

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Environmental cost recovery clause.

DOCKET NO. 110007-EI

DATED: SEPTEMBER 15, 2011

**PROGRESS ENERGY FLORIDA'S RESPONSE TO STAFF'S  
SIXTH SET OF INTERROGATORIES (NOS. 13-14)**

PROGRESS ENERGY FLORIDA, INC. ("PEF"), pursuant to Rule 28-106.206, Florida Administrative Code, Rule 1.340, Florida Rules of Civil Procedure, and the Order Establishing Procedure in this matter, hereby responds to Staff's Sixth Set of Interrogatories (Nos. 13-14):

**RESPONSES**

**13. Please refer to pages 4 and 7 of witness Foster's testimony and page 8 of Exhibit TGF-3 filed on August 26, 2011.**

- a. On page 4 of his testimony, witness Foster stated "NOx and SO2 emission allowances under the current CAIR cannot be used to satisfy the new CSAPR programs effective January 1, 2012." (Lines 22 – 23) Referring to page 8 of Exhibit TGF-3, PEF has projected SO2 expenses totaling \$335,206 for 2012, on Line 6a 5090001 SO2 Allowance Expense. Please explain from where PEF will obtain the SO2 allowances that will be useful under the new CSAPR rule.**

**Answer:** Please see PEF's response to Staff's Fifth Set of Interrogatories No. 12a.

- b. Referring to page 8 of Exhibit TGF-3, please explain the differences between Line 6a 5090001 SO2 Allowance Expense and Line 6b 4074004 SO2 Allowance Amortization Expense.**

**Answer:** Line 6a 5090001 SO2 Allowance Expenses is the estimated cost of allowances that will be expensed concurrent with monthly emissions of SO2 in 2012. PEF is allocated allowances from the EPA at no cost and also purchases allowances in the market. PEF values its pool of SO2 inventory allowances at average cost and expenses these allowances to meet emission compliance requirements using an average cost method.

Line 6b 4074004 SO2 Allowance Amortization Expense is estimated amortization of 2012 SO2 allowance auction proceeds. EPA auctions a percentage of a utility's SO2 allowances each year. EPA remits these auction proceeds to the utility and the utility then gives them back to the customers through the ECRC. PEF accounts for the proceeds in as a regulatory liability (account 25401FL) and amortizes the proceeds for each vintage year over a 12 month period.

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- c. **According to the Excel file ecrc-2012-projection.xlsx which PEF filed on August 26, 2011, it appears that PEF has projected it will use the allowances from its 2011 SO<sub>2</sub> inventory to cover the company's 2012 SO<sub>2</sub> allowance expense. In light of witness Foster's testimony mentioned in (a), please explain why such projection is appropriate.**

**Answer:** Please see PEF's response to Staff's 5<sup>th</sup> Set of Interrogatories No. 12a. Due to the fact that these allowances still have value and are expected to be used to comply with the Acid Rain Program under Title V of the Clean Air Act, it is appropriate to continue to treat these allowance expenses in the same manner as in prior periods. The Commission approved ECRC recovery of SO<sub>2</sub> Emission Allowances under CAA Title IV in Order No. PSC-95-0450-FOF-EI.

- d. **Referring to the beginning balance of \$22,549,875 reported on Line 1d 1823403 NO<sub>x</sub> Emission Allowance Regulatory, please break this amount down to show how much was purchased by PEF from the allowance market and how much was allocated to PEF by the EPA under the CAIR program.**

**Answer:** All of the \$22.5 million referenced above was purchased by PEF from the allowance market. PEF does not book any value in inventory for allowances the EPA gives to PEF at no charge. The Company does not impute a value for allowances based on market conditions. For this reason, all of the \$22.5 million was incurred purchasing NO<sub>x</sub> allowances and represent investment PEF has made in this inventory. When allowances are expensed, PEF values its pool of NO<sub>x</sub> inventory allowances at average cost consistent with inventory accounting principles. Consistent with this inventory method, this cost is spread over all inventory and expensed at an average cost as the allowances are used. In no case would PEF expense more than PEF has incurred purchasing allowances. [NOTE: This answer also is responsive to Interrogatory No. 16a of Staff's Seventh Set of Interrogatories to PEF]

- e. **For the purchased portion mentioned in (d), please fill out Table 1 below for the period 2007 through 2011.**

**Answer:** Please see Attachment 13-e. [NOTE: PEF has revised the tables to also include the additional information requested in Interrogatory No. 16c (Table I) of Staff's Seventh Set of Interrogatories to PEF]

- f. **Please elaborate on the statement "[t]he impact this has on 2012 costs is instead of expensing some portion of the investment balance, the full balance of approximately \$22.5 million is amortized." (Lines 16 – 18 on page 7 of Foster's testimony)**

**Answer:** As PEF has described in its Integrated Clean Air Compliance Plan, these allowances represent an inventory of NO<sub>x</sub> annual and seasonal allowances that would have been used under the Clean Air Interstate Rule (CAIR) over a period of several years. EPA's new Cross-State air Pollution Rule (CSAPR) does not recognize NO<sub>x</sub> allowances that qualify under the prior EPA CAIR. Because the EPA has changed their rules for compliance, any unused NO<sub>x</sub> allowances

issued under the CAIR are expected to have no value as of year-end 2011. Prior to EPA changing the rules, the value of these allowances was expected to be used over several years. Because these allowances may now have no value in the future, PEF believes it is appropriate to amortize their cost into rates over the projection period. If CSAPR is stayed and/or reconsidered, PEF's purchased emissions allowances could retain a market value and would not be written off. PEF cannot predict what may happen in the future related to motions filed challenging the CSAPR.

- g. Please provide detailed explanations regarding whether PEF acted prudently in acquiring approximately \$22.5 million in now worthless NOx allowances.**

**Answer:** The strategic purchase of annual and ozone season NOx emission allowances over time has always been part of PEF's Commission-approved Integrated Clean Air Compliance Plan. As discussed below, PEF has consistently kept the Commission apprised of its NOx allowance procurement strategy. PEF acted in a reasonable and prudent manner by gradually increasing its NOx allowance inventory based on forecasted needs using the best information available at the time. PEF adjusted its procurement strategy in response to judicial and regulatory developments affecting its compliance obligations and changes in forecasts. Between the time the Clean Air Interstate Rule (CAIR) was vacated until it was subsequently reinstated, PEF did not purchase any additional NOx allowances. After CAIR was reinstated, PEF made some limited purchases in order to ensure compliance going forward. However, PEF stopped purchasing NOx allowances after May 2009 -- well before EPA first indicated that banked allowances may not be useful when it proposed a new rule to replace CAIR in July 2010. EPA's final Cross-State Pollution Rule (CSAPR), which if not stayed or revised, would devalue PEF's NOx allowance inventory, does not provide a basis for applying improper hindsight review.

