

HECEINED-FPSC March 22, 2010

VIA HAND DELIVERY

Ms. Ann Cole, Commission Clerk **Florida Public Service Commission** 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850

Petition for approval of amended negotiated purchase power contract with BG&E of Florida, Re: LLC by Progress Energy Florida, Inc.; Docket No. 090537-EQ

Dear Ms. Cole:

Please find enclosed for filing on behalf of Progress Energy Florida, Inc. ("PEF") the original and five (5) copies of PEF's response to Staff's Data Request No. 2 in the above referenced docket.

Thank you for your assistance in this matter. Please call me at (727) 820-5184 should you have any questions.

Sincerely, mT. Burnettins John T. Burnett

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PROGRESS ENERGY FLORIDA, INC.'S RESPONSES TO STAFF DATA REQUEST NO. 2 DOCKET NO. 090537-EQ

- Q1. In PEF's response to Question 9 of Staff's First Data Request, dated February 10, 2010, PEF states that the fuel price forecast used was provided by PIRA Energy Group. Please respond to the following:
 - a. What date was this fuel price forecast calculated?

<u>Answer</u>: The forecast was calculated the three weeks prior to August 27, 2008. This was the last forecast that PIRA provided PEF in 2008.

b. What date was this forecast provided to PEF?

Answer: August 27, 2008.

Q2. In PEF's response to Question 10 of Staff's First Data Request, dated February 10, 2010, PEF provided the fuel price forecast used to calculate the NPV for the amended contract. Are the prices listed in the column titled "Henry Hub Natural Gas" the delivered prices of natural gas or the commodity prices only?

<u>Answer</u>: The prices listed in the column titled "Henry Hub Natural Gas" are commodity prices at the hub. Additional transportation is required for delivery to PEF's service area. This additional transportation cost is labeled as "Physical Basis FT Z3".

Q3. Please provide a comparison of the amended contract NPV's using prices 20% above and 20% below the fuel price forecast used by PEF for the amended contract.

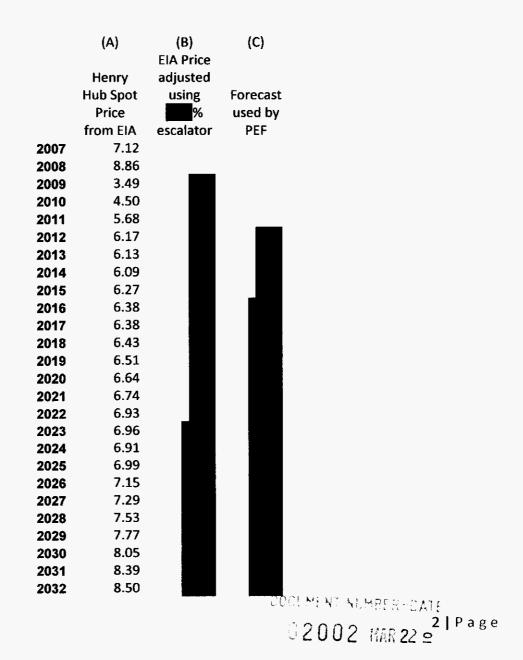
Answer: Please see Attachment A.

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- Q4. Please refer to the Energy Information Administration's (EIA) Annual Energy Outlook reference case for Henry Hub natural gas prices (dated December 2009). This is a long term natural gas price forecast through 2035 and is in 2008 dollars. Please respond to the following:
 - a. Assume the reference case Henry Hub prices for 2012 through 2032 are adjusted at the escalation rate used in PEF's response to Question 10 of Staff's First Data Request, dated February 10, 2010. Please explain the differences between these forecasted gas prices and the forecasted gas prices used by PEF in its NPV analysis of the amended contract. In particular, please explain the differences in forecasted prices in the near-term, e.g., 2012 through 2017.



Answer:

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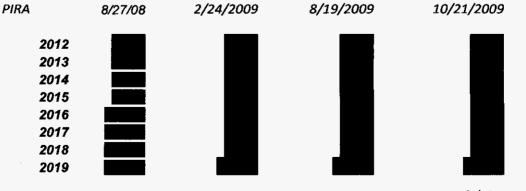
The table above shows the EIA Annual Energy Outlook reference case for Henry Hub natural gas prices in Column A. Column B takes the EIA prices and escalates them at **1000**% per year starting in 2009. Column C is the natural gas forecast that PEF obtained from PIRA with the prices for 2029 through 2032 escalated at **1000**%.

The natural gas forecasts in Columns B and C are different for a number of reasons. First, the escalator of **1000**% is inappropriate. PEF used that escalator for the last few years of its forecast based on the remainder of the forecast. That escalator was not intended a fuel price escalator for the entire twenty year forecast. In this case, a measure of inflation would be a more appropriate escalator because the escalator is used to reflect the time value of money by adjusting 2008 dollars to nominal dollars. Second, the forecasts were prepared at different times with different assumptions. The EIA forecast was prepared in December 2009 while the forecast used by PEF was prepared in August 2008.

