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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DIRECT TESTIMONY OF

JOSEPH MCCALLISTER

ON BEHALF OF

PROGRESS ENERGY FLORIDA

DOCKET NO. 090007-EI

August 3, 2009

Q. Please state your name and business address.

A. My name is Joseph McCallister. My business address is 410 South Wilmington Street, Raleigh, North Carolina 27601.

Q. By whom are you employed and in what capacity?

A. I am employed by Progress Energy Carolinas (PEC) in the capacity of Director, Gas, Oil and Power.

Q. What are your responsibilities in that position?

A. I am responsible for the procurement of natural gas, fuel oil and emission allowances and for power trading and optimization on behalf of PEC and Progress Energy Florida (PEF).

1 **Q. Have you previously provided testimony before this Commission in**
2 **connection with PEF's Environmental Cost Recovery Clause?**

3 A. Yes. In Docket No. 080007-EI I presented testimony outlining PEF's overall
4 approach to procuring emission allowances as part of its Integrated Clean Air
5 Compliance Plan and preparation for the compliance requirements of the Clean
6 Air Interstate Rule (CAIR).

7
8 **Q. What is the purpose of your testimony?**

9 A. The purpose of my testimony is to summarize PEF's actions to date related to its
10 emission allowance procurement strategy as part of its Integrated Clean Air
11 Compliance Strategy in preparation for the requirements under the CAIR.

12
13 **Q. How does PEF determine how many emission allowances it needs to**
14 **purchase?**

15 A. As part of the fuel and generation forecasts that are generated periodically by the
16 company, expected emissions are projected. The forecasts are based on input
17 assumptions such as generation availability and capacity, planned generation
18 outage schedules, purchase power contracts, fuel and emissions price forecasts,
19 planned environmental equipment installations and load projections. To
20 determine if the Company needs to purchase emission allowances for
21 compliance requirements in the current or future time periods, PEF compares the
22 forecasts of the emissions that will be generated to the number of emissions

1 allowances that PEF owns through allocations, purchases and accumulated
2 inventory.

3

4 **Q. How did CAIR impact PEF's procurement activities for emission**
5 **allowances?**

6 A. CAIR established an updated cap-and-trade system for SO₂ and NO_x and covers
7 28 eastern states and the District of Columbia. CAIR established a modified
8 sulfur dioxide (SO₂) annual compliance requirements under Title IV of the
9 Clean Air Act by requiring that for vintage years 2010-2014, 2.0 allowances are
10 required per ton of SO₂ emissions, and for the 2015 and later vintages, 2.86 SO₂
11 allowances are required per ton of SO₂ emissions. In addition, CAIR established
12 new seasonal and annual emission compliance requirements for nitrogen oxides
13 (NO_x). Beginning in 2009, CAIR requires affected sources to complete a
14 seasonal NO_x emission allowance compliance submittal for the May 1st through
15 September 30th time period as well as an annual NO_x emission allowance
16 compliance submittal for the January 1st through December 31st time period each
17 year. As part of its Integrated Clean Air Compliance Plan, PEF forecasted the
18 need to purchase both seasonal and annual NO_x emissions allowances in order
19 to comply with CAIR beginning with 2009 operations. For that reason, and
20 consistent with its strategy, PEF has purchased seasonal and annual NO_x
21 allowances over time to gradually increase inventories to the levels necessary to
22 achieve compliance.

23

1 **Q. How did Estimated/Actual Emissions expense for the period January 2009**
2 **through December 2009 compare with PEF's original 2009 O&M**
3 **projections?**

4 A. The project expenditure variance for the Estimated/Actual SO₂ and NO_x
5 emission expenses are \$52,637,496, compared to the original projection of
6 \$71,976,198 for a variance of \$(19,338,701) or -27% in 2009. There are two
7 primary drivers to explain the lower expenses. First, actual emissions have been
8 lower than forecasted emissions due to lower power demand and fuel switching
9 from coal-fired and oil-fired generation to gas-fired generation when
10 economically and operationally feasible. Second, the weighted average cost –
11 the per allowance cost at which emissions are expensed – is lower than the
12 original projection. The weighted average price is lower because fewer
13 allowances needed to be purchased for this time period and the average price for
14 procured allowances was lower than original projections.

15

16 **Q. How do the Estimated/Actual revenue requirements on inventory of**
17 **emission allowances for the period January 2009 through December 2009**
18 **compare with PEF's original projections?**

19 A. The revenue requirements on the inventory of SO₂ and NO_x emission
20 allowances are estimated to be \$681,439 or 10% higher than originally
21 projected. Revenue requirements were higher due to the larger inventory
22 balance that is reprojected throughout the year attributable to the lower power
23 demand and fuel switching as described above.

1 Q. **Does this conclude your testimony?**

2 A. Yes it does.