### **Regulatory Background**

By way of background, CAIR established new seasonal and annual emission compliance requirements for NOx. Beginning in 2009, CAIR required affected sources to complete a seasonal NOx emission allowance compliance submittal for the May 1 through September 30 time period and an annual NOx emission allowance compliance submittal for the January 1 through December 31 time period each year. For each submittal, affected sources were required to have an amount of NOx allowances equal to the tons of NOx emitted during the relevant time period.

When PEF first submitted its Integrated Clean Air Compliance Plan for Commission review in March 2006, PEF provided detailed economic analyses of five potential compliance scenarios, including one ("Plan A") that would call for installation of NOx emission controls on all of PEF's coal-fired units at the Crystal River Plant to comply with CAIR without having to purchase allowances. However, the economic analysis demonstrated that "Plan D," which relied on strategic purchases of annual and seasonal NOx allowance rather than installing NOx controls on Crystal River Units 1 and 2, was the most cost-effective option for compliance with CAIR and related regulatory requirements. See Testimony of Daniel J. Roeder in Docket NO. 060007-EI (filed Mar.31, 2006) and Exhibit No. 11 (DJR-1).

In the 2007 ECRC docket, PEF submitted updated economic analyses confirming that Plan D, including its reliance on NOx allowance purchases, was the most cost-effective option. *See* Testimony of Samuel Waters in Docket No. 070007-EI (filed June 1, 2007) and Exhibit No. 30 (SSW-1). As discussed on pages 8-9 of the testimony of PEF witness Samuel Waters, the economic analyses demonstrated that “[n]ot only is Plan D the most cost-effective alternative under base planning assumptions, it is the most robust plan over a range of allowance prices, representing the best balance between increased capital expenditures for added controls and increased allowance prices” In the same 2007 ECRC docket, PEF witness Joseph McCallister explained PEF’s allowance purchase strategy as follows:

PEF’s overall procurement strategy for meeting emission allowance requirements is to buy allowances over time based on forecasted needs to comply with existing and future compliance requirements. PEF believes a procurement strategy of buying emission allowances over time is a reasonable and prudent approach to manage compliance requirements, reduce price risk and volatility for customers, and provide greater price certainty for our customers.

Testimony of Joseph McCallister in Docket No. 070007-EI, at p.2 (filed Aug. 3, 2007). Mr. McCallister also advised the Commission that PEF had begun purchasing NOx allowances and explained the market conditions at that time. *Id.* at pp. 3-5. Based on the record, including the testimony of Mr. Waters and Mr. McCallister, the Commission specifically found that “PEF’s Integrated Clean Air Compliance Plan represents the most cost-effective alternative for achieving compliance with CAIR, CAMR, CAVR, and related regulatory requirements, and it is reasonable and prudent for PEF to recover prudently incurred costs to implement the plan.” Order No. PSC-07-0922-FOF-EI issued in Docket No. 070007-EI, at p.8 (Nov. 2007).

In the 2008 ECRC docket, Mr. McCallister reiterated PEF’s allowance procurement strategy and again advised the Commission that, consistent with its strategy, “PEF has been purchasing seasonal and annual NOx allowances over time to gradually increase inventories to the levels necessary to achieve compliance.” Testimony of J. McCallister in Docket No. 080007-EI, at p. 4 (filed Aug. 4, 2008). However, Mr. McCallister also advised the Commission that PEF had stopped purchasing CAIR emission allowances in light of a recent (July 2008) federal court order vacating CAIR. *Id.* Once again, based on Mr. McCallister’s testimony and annual review submitted by PEF witness Patricia West, the Commission found that “PEF’s Plan represents the most cost-effective alternative for achieving and maintaining compliance with CAIR, CAVR, and other environmental requirements.” Order No. PSC-08-0775-FOF-EI, issued in Docket No. 080007-EI, at p. 11 (Nov. 2008).

In December 2008, the federal court issued a revised decision that remanded CAIR back to EPA without vacating the rule. *See, North Carolina v. EPA*, 550 F.3d 1176, 1178 (DC Cir. 2008). As a result, CAIR remained in effect in its original form and, as Mr. McCallister advised the Commission in testimony submitted in April 2009, PEF resumed purchasing allowances consistent with its procurement strategy and the requirement to comply with CAIR. Testimony of J. McCallister in Docket No. 090007-EI, at pp. 4-5 (filed April 1, 2009). In August 2009, Mr. McCallister updated the Commission on PEF’s implementation of its allowance procurement

strategy. Testimony of J. McCallister in Docket No. 090007-EI (filed Aug. 3 and 28, 2009). Once again, based on Mr. McCallister's testimony and annual review submitted by Ms. West, the Commission found that "PEF's [Integrated Clean Air Compliance] plan remains the most cost-effective alternative for achieving and maintaining compliance with air quality control and monitoring regulatory requirements." Order No. PSC-09-0683-FOF-EI, issued in Docket No. 090007-EI, at p. 6 (Nov. 2009).

In July, 2010, EPA issued a proposed "transport rule" to replace CAIR in response to the federal court's remand. *See* 75 Fed. Reg. 45,210 (Aug. 2, 2010). At that time, EPA proposed to continue to include Florida within the annual NOx and ozone season NOx allowance programs. The preamble to the proposed rule included a one-page discussion of how banked NOx allowances might be treated. *Id.* at 45,339. EPA requested comment on alternative approaches that would allow some or all of the banked allowances to be used. However, EPA's proposed approach was to not allow use of banked NOx allowances. This was the first indication banked NOx allowances might lose value. It was not until July 6, 2011, when EPA issued the final CSAPR to replace CAIR that EPA announced its final decision that Florida would not be included in the annual NOx program and that banked allowances could not be used for compliance.<sup>1</sup> *See* 76 Fed. Reg. 48,208 (Aug. 8, 2011). In any event, as noted below, PEF had already stopped purchasing NOx allowances in May 2009, well before EPA had indicated that NOx allowances might lose value.

