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Public Service Commission

February 19, 2014

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Gary V. Perko
Hopping Green & Sams P.A.
119 S. Monroe Street
Suite 300
Tallahassee, FL 32301

STAFF'S SECOND DATA REQUEST

RE: Docket No. 130301-EI- Petition to modify scope of existing environmental program by Duke Energy Florida, Inc.

Dear Mr. Perko

By this letter, the Commission staff requests that Duke Energy Florida, Inc., (DEF or company) provide responses to the following data requests.

1. Does DEF anticipate any salvage value associated with the ACI and DSI systems?
 - A. If yes, what is the estimated dollar amount associated with the salvage values of the systems?
 - B. If no, why not?

2. Page 7 of the DEF's CR South Environmental Compliance Study states "The engineering team performed plant performance analysis using VISTA combustion systems model."
 - A. Please describe the VISTA combustion systems model.
 - B. Who is the developer of the model?
 - C. Is the model accepted by the electric industry? Please explain.

3. Page 7 of the DEF's CR South Environmental Compliance Study states "[T]he planning team performed system operations analysis utilizing EPM/PROSYM."
- A. Please describe EPM/PROSYM.
 - B. Who is the developer of EPM/PROSYM?
 - C. Is EPM/PROSYM accepted by the electric industry? Please explain.
4. Page 8 of the DEF's CR South Environmental Compliance Study states:
- Sensitivity studies were also performed to assess impacts that might be expected with different combinations of units on-line and off-line. During periods when one or both of the scrubbed units at CR North were projected to be off-line, the reduced emissions resulting from utilization of the proposed reagent systems at CR South will extend the site average compliance timelines to support system