## BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Environmental cost recovery clause.

DOCKET NO. 120007-EI

DATED: SEPTEMBER 13, 2012

## PROGRESS ENERGY FLORIDA'S RESPONSES TO STAFF'S THIRD SET OF INTERROGATORIES (NOS. 17-19)

PROGRESS ENERGY FLORIDA, INC. (PEF), pursuant to Rule 1.340, Florida Rules of

Civil Procedure, hereby responds to Staff's First Set of Interrogatories (Nos. 17-19).

### **Responses**

Please refer to witness P. West's testimony filed August 8, 2012, for questions 17 and 18.

### 17. Referring to project No. 11.1 discussed on pages 6 – 7:

### a. Please elaborate on the phrase "reasonable storage costs."

**<u>Response</u>**: Under the current schedule for the Crystal River Unit 3 ("CR3") Extended Power Uprate (EPU), PEF does not need to commence cooling tower construction until April 2014 in order to complete it by April 2015 prior to the first summer of CR3 operation at power uprate conditions. As a result, PEF has additional time to evaluate evolving environmental regulatory requirements and impacts on the Company's generation operations before commencing with construction. Cooling tower storage costs incurred in 2012 are reasonable as they were necessary to secure and maintain the integrity of the cooling tower equipment.

Total 2012 expenditures for the cooling tower are estimated at approximately \$880,000; of which 64% is allocated to ECRC and 36% is allocated to NCRC. Included in this amount is an invoice for cooling tower equipment for approximately \$420,000 that was submitted to PEF by a vendor in November 2011 and paid in 2012. Because this invoice was not related to actual 2012 work, this was not considered as part of the explanation in Ms. West's testimony related to storage costs. Of the remaining \$460,000, 64% or \$300 thousand are storage costs allocated to ECRC. This amount includes actual storage costs of approximately \$152,000 incurred January – June 2012 for activities such as: lay-down yard excavation; tent removal and set-up; install fencing around rail yard to protect cooling tower equipment, and trailer rental. The estimated July – December expenses of \$148,000 are reflected in the total \$563,727 costs on line 1 of Form 42 8E.

# b. Is the variance of \$563,727 capital expenditures solely related to the equipment storage?

**<u>Response</u>:** No. See response to 17a.

DOCUMENT NUMBER-DATE

06170 SEP 13 ≌

FPSC-COMMISSION CLERK

# c. Does PEF expect to incur the same level of cost every year until it commences construction work at the CR plant?

**Response:** Yes, approximately \$210 thousand is estimated for 2013 for cooling tower storage costs.

### 18. Referring to page 8, lines 1 - 18 and page 11, lines 7 - 23:

# a. When does PEF expect to start and to complete the Crystal River (CR) Units 4 and 5 carbon traps installation project?

**Response:** The installation of carbon traps on CR 4 & 5 began during the second quarter of 2012. Data collection began in June 2012 and continues to provide stack mercury (Hg) emission information. Carbon trap measurements for baseline data capture is expected to be completed at end of year 2012.

# b. Within what period of time does PEF expect to incur the \$1,250,000 capital expenditure associated with the project referenced in question 18a?

**Response:** Capital expenditure is expected to continue through the fourth quarter 2012. In addition to carbon trap testing, mercury profiling is planned for late third quarter 2012. Profiling will establish baseline mercury speciation at all points in the unit backpass to develop a profile that can be used to determine optimal Hg mitigation controls, if needed. Capital expenditures also include costs associated with performing mercury mitigation technology trials at CR 4 & 5, if needed.

# c. What will be the total O&M costs associated with CR Units 4 and 5 MATS compliance for the period 2012 - 2013?

**<u>Response</u>**: The O&M costs have not yet been determined and will depend upon the results of the mercury emissions data collected.

# d. Are the carbon traps are for measuring and trending the mercury emissions? Please explain.

**Response:** The carbon traps provide a means of measuring the average mercury emissions in the stack over a week-long period. The traps extract a slip stream of flue gas from the stack and collect mercury residual on carbon disks. The disks are removed and replaced on a weekly basis and are analyzed for total mercury capture. This measurement is then coupled with measured stack flow and carbon dioxide concentrations to derive an average pound/TBtu of mercury captured. Finally, this information is used to calculate a 30-day rolling average Hg emission for each unit.