#### **Prudence of PEF's NOx Allowance Procurement Strategy**

Under well-established Commission precedent, "the standard for determining prudence is consideration of what a reasonable utility manager would have done, in light of conditions and circumstances which were known, or reasonably should have been known, at the time the decision was made." PSC-08-0749-FOF-EI, at p. 28 (Nov. 12, 2008). During the relevant time period, in order to determine if PEF needed to purchase seasonal and annual NOx emission allowances, PEF compared the total seasonal and annual NOx emissions projections from fuel and generation forecasts to the number of seasonal and annual NOx allowances held by PEF, which includes allocations, purchases made over time, and carryovers. As part of the fuel and generation forecasting processes, emission burn projections are generated on a periodic basis for future periods with consideration of generation availability, planned outage schedules, purchase power contracts, fuel price forecasts, planned environmental equipment installations and load projections. In aggregate, if the number of allowances that PEF required to comply with CAIR based on forecasted emissions was greater than the number of allowances PEF held, then PEF needed to purchase additional allowances from the market. The following discussion summarizes PEF's annual and seasonal NOx forecasted emissions, allocations and purchases made over time to demonstrate the prudence of PEF's NOx allowance procurement strategy.

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<sup>1</sup> While CSAPR is a final rule, several motions have been filed, and more are expected, requesting reconsideration and a stay of the rule which could delay implementation. To date Edison Mission Energy, Luminant Energy, Xcel Energy and the state of Louisiana have challenged CSAPR. Additional challenges to the rule are expected. If CSAPR is stayed and/or reconsidered, PEF's purchased emissions allowances could retain a market value and would not be written off.



For illustrative purposes, as outlined in Figure 1 below as of July 19, 2007, PEF's annual NOx allowance allocations for 2009 were 16,566 tons with projected emissions of 34,183 tons. At that point in time, PEF had procured 2,650 of annual NOx allowances for 2009. PEF was forecasting the need to procure a minimum of an additional 14,967 annual NOx allowances to comply with CAIR for 2009. Similarly, as of July 19, 2007, annual NOx allowance allocations for 2010 were 16,566 tons with projected emissions of 20,917 tons. At that point in time, PEF had procured 650 annual NOx allowances for 2010. After purchases of 2010 annual NOx allowances totaling 650 tons, PEF was forecasting the need to purchase an additional 3,696 tons of 2010 annual NOx allowances to comply with CAIR requirements for 2010.

As a result, consistent with the procurement strategy described in PEF's Integrated Clean Air Compliance Plan and prior testimony, PEF bought NOx allowances over time to meet forecasted needs. Figure 1 below demonstrates that the forecasted needs decreased over time due to changes in forecasted emissions due to lower power demand forecasts and changes in the fuel markets. As of May 2009, PEF estimated based on recent forecasts that it had accumulated an adequate inventory to be in compliance with CAIR requirements for 2009 and 2010. Thus, PEF made no additional annual NOx allowance purchases.

Annual NOx	7/19/2007		7/14/2008		2/13/2009		5/18/2009	
	2009	2010	2009	2010	2009	2010	2009	2010
EPA Allowance Allocation	16,566	16,566	16,182	16,182	16,182	16,182	16,182	16,182
Carryover	0	0	0	0	0	0	0	92
Purchases	2,650	650	10,010	2,610	11,410	2,610	12,260	2,610
Total Owned	19,216	17,216	26,192	18,792	27,592	18,792	28,442	18,884
Total Projected Burn	34,183	20,912	31,866	19,726	28,927	19,510	28,350	18,170
Net Position	(14,967)	(3,696)	(5,674)	(934)	(1,335)	(718)	92	714

*Figure 1. PEF Annual NOx Position Over Time*

For illustrative purposes, with respect to seasonal NOx allowances, Figure 2 below demonstrates that, as of July 19, 2007, PEF had procured sufficient 2009 seasonal NOx allowances, but was forecasting the need to purchase additional seasonal NOx allowances to comply with CAIR requirements for 2010. Rather than purchasing additional allowances to meet the forecasted 2010 need, PEF exchanged allowances between years for 2010 CAIR compliance. As shown in Figure 2, between July 19, 2007 and July 14, 2008, PEF's net position for 2010 CAIR compliance changed from a requirement to purchase a minimum of 192 seasonal NOx allowances to estimated position that achieved minimum compliance. As with annual NOx allowances, forecast changes occurred over time as a result of lower power demand forecasts and changes in the fuel markets. Based on the changed forecast, PEF made no additional seasonal NOx allowance purchases after July 2007. Although PEF projected a surplus of allowances at this point in time, the CAIR rule in effect at that time would have allowed PEF to "bank" any surplus allowances for use in later years.



Seasonal NOx	7/19/2007		7/14/2008	
	2009	2010	2009	2010
EPA Allowance Allocation	8,121	8,121	7,962	7,962
Carryover	0	1,956	0	978
Purchases	8,243		6,885	1,155
Total Owned	16,364	10,077	14,847	10,095
Total Projected Burn	14,408	10,269	13,869	9,820
Net Position	1,956	(192)	978	275

Figure 2. PEF Seasonal NOx Position Over Time

As noted in Figure 3 below, as of July 14, 2008 PEF forecasted a deficit of seasonal NOx allowances extending through 2020. Thus, although PEF had a surplus in 2009 and 2010, PEF was forecasting the need for additional purchases.

NOx POSITION													
Legislation Phase	CAIR Phase I								CAIR Phase II				
Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Seasonal NOx Position</b>													
Owned													
Carryover		-	978	275	-	-	-	-	-	-	-	-	-
Sold Allowances													
Purchased Allowances		6,885	1,155	667									
EPA Seasonal Allocation	NA	7,962	7,962	7,962	7,962	7,962	7,962	6,529	6,529	6,529	6,529	6,529	6,529
Total Owned	NA	14,847	10,095	8,904	7,962	7,962	7,962	6,529	6,529	6,529	6,529	6,529	6,529
Seasonal Projected Burn	NA	13,869	9,820	10,726	10,581	9,060	9,327	9,524	9,181	8,778	9,191	8,564	8,771
Net Position	NA	978	275	(1,822)	(2,619)	(1,098)	(1,365)	(2,995)	(2,652)	(2,249)	(2,662)	(2,035)	(2,242)

Figure 3. PEF Seasonal NOx Risk Report 7/14/2008

For additional illustration of PEF's procurement strategy and approach, as outlined in Figures 4 and 5 below, PEF forecasted the need to purchase annual NOx positions through 2020 on July 14, 2008 and February 13, 2009. In addition, the February 13, 2009 estimated position shows a forecasted annual NOx deficit for the remaining calendar year in 2009. As noted earlier, based on a forecasted deficit for 2009 in early 2009, PEF made some limited purchases of annual NOx allowances over time based on forecasted needs to build adequate inventory for 2009 compliance. However, PEF has not entered into any more contracts to buy allowances since May 2009.

