic suppliers to build LNG facilities in the Gulf of Mexico, Staff questioned whether PEF could have “bridged the gap” between the in-service date of Hines 4 and the expected completion date of these possible LNG projects by using short-term fuel supply contracts. (Tr. p. 58, L. 1-4; p. 69, L. 19; p. 75, L. 19-21). However, “bridging the gap” with short-term fuel supply contracts is only feasible when the length of the delay is known. Ms. Murphy testified that the domestic suppliers and the Bahamas-based suppliers were unable to give any sort of reasonable time frame as to when future LNG projects would even begin, let alone when they would actually finish. (Tr. p. 58, L. 5-8; p. 75, L. 22-25, p. 76, L. 1). Again, as stated by Ms. Murphy, the Bahamian government has recently disapproved the site locations for the proposed Bahamas-based projects, and it is very questionable that those projects may ever happen. (Tr. p. 76, L. 3-6). Given these uncertainties, PEF’s most reasonable and prudent choice was not to try to “bridge the gap” so as to accommodate possible Bahamas-based projects that may not ever be completed.<sup>3</sup>

The BG/Cypress/FGT also provided PEF the best opportunity to increase its operational flexibility and continue to reliably supply natural gas to its generating units.

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<sup>3</sup> The speculative nature of the Bahamas-based LNG project also rendered any benefits of the project meaningless to PEF. Despite providing geographic diversity and the lowest cost option considering total prices, the completion of the Bahamas-based LNG project was so uncertain that PEF reasonably and prudently eliminated it from consideration. (Tr. p. 75, L. 9-11).

While a Bahamas-based option may have provided some operational flexibility, the Cypress pipeline expansion provides maximum flexibility in that the natural gas from Elba Island can be used at other gas-fired generating units on PEF's system. (Tr. p. 133, L. 1-3). By contrast, a pipeline from the Bahamas would only be able to fuel the Hines Complex, because additional pipelines would need to be built to reach PEF's other units. (Ex. 8, PRM-4). Additionally, when the Cypress alternative is compared to the Bahamas-based option, the speculative and uncertain nature of the Bahamas project makes it too risky to reliably supply fuel to Hines 4. No matter what other benefits a Bahamas-based project could potentially provide, if PEF cannot be assured the project will be finished in advance of Hines 4's in-service date, the Bahamas option must necessarily lose.

**(B). The Gulf of Mexico-Based Project.**

The BG/Cypress/FGT contracts provided a better overall price than the Gulf of Mexico alternative and provided geographic diversity and greater operational flexibility than the Gulf of Mexico alternative.<sup>4</sup> As a result, the BG/Cypress/FGT contracts alternative was clearly the better choice over a Gulf of Mexico based project.

The BG/Cypress/FGT contracts provided a competitive overall price compared to the Gulf of Mexico alternative. When comparing the BG supply contract to the supply portions of the Gulf of Mexico-based and Bahamas-based alternatives, the prices under the BG supply contract are lower. (Confidential Ex. 15, PRM-5). Additionally, the Gulf

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<sup>4</sup> The Gulf of Mexico alternative, with the existing Gulfstream pipeline, satisfied the certainty requirement. However, so did the BG/Cypress/FGT alternative, given the high degree of certainty that the Cypress project will be completed in advance of the Hines 4 in-service date. Further, PEF is in a position to monitor the Cypress project to ensure timely completion because the Cypress contracts require Southern Natural to provide monthly progress reports to PEF. (Tr. p. 109, L. 2-4). As a result, the certainty of the Gulf of Mexico alternative did not outweigh the other benefits of the BG/Cypress/FGT alternative.

of Mexico-based suppliers were unwilling to provide a 20-year term for the supply contract, so the BG supply contract in the Cypress alternative provides the additional benefit of a favorable price for a substantial time period. The Cypress/FGT transportation contracts are somewhat higher in price, compared to the transportation aspect of the Gulf of Mexico-based alternative, however, based on the total contract package and actual gas volumes the Cypress alternative is competitive with the Gulf of Mexico-based alternative based solely on the price factor. (Confidential Ex. 15, PRM-6).

Supply diversity and operational flexibility were the critical factors distinguishing the BG/Cypress/FGT contracts alternative from the Gulf of Mexico alternative in PEF's decision to secure a natural gas supply for Hines 4. (Tr. p. 77, L. 12-15). The Gulf of Mexico alternative simply did not provide any geographic diversity to PEF. Similarly, a Gulf of Mexico-based alternative provides no additional operational flexibility to PEF because all of PEF's current natural gas supply originates from that region. As Ms. Murphy testified, the Cypress option offered so many valuable benefits that the Gulf of Mexico-based alternative could not provide, such as geographic diversity and operational flexibility, the Cypress contract was the clear winner. (Tr. p. 50, L. 15-17; p. 51, L. 1-8).

**(C). Summary of Project Comparisons.**

The BG/Cypress/FGT alternative clearly outweighed the Gulf of Mexico alternative on supply diversity and operational flexibility. When compared to the Bahamas-based alternative, the BG/Cypress/FGT alternative clearly outweighed the Bahamas option on project certainty. As Ms. Murphy testified, the Cypress alternative "has so many valuable options that we very well just could not overlook." (Tr. p. 51, L. 6-8). Ms. Murphy's point is well taken, because logically, PEF could not reasonably and



prudently ignore the added benefits provided by the BG/Cypress/FGT contracts that were simply unavailable in the Bahamas and the Gulf of Mexico alternatives.

**IV. Conclusion.**

The BG/Cypress/FGT contracts that PEF submitted for approval in this proceeding represent the most reasonable and prudent alternative to meet the fuel needs of Hines 4 and other gas-fired units on PEF's system. The BG/Cypress/FGT contracts also represent a unique, first-of-a-kind opportunity for the State of Florida to have a new supply source for natural gas as well as a third major gas pipeline to deliver natural gas into the state. The evidence in this case shows that PEF carefully and comprehensively considered all reasonable potential fuel supply and transportation options and ultimately chose the BG/Cypress/FGT alternative because it was the most beneficial to PEF and its ratepayers on both price and non-price factors. To allow PEF, its ratepayers, and the State of Florida as a whole to benefit from the BG/Cypress/FGT project, PEF respectfully requests that the Commission grant PEF's Petition for Approval of Long-Term Fuel Supply and Transportation Contracts for Hines Unit 4 and Additional System Supply and Transportation, and thereby approve the BG/Cypress/FGT contracts.

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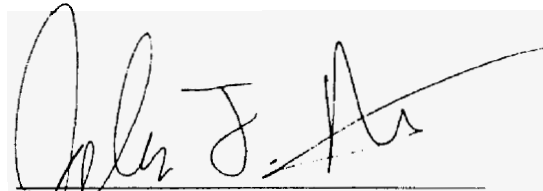
**CERTIFICATE OF SERVICE**

I HEREBY CERTIFY that a true copy of the foregoing has been furnished to the following individuals as indicated in the service list on this 31<sup>st</sup> day of May, 2005.

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