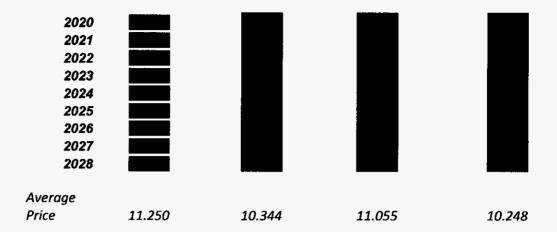
b. In light of differences between the EIA's reference case natural gas price forecast and the long-term gas price forecast used by PEF, please explain how the long-term gas price forecast used by PEF is reasonable for purposes of the NPV analysis.

<u>Answer</u>: Forecasts of volatile commodities, like natural gas, change frequently. This can be seen by looking at the last four forecasts of natural gas provided by PIRA below. In these forecasts, the average price fluctuated up and down during 2009.

For consistency, PEF uses the forecast used to develop the Ten-Year-Site-Plan throughout the year when evaluating QF purchases. Negotiated contracts can take months to negotiate and during that time the forecast of natural gas may change. It may even change more than once during negotiations. If PEF used the latest natural gas forecast during negotiations then the negotiations would have to restart each time a new forecast became available.



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Another reason that PEF uses the fuel forecast from Ten-Year-Site-Plan when evaluating QF contracts is to maintain consistency with the Ten-Year-Site-Plan. If a different fuel forecast had been used in the Ten-Year-Site-Plan then a different avoided unit may have emerged. Therefore, it is consistent to use the fuel forecast used to establish the avoided unit when evaluating QF contracts against the avoided unit.

Attachment A

Dollars in \$000	NPV	2012		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
High Fuel - 20% Increase																							2032
NPV of Payments to BGE	\$ 231,583	10,622	19	9,570	18,311	17,133	16,070	14,995	14,030	13,128	12,314	11,490	10,751	10,059	9,435	8,804	8,238	7,707	7,230	6,746	6,312	5,906	2,734
NPV of Avoided Capacity Costs	\$ 43,007	\$-	\$	- \$	1,998 \$	3,283 \$	3,141 \$	3,008 \$	2,877 \$	2,753 Ś	2.635 \$	2.524 S	2.414 S	2,314 \$	2.214 S	2,119 \$	2,028 Ś	1.942 S	1.858 \$	1.779 Ś	1,705	\$ 1.632	\$ 781
NPV of Avoided Energy Costs	\$ 282,757	5 14,146	\$ 26	5,538 \$	24,021 \$	22,967 \$	19,768 \$	16,517 \$	15,273 \$	14,288 \$	13,489 \$	13,077 \$	12,463 \$	12,023 \$	10,852 \$	10,560 \$	10,085 \$	9,877 \$	9,124 \$	8,580 \$	8,087		\$ 3,399
NPV of Net Benefit (Cost)	\$ 94,181	3,525	ŧ	5, 968	7,709	9,118	6,839	4,530	4,120	3,913	3,811	4,111	4,127	4,277	3,630	3,875	3,876	4,111	3,753	3,613	3,480	3,348	1,446
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Dollars in \$000 Low Fuel - 20% Decrease	NPV	2012		2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
NPV of Payments to BGE	\$ 231,583	10,622	19	9,570	18,311	17,133	16,070	14,995	14,030	13,128	12,314	11,490	10,751	10,059	9,435	8,804	8,238	7,707	7,230	6,746	6,312	5,906	2,734
NPV of Avoided Capacity Costs	\$ 43,007	; -	\$	- \$	1,998 \$	3,283 \$	3,141 \$	3,008 \$	2,877 \$	2,753 \$	2,635 \$	2,524 \$	2,414 \$	2,314 \$	2,214 \$	2,119 \$	2.028 S	1.942 Ś	1.858 S	1.779 Ś	1.705	\$ 1.632	\$ 781
NPV of Avoided Energy Costs	\$ 188,505	9,431	\$ 17	,691 \$	16,013 \$	15,312 \$	13,178 \$	\$ 11,012 \$	10,182 \$	9,525 \$	8,993 \$	8,719 \$	8,309 \$	8,015 \$	7,235 \$	7,040 \$	6,723 \$	6,585 \$	6,083 \$	5,720 \$	5,391		\$ 2,266
NPV of Net Benefit (Cost)	\$ (71)	(1,190)	(1	,879)	(299)	1,462	249	(975)	(971)	(850)	(685)	(247)	(27)	270	13	355	514	819	712	753	784	808	314

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