NOx POSITION													
Legislation Phase	CAIR Phase I								CAIR Phase II				
Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Annual NOx Position</b>													
<b>CAIR Compliance</b>													
Owned													
Carryover		-	-	-	-	-	-	-	-	-	-	-	-
Sold Allowances													
Purchased Allowances		10,010	2,610	2,785	1,650	1,025	650						
EPA Annual Allocation	NA	16,182	16,182	16,182	16,182	16,182	16,182	13,593	13,593	13,593	13,593	13,593	13,593
Total Owned	NA	26,192	18,792	18,967	17,832	17,207	16,832	13,593	13,593	13,593	13,593	13,593	13,593
Annual Projected Burn	NA	31,866	19,726	22,119	21,271	20,003	19,634	20,416	19,967	19,325	19,288	18,926	18,926
Net Position	NA	(5,674)	(934)	(3,152)	(3,439)	(2,796)	(2,802)	(6,823)	(6,374)	(5,732)	(5,695)	(5,333)	(5,333)

Figure 4. PEF NOx Annual Risk Report 7/14/2008



NOx POSITION												
Legislation Phase	CAIR Phase I						CAIR Phase II					
Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Annual NOx Position</b>												
<b>CAIR Compliance</b>												
Owned												
Carryover	-	-	-	1,537	1,163	-	-	-	-	-	-	-
Sold Allowances												
Purchased Allowances	11,410	2,610	3,065	1,950	1,325	950						
EPA Annual Allocation	16,182	16,182	16,182	16,182	16,182	16,182	13,593	13,593	13,593	13,593	13,593	13,593
Total Owned	27,592	18,792	19,267	19,669	18,670	17,132	13,593	13,593	13,593	13,593	13,593	13,593
Annual Projected Burn	28,927	19,510	17,730	18,506	18,750	17,442	17,872	19,393	18,661	18,447	18,511	18,975
Net Position	(1,335)	(718)	1,537	1,163	(80)	(310)	(4,079)	(5,800)	(5,068)	(4,854)	(4,918)	(5,382)

Figure 5. PEF NOx Annual Risk Report 2/13/2009

As these illustrations show, PEF was making procurement decisions over time based on periodic forecasts that existed at the time purchases were made and consistent with expected rules and regulations in place. PEF was executing its long-term procurement strategy and was monitoring changes to forecasted emissions over time. Once the NOx allowance inventories were deemed to be adequate, PEF no longer made emission allowance purchases.

The table provided in response to Staff Interrogatory No. 13e details all of PEF's NOx allowance purchases over time. Consistent with the procurement strategy that PEF described in its Integrated Clean Air Compliance Plan and testimony submitted to the Commission, between late-2006 and mid-2008, PEF purchased NOx allowances to gradually build up an inventory that would allow PEF to comply with CAIR over the long-term based on forecasted needs. Between the time CAIR was vacated in July 2008 until it was reinstated in December 2008, PEF did not purchase any additional allowances. After CAIR was reinstated, PEF made some limited purchases in order to ensure compliance going forward, but PEF made no NOx allowances purchases after May 2009 -- well before EPA first indicated that banked allowances may not be useful when it proposed a new rule to replace CAIR in July 2010.

### Conclusion

As demonstrated above, PEF acted prudently in implementing its procurement strategy of purchasing NOx allowances over time to gradually increase inventory levels based on emission forecasts developed using the best information available at the time. The Commission recognized as much when it repeatedly approved PEF's Integrated Clean Air Compliance Plan in each annual ECRC proceeding since 2007. EPA's subsequent decision that "banked" NOx allowances cannot be used beyond 2011 is not a basis for "impermissibly applying hindsight review, which is the application of facts that are known today to decisions made in the past (*i.e.*, Monday morning quarterbacking)." Order No. 13452 issued in Docket No. 820001-EU-A (June 22, 1984).



- h. Please explain in detail why it is appropriate for PEF to use a one year amortization period, rather than a longer amortization period, to recover the aforementioned \$22.5 million.**

**Answer:** PEF believes the amortization of this investment into rates over one year is appropriate because due to the EPA changing the program that they established these allowances will no longer have value in future periods. These investments were prudently incurred under a Commission approved Compliance Plan as described further above in response to Interrogatory No. 13g. While PEF believes a one year amortization period is the most appropriate, other amortization periods could also be reasonable under these circumstances.

- i. Please fill out Tables 2 through 5 below.**

**Answer:** Please see Attachment 13-i. [NOTE: PEF has revised the tables to also include the additional information requested in Interrogatory No. 16c (Tables II – V) of Staff's Seventh Set of Interrogatories to PEF]

- 14. Please refer to witness Sorrick's testimony filed on August 26, 2011.**

- a. Referring to lines 11 – 12, on page 3, please explain in detail why PEF projects approximately \$1.1 million in CR5 outage costs will be recovered through the ECRC. What is the cause of this outage and how long will it be?**

**Answer:** This is a regularly scheduled maintenance outage, which includes maintenance activities associated with the Crystal River Unit 5 (CR5) air pollution control equipment. The \$1.1 million for which PEF seeks ECRC recovery includes only costs directly associated with the new clean air equipment. As with all power plant equipment, regular maintenance and engineering inspections are required to maintain equipment performance and reliability. The outages are scheduled based upon the optimized Generating Unit Maintenance Schedule which considers multiple variables when granting unit outages. During a unit outage, when the steam plant is not producing flue gases, the clean air equipment must also be removed from service. To make efficient use of the steam plant outage period, inspections, cleanings and maintenance of the clean air equipment are performed concurrently. The fall CR5 outage in 2012 is scheduled for [REDACTED].

- b. Please provide a detailed breakdown of the component items that comprise the \$1.1 million in O&M expenditures related to the aforementioned CR5 outage.**

**Answer:** The O&M cost of the Crystal River Unit 5 (CR5) outage is based upon the periodic maintenance of clean air equipment. Please see Confidential Attachment 14-b, which is being filed pursuant to a Request for Confidential Classification of certain confidential proprietary information..