PROGRESS ENERGY FLORIDA'S RESPONSES TO STAFF'S THIRD SET OF INTERROGATORIES (NOS. 17-19) DOCKET NO. 120007-EI Page 3

## e. Given the tight compliance deadline of the MATS, what will be potential control options to bring the CR Units 4 and 5 into compliance?

**<u>Response</u>**: Current measurements indicate that the mercury emissions from CR 4 & 5 appear to be within the limits established by MATS. If controls are required, options may include changes to unit operation, installation of mercury sorbent or other chemical injection systems or changes to existing equipment to reduce mercury concentrations.

## 19. Please refer to page 3, lines 13 – 24, of witness J. Swartz's testimony filed August 1, 2012, for the following questions.

a. Does PEF expect to produce fewer tons of gypsum in 2012 than it did in 2011?

**Response:** No, we expect to produce more gypsum in 2012 than 2011.

- b. Please identify the tonnage of gypsum (1) produced in 2011, and (2) expected to be produced in 2012.
- **<u>Response</u>:** 2011: 450,309 wet tons 2012: 463,239 wet tons
- c. Please identify the tonnage of gypsum (1) sold to customers in 2011, and (2) expected to be sold to customers in 2012.

**Response:** 2011: wet tons 2012: wet tons

# d. Please identify the factors that result in the "lower expenses than originally projected" for gypsum removal referenced at lines 18 – 19.

**<u>Response</u>**: Execution of additional contracts redirected incremental product originally budgeted for disposal to emerging markets. This resulted in increased beneficial reuse, reduced disposal costs and overall improvement in expenses.

# e. Please identify the factors that result in the "increased customer sales" of gypsum referenced at line 19.

**<u>Response</u>**: See 19d and the response to Interrogatory No. 5(i) of Staff's First Set of Interrogatories.

## PROGRESS ENERGY FLORIDA'S RESPONSES TO STAFF'S THIRD SET OF INTERROGATORIES (NOS. 17-19) DOCKET NO. 120007-EI Page 4

DATED this <u>13th</u> day of September, 2012.

HOPPING GREEN & SAMS, P.A in By: Gary V. Perko (Fla. Bar No. 855898)

P.O. Box 6526 / Tallahassee, FL 32301 (850) 222-7500

Attorneys for Progress Energy Florida, Inc.

#### AFFIDAVIT

#### (STATE OF FLORIDA

### COUNTY OF PINELLAS)

I hereby certify that on this 31st day of August, 2012, 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) 17 from STAFF's THIRD SET OF INTERROGATORIES TO PROGRESS ENERGY FLORIDA, INC. (NOS. 17-19) in Docket No. 120007-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 31st day of August, 2012.

. d. West

Patricia O. West

II INE C

Notary Public State of Florida

My Commission Expires:

Sept. 18, 2012

#### AFFIDAVIT

### (STATE OF FLORIDA

### COUNTY OF PINELLAS)

I hereby certify that on this 29th day of August, 2012, 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) 18 from STAFF's THIRD SET OF INTERROGATORIES TO PROGRESS ENERGY FLORIDA, INC. (NOS. 17-19) in Docket No. 120007-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 29th day of August, 2012.

West

Patricia O. West

JUNE C. MC Y COMMISSION I

noney

Sept. 18, 2012

Notary Public State of Florida

My Commission Expires:

#### AFFIDAVIT

(STATE OF FLORIDA COUNTY OF PINELIAS

I hereby certify that on this  $\underline{29}$  day of August, 2012, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared JEFF SWARTZ, who is personally known to me, and he acknowledged before me that he provided the answers to interrogatory number(s) 19 from STAFF's THIRD SET OF INTERROGATORIES TO PROGRESS ENERGY FLORIDA, INC. (NOS. 17-19) in Docket No. 120007-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  $\underline{A}\underline{\gamma}$  day of August, 2012.



I B.

Notary/Public State of Florida

My Commission Expires:

2-27-14