- c. **Referring to lines 3-4, on page 4, please provide a detailed explanation regarding the "alternative" water project. What will be the component activities and their associated costs that comprise this alternative water project? Which units at Crystal River plan will be the beneficiaries of the project?**

**Answer:** To operate the FGD systems on Crystal River Units 4&5, additional water was needed. The need to install additional ground water wells and increase the permitted use of ground water was necessary to supply this additional water. This required a modification to the existing water use permit conditions contained in the Conditions of Site Certification (COC) for Crystal River Units 4&5. The modified COC conditions required the following contained in COC PA77-090, Section C.II.D. "a" through "f". The first two of these conditions are provided below:

- a. *Within 6 months of groundwater use rising to more than 3 million gallons per day (average annual daily withdrawal quantity) from all the wells included in this site certification, the Licensee shall submit for SWFWMD approval, an Alternative Water Supply Plan. The Alternative Water Supply Plan shall evaluate, identify, and propose alternative water supply development of at least three million two hundred thousand (3,200,000) gallons per day (gpd).*
- b. *Within 2 years of groundwater use rising to more than 3 million gallons per day (average annual daily withdrawal quantity) from all the wells included in this site certification, Licensee shall submit to SWFWMD, a preliminary design of the approved alternative water supply project that the Licensee will implement.*

Per the license requirements listed above, the Crystal River Units 4 & 5 FGD consumption of water exceeded the 3 million gallons per day in August of 2011. Therefore, in order to optimize the FGD water usage and comply with the site's conditions of certification, a team was formed to evaluate and develop "alternative" water use strategies on site and to develop the alternative water supply plan including the identification of possible projects. A portfolio of alternative projects is under evaluation including the use of wastewater from the coal pile runoff ponds, wastewater from the limestone storage building sumps, and rainwater from the roof of the limestone storage building. One of the more attractive projects is to use "gray" water from the City of Crystal River. The initial quantity will be 750,000 gallons per day and could grow to an average daily flow rate of up to 1.5 million gallons per day. The costs included in the 2012 ECRC budget includes engineering and development costs of delivering the City of Crystal River water to the Crystal River Units 4 & 5. Other projects will likely be required in the future to ensure sufficient capacity is available for the clean air requirements.

The benefit of the alternative water supply projects will be to off-set groundwater usage at Units 4 & 5 due to additional water use associated with operation of the new air pollution control equipment. The water requirements associated with the FGD system average approximately 2.8 mgd per day. This usage, coupled with historical plant groundwater usage of approximately 0.8 – 1.0 mgd requires Units 4 & 5 to comply with the site's conditions of certification relative to groundwater withdrawals.

The additional water use that triggered these above requirements is directly attributable to the operation of the CR 4 & 5 FGD systems. Thus, the activities discussed above are required to comply with the site's conditions of certification while operating the clean air equipment.

- d. **Referring to lines 5-7, on page 4, please provide a detailed explanation regarding the "alternative" wastewater system. What will be the component activities and their associated costs that comprise such alternative water project?**

**Answer:** The Crystal River Units 4 & 5 Flue Gas Desulfurization (FGD) blowdown (wastewater) is currently being discharged to lined solids settling ponds. Following settling, the wastewater is then discharged to the existing percolation pond system. Crystal River Units 4 & 5 are covered by a site-wide groundwater monitoring plan which is part of the Industrial Waste Water (IWW) permit (FLA016960). This permit, last modified November 17, 2009 in conjunction with agency authorization to operate the wet FGD systems and discharge treated FGD blowdown, requires periodic monitoring of a series of groundwater wells located at various locations throughout the Crystal River Units Energy Complex. The monitoring well locations were approved by the Florida Department of Environmental Protection (FDEP) and are strategically located such that the discharge to groundwater from industrial wastewater percolation pond systems and other installations are monitored on a quarterly basis with results submitted to the FDEP. Based upon our review of these results and trends associated with the discharge of treated FGD blowdown, and in consideration of industry experience with FGD blowdown, FDEP will likely require Crystal River Units 4&5 to add a treatment system upstream of the FGD blowdown discharge to the percolation pond to ensure compliance with applicable groundwater quality standards. The costs that comprise this project include development and engineering and will be based upon the design needed to address the observed impacts. At this point, we are in the study and planning phase of this project.

DATED this 15<sup>th</sup> day of September, 2011.

HOPPING GREEN & SAMS, P.A.

By: 

Gary V. Perko  
Florida Bar No. 855898  
P.O. Box 6526  
Tallahassee, FL 32301  
(850) 222-7500

Attorneys for Progress Energy Florida, Inc.



	Amount of Allowances Purchased (ton)	Actual Costs for the purchasing (\$)	When (mm/yy) the Purchasing Made (Note 2)	Type	Reasons of the Purchasing
1	545	\$392,400	12/06	Seasonal Nox	Note 1
2	200	\$144,000	12/06	Seasonal Nox	Note 1
3	500	\$360,000	12/06	Seasonal Nox	Note 1
4	350	\$273,875	12/06	Seasonal Nox	Note 1
5	200	\$144,000	01/07	Seasonal Nox	Note 1
6	300	\$216,000	01/07	Seasonal Nox	Note 1
7	32	\$23,040	01/07	Seasonal Nox	Note 1
8	150	\$145,500	02/07	Seasonal Nox	Note 1
9	90	\$84,600	02/07	Seasonal Nox	Note 1
10	250	\$228,750	02/07	Seasonal Nox	Note 1
11	400	\$348,000	03/07	Seasonal Nox	Note 1
12	250	\$208,125	03/07	Seasonal Nox	Note 1
13	111	\$91,853	03/07	Seasonal Nox	Note 1
14	500	\$407,500	03/07	Seasonal Nox	Note 1
15	300	\$212,500	03/07	Seasonal Nox	Note 1
16	3900	\$12,829,050	04/07	Annual Nox	Note 1
17	271	\$227,640	04/07	Seasonal Nox	Note 1
18	193	\$163,085	05/07	Seasonal Nox	Note 1
19	100	\$84,750	05/07	Seasonal Nox	Note 1
20	100	\$85,000	05/07	Seasonal Nox	Note 1
21	100	\$85,000	05/07	Seasonal Nox	Note 1
22	2000	\$1,515,000	05/07	Seasonal Nox	Note 1
23	100	\$71,500	05/07	Seasonal Nox	Note 1
24	100	\$66,500	05/07	Seasonal Nox	Note 1
25	52	\$33,930	05/07	Seasonal Nox	Note 1
26	100	\$64,000	06/07	Seasonal Nox	Note 1
27	250	\$160,000	06/07	Seasonal Nox	Note 1
28	300	\$186,000	06/07	Seasonal Nox	Note 1
29	1000	\$4,525,000	06/07	Annual Nox	Note 1
30	1000	\$4,525,000	06/07	Annual Nox	Note 1
31	300	\$162,000	07/07	Seasonal Nox	Note 1
32	100	\$52,000	07/07	Seasonal Nox	Note 1
33	100	\$50,000	07/07	Seasonal Nox	Note 1
34	1875	\$5,671,875	09/07	Annual Nox	Note 1
35	250	\$918,750	09/07	Annual Nox	Note 1
36	100	\$427,500	09/07	Annual Nox	Note 1

Attachment 13-e

37	300	\$1,207,500	09/07	Annual Nox	Note 1
38	500	\$1,812,500	09/07	Annual Nox	Note 1
39	150	\$528,750	09/07	Annual Nox	Note 1
40	300	\$757,500	09/07	Annual Nox	Note 1
41	200	\$725,000	09/07	Annual Nox	Note 1
42	200	\$795,000	10/07	Annual Nox	Note 1
43	500	\$1,962,500	10/07	Annual Nox	Note 1
44	500	\$1,262,500	10/07	Annual Nox	Note 1
45	100	\$392,500	10/07	Annual Nox	Note 1
46	200	\$785,000	10/07	Annual Nox	Note 1
47	100	\$391,250	10/07	Annual Nox	Note 1
48	300	\$1,117,500	10/07	Annual Nox	Note 1
49	100	\$347,000	11/07	Annual Nox	Note 1
50	300	\$1,023,000	12/07	Annual Nox	Note 1
51	200	\$665,000	12/07	Annual Nox	Note 1
52	100	\$297,500	12/07	Annual Nox	Note 1
53	100	\$297,500	12/07	Annual Nox	Note 1
54	200	\$644,000	12/07	Annual Nox	Note 1
55	200	\$649,000	01/08	Annual Nox	Note 1
56	900	\$2,407,500	01/08	Annual Nox	Note 1
57	105	\$280,875	01/08	Annual Nox	Note 1
58	200	\$624,000	01/08	Annual Nox	Note 1
59	100	\$312,000	01/08	Annual Nox	Note 1
60	100	\$305,000	01/08	Annual Nox	Note 1
61	300	\$915,000	01/08	Annual Nox	Note 1
62	200	\$615,000	01/08	Annual Nox	Note 1
63	250	\$962,500	02/08	Annual Nox	Note 1
64	750	\$2,040,000	03/08	Annual Nox	Note 1
65	250	\$836,250	03/08	Annual Nox	Note 1
66	250	\$798,750	03/08	Annual Nox	Note 1
67	250	\$973,750	04/08	Annual Nox	Note 1
68	200	\$504,000	04/08	Annual Nox	Note 1
69	400	\$1,090,000	04/08	Annual Nox	Note 1
70	150	\$663,000	04/08	Annual Nox	Note 1
71	50	\$221,000	04/08	Annual Nox	Note 1
72	50	\$221,000	04/08	Annual Nox	Note 1
73	150	\$629,250	04/08	Annual Nox	Note 1
74	50	\$138,500	04/08	Annual Nox	Note 1
75	500	\$2,135,000	05/08	Annual Nox	Note 1
76	250	\$955,000	05/08	Annual Nox	Note 1
77	150	\$326,250	05/08	Annual Nox	Note 1

**Attachment 13-e**

78	200	\$494,000	05/08	Annual Nox	Note 1
79	250	\$493,750	06/08	Annual Nox	Note 1
80	1200	\$2,094,000	06/08	Annual Nox	Note 1
81	250	\$1,292,500	06/08	Annual Nox	Note 1
82	250	\$1,273,750	07/08	Annual Nox	Note 1
83	500	\$2,637,500	01/09	Annual Nox	Note 1
84	150	\$513,000	01/09	Annual Nox	Note 1
85	250	\$805,000	02/09	Annual Nox	Note 1
86	150	\$460,500	02/09	Annual Nox	Note 1
87	100	\$302,500	02/09	Annual Nox	Note 1
88	100	\$292,000	02/09	Annual Nox	Note 1
89	100	\$242,000	02/09	Annual Nox	Note 1
90	100	\$212,000	02/09	Annual Nox	Note 1
91	100	\$209,000	03/09	Annual Nox	Note 1
92	100	\$122,000	04/09	Annual Nox	Note 1
93	100	\$112,000	05/09	Annual Nox	Note 1

Note 1: PEF made these purchases because the forecasted emissions at the time showed a need to purchase additional allowances. Please see response to 13g below for a more detailed description of how this was done.

Note 2: This column shows when PEF entered into a contract to purchase these allowances. Many of these are forward purchases and would show up on PEF's accounting books when the transfer occurred which would have been some time in the future.



	Inventory Beginning Balance		Inventory Ending Balance		Allowances allocated from the EPA		Allowances Purchased from the Market		Allowance Auction		Allowance Expenses & Other	
	(in ton)	(in \$)	(in ton)	(in \$)	(in ton)	(in \$)	(in ton)	(in \$)	Amount (in ton)	Proceeds (in \$)	(in ton)	(in \$)
2011	29,511	\$27,715,427	43,688	\$23,890,030	26,644	\$0	0	\$0	n/a	n/a	12,467	\$3,825,397
2010	24,061	36,341,932	29,511	27,715,427	26,436	0	800	2,392,500	n/a	n/a	21,786	11,019,005
2009	26,625	65,510,820	24,061	36,341,932	26,878	0	3,950	12,504,000	n/a	n/a	33,391	41,672,888
2008	15,136	28,663,433	26,625	65,510,820	0	0	10,655	36,911,125	n/a	n/a	(834)	63,738
2007	0	0	15,136	28,663,433	0	0	15,119	28,545,473	n/a	n/a	(17)	(117,960)

	Inventory Beginning Balance		Inventory Ending Balance		Allowances allocated from the EPA		Allowances Purchased from the Market		Allowance Auction		Allowance Expenses & Other	
	(in ton)	(in \$)	(in ton)	(in \$)	(in ton)	(in \$)	(in ton)	(in \$)	Amount (in ton)	Proceeds (in \$)	(in ton)	(in \$)
2011	19,792	\$26,591,351	30,108	\$23,064,767	17,914		0	\$0	n/a	n/a	7,598	\$3,526,584
2010	16,035	34,316,004	19,792	26,591,351	17,923		800	2,392,500	n/a	n/a	14,966	10,117,153
2009	17,430	59,169,925	16,035	34,316,004	18,249		3,950	12,504,000	n/a	n/a	23,593	37,357,921
2008	6,775	22,377,135	17,430	59,169,925	0		10,655	36,911,125	n/a	n/a	0	118,335
2007	0	0	6,775	22,377,135	0	0	6,775	22,259,175	n/a	n/a	0	(117,960)

	Inventory Beginning Balance		Inventory Ending Balance		Allowances allocated from the EPA		Allowances Purchased from the Market		Allowance Auction		Allowance Expenses & Other	
	(in ton)	(in \$)	(in ton)	(in \$)	(in ton)	(in \$)	(in ton)	(in \$)	Amount (in ton)	Proceeds (in \$)	(in ton)	(in \$)
2011	9,719	\$1,124,076	13,580	\$825,263	8,730	\$0	0	\$0	n/a	n/a	4,869	\$298,814
2010	8,026	2,025,928	9,719	1,124,076	8,513	0	0	0	n/a	n/a	6,820	901,852
2009	9,195	6,340,895	8,026	2,025,928	8,629	0	0	0	n/a	n/a	9,798	4,314,967
2008	8,361	6,286,298	9,195	6,340,895	0	0	0	0	n/a	n/a	(834)	(54,597)
2007	0	0	8,361	6,286,298	0	0	8,344	6,286,298	n/a	n/a	(17)	0

	Inventory Beginning Balance		Inventory Ending Balance		Allowances allocated from the EPA		Allowances Purchased from the Market		Allowance Auction		Allowance Expenses & Other	
	(in ton)	(in \$)	(in ton)	(in \$)	(in ton)	(in \$)	(in ton)	(in \$)	Amount (in ton)	Proceeds (in \$)	(in ton)	(in \$)
2011	143,338	\$5,674,078	185,384	\$5,169,875	59,571	\$0	0	\$0	n/a	\$5,122	17,525	\$504,203
2010	145,210	7,312,131	143,338	5,674,078	59,571	0	0	0	n/a	\$68,473	61,442	1,638,053
2009	98,285	11,191,195	145,210	7,312,131	125,653	0	0	0	n/a	\$131,619	78,728	3,879,064
2008	41,697	2,905,441	98,285	11,191,195	125,653	0	27,000	23,027,500	n/a	\$906,201	96,064	14,741,746
2007	34,136	1,942,701	41,697	2,905,441	125,653	0	13,000	10,400,000	n/a	\$1,098,566	131,091	9,437,260

(Note 1) These represent when the allowances were actually transferred into PEF inventory, and may be after the date the purchase occurred. For example, the 800 allowances shown in Tables 2 and 3 for 2010 were actually purchased in 2009. As shown in Attachment A and explained in response to Staff Interrogatory No. 13g, PEF did not make any NOx allowance purchases after May 2009.

**Absorber Maintenance Activities**

ACTIVITY	ACTIVITY NAME	TOTAL COST
1	OPERATE A/R PUMPS AND OBSERVE SPRAY NOZZLES	██████████
2	DRAIN ABSORBER TOWER TO EMERGENCY STORAGE TANK/REFILL TANK	██████████
3	OPEN/CLOSE ABSORBER TOWER DOORS	██████████
4	INITIAL INSPECTION OF DUCTWORK INTO ABSORBER - KNOCK DOWN BUILDUP	██████████
5	VACCUMING THE ABSORBER TOWER AND SUMPS	██████████
6	INSPECT ABSORBER TILE AND INLET AND OUTLET DUCT LINING - NOTE SCALING	██████████
7	SCAFFOLD TO ABSORBER TRAYS	██████████
8	CLEAN AND INSPECT ALL ABSORBER NOZZLES - REPLACE AS NECESSARY	██████████
9	FGD 6.9KV & 480V BREAKER MAINTENANCE	██████████
10	ABSORBER RECYCLE PUMP IMPELLER ADJUSTMENTS & LINER INSPECTION	██████████
11	ABSORBER RECYCLE PUMP TECHNICAL FIELD ADVISOR	██████████
12	CLEAN AND INSPECT 'A' ABS RECYCLE PUMP SUCTION	██████████
13	OVATION DEVICENET AND FIELDBUS MAINTENANCE	██████████
14	CLEAN AND INSPECT 'C' ABS RECYCLE PUMP SUCTION	██████████
15	CLEAN AND INSPECT 'D' ABS RECYCLE PUMP SUCTION	██████████
16	CLEAN AND INSPECT 'E' ABS RECYCLE PUMP SUCTION	██████████
17	ABSORBER HYDRAULIC POWER UNIT FLUSH AND PM	██████████
18	INSPECT AND REPAIR ABS RECYCLE PUMP SUCTION KNIFE VALVES (10)	██████████
19	INSPECT AND REPAIR ABS INSTRUMENT INLET AND OUTLET PORTS	██████████
20	INSPECT AND REPAIR ABSORBER TOWER AGITATORS	██████████
21	INSPECT AND REPAIR ABSORBER TRAY	██████████
22	CLEAN TRAY OF ANY SCALE OR DEPOSITS	██████████
23	INSPECT SPRAY HEADERS FOR EROSION	██████████
24	SCAFFOLD ABOVE MIST ELIMINATOR TOP CHEVRON LAYER	██████████
25	TEST MIST ELIMINATOR OVER AND UNDERSPRAYS BY RUNNING WATER	██████████
26	CLEAN/REPLACE PLUGGED MIST ELIMINATOR NOZZLES	██████████
27	INSPECT ALL LEVELS OF MIST ELIMINATOR CHEVRONS	██████████
28	CLEAN MIST ELIMINATOR CHEVRONS	██████████
29	INSPECT OXIDATION AIR SUPPLY HEADERS	██████████
30	CLEAN AND INSPECT ABS AREA SUMPS	██████████
31	FLAKE GLASS LINING REPAIRS	██████████
32	TEST EMERGENCY QUENCH SYSTEM - CLEAN NOZZLES	██████████
33		██████████

SCR Maintenance Activities

ACTIVITY	ACTIVITY NAME	TOTAL COST
1	OPEN/CLOSE SCR DOORS: INLET PLENUM, CATALYST LEVELS, BYPASS DUCTS, AIGs	████████
2	Vacuum ash deposits at each catalyst level	████████
3	Internal Inspection of Ammonia Injection grid nozzles A Train	████████
4	Internal Inspection of Ammonia Injection grid nozzles B Train	████████
5	CLEAN AND INSPECT CATALYST AND SONIC HORNS	████████
6	Sonic Horn Maintenance PM's	████████
7	Internal Inspection and repair of catalyst seals and cover grates	████████
8	REMOVE TWO TEST COUPONS (ONE FROM EACH LAYER) FOR ANALYSIS	████████
9	SCR 6.9KV & 480V BREAKER MAINTENANCE	████████
10	Internal Inspection of economizer bypass dampers	████████
11	Internal Inspection of economizer puff blowers lances	████████
12	Internal Inspection of SCR dampers	████████
13	Ovation DeviceNet maintenance	████████
14	Internal Inspection of SCR expansion joint	████████
15	Internal Inspection of SCR bypass expansion joint	████████
16	OPEN/CLOSE SCR DOORS: INLET PLENUM, CATALYST LEVELS, BYPASS DUCTS, AIGs	████████
17	CLEAN AND BLOW OUT TEST GRID INSTRUMENT LINES	████████
18	Internal Inspection of AMM Injection grid nozzles	████████
19	Scaffolding for AMM Injection nozzle inspections (2) secondary & (1) Primary	████████
20	Catalyst Manufacture Coupon Testing Analysis	████████
21		████████



**FGD Maintenance Activities**

ACTIVITY	ACTIVITY NAME	TOTAL COST
1	Turblex Oxidation Air PM	
2	Turblex Oxidation Air PM - Annual	
3	Turblex Oxidation Air PM - Annual	
4	Relay settings maintenance & Testing	
5	Common Bus & Cubicles Cleanings	
6	ME Pump overhaul (1)	
7	FGD Service Water Pump & Strainer	
8	Well pump maintenance (2) per outage	
9	6.9KV & 480V Breaker Maintenance	
10	CEMS Solutions	
11	Emerson Ovation Patch updates	
12	Internal Tank inspections	
13	Emerson Support	
14	Ovation DeviceNet maintenance	
15		

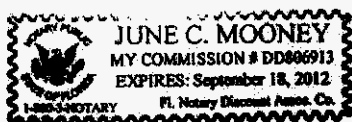
**AFFIDAVIT**

(STATE OF FLORIDA  
COUNTY OF PINELLAS)

I hereby certify that on this 15<sup>th</sup> day of September, 2011, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared PATRICIA Q. WEST, who is personally known to me, and she acknowledged before me that she provided the answers to interrogatory number(s) 13a and 13c from STAFF'S SIXTH SET OF INTERROGATORIES TO PROGRESS ENERGY FLORIDA, INC. (NO. 13a & 13c) in Docket No. 110007-EI, and that the responses are true and correct based on her personal knowledge.

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this 15<sup>th</sup> day of September, 2011.

Patricia Q. West  
Patricia Q. West



June C. Mooney  
Notary Public  
State of Florida

My Commission Expires:

Sept. 18, 2012

**AFFIDAVIT**

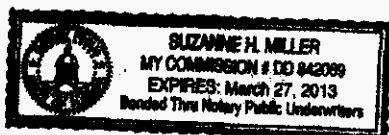
(STATE OF FLORIDA


COUNTY OF Pinellas )

I hereby certify that on this 15<sup>th</sup> day of September, 2011, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared THOMAS G. FOSTER , who is personally known to me, and he acknowledged before me that he provided the answers to interrogatory number(s) 13b, c, d, f, g, and h from STAFF'S SIXTH SET OF INTERROGATORIES TO PROGRESS ENERGY FLORIDA, INC. (NO. 13b, c, d, f, g, & h) in Docket No. 110007-EI, and that the responses are true and correct based on his personal knowledge.

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this 15<sup>th</sup> day of September, 2011.

  
\_\_\_\_\_  
Thomas G. Foster



  
\_\_\_\_\_  
Notary Public  
State of Florida

My Commission Expires:

3/27/13

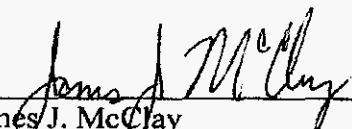
**AFFIDAVIT**

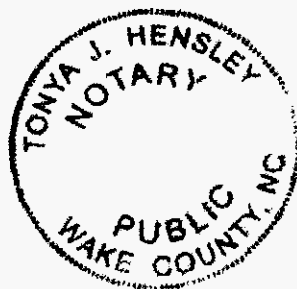
(STATE OF NORTH CAROLINA

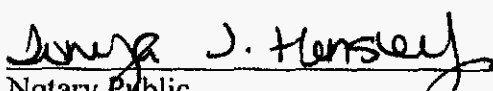
COUNTY OF WAKE)

I hereby certify that on this 15<sup>th</sup> day of September, 2011, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared JAMES J. McCLAY, who is personally known to me, and he acknowledged before me that he provided the answers to interrogatory number(s) 13e and 13g from STAFF'S SIXTH SET OF INTERROGATORIES TO PROGRESS ENERGY FLORIDA, INC. (NO. 13e & 13g) in Docket No. 110007-EI, and that the responses are true and correct based on his personal knowledge.

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this 15<sup>th</sup> day of September, 2011.

  
James J. McClay



  
Notary Public  
State of North Carolina

My Commission Expires:

January 29, 2013

**AFFIDAVIT**

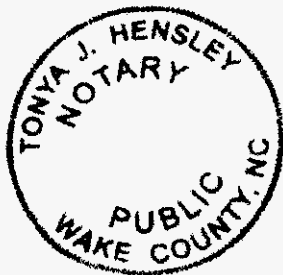
(STATE OF NORTH CAROLINA

COUNTY OF Wake )

I hereby certify that on this 15<sup>th</sup> day of September, 2011, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared JAMES A. KING, who is personally known to me, and he acknowledged before me that he provided the answers to interrogatory number(s) 13i from STAFF'S SIXTH SET OF INTERROGATORIES TO PROGRESS ENERGY FLORIDA, INC. (NO. 13i) in Docket No. 110007-EI, and that the responses are true and correct based on his personal knowledge.

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this 15<sup>th</sup> day of September, 2011.

James A. King  
James A. King



Tonya J. Hensley  
Notary Public  
State of North Carolina

My Commission Expires:

January 29, 2013



AFFIDAVIT

(STATE OF FLORIDA  
COUNTY OF Pinellas)

I hereby certify that on this 15 day of September, 2011, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared DAVID W. SORRICK, who is personally known to me, and he acknowledged before me that he provided the answers to interrogatory number(s) 14a, b, c, and d from STAFF'S SIXTH SET OF INTERROGATORIES TO PROGRESS ENERGY FLORIDA, INC. (NO. 14a, b, c, & d) in Docket No. 110007-EI, and that the responses are true and correct based on his personal knowledge.

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this 15<sup>th</sup> day of September, 2011.

David W. Sorrick  
David W. Sorrick

Lynda K. Bates  
Notary Public  
State of Florida



My Commission Expires:  
2/27/2014

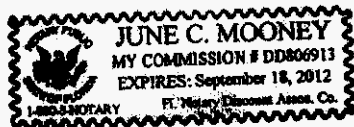
**AFFIDAVIT**

(STATE OF FLORIDA  
COUNTY OF PINELLAS)

I hereby certify that on this 15<sup>th</sup> day of September, 2011, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared PATRICIA Q. WEST, who is personally known to me, and she acknowledged before me that she provided the answers to interrogatory number(s) 14c and 14d from STAFF'S SIXTH SET OF INTERROGATORIES TO PROGRESS ENERGY FLORIDA, INC. (NO. 14c & 14d) in Docket No. 110007-EI, and that the responses are true and correct based on her personal knowledge.

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this 15<sup>th</sup> day of September, 2011.

*Patricia Q. West*  
Patricia Q. West



*June C. Mooney*  
Notary Public  
State of Florida

My Commission Expires:

Sept. 18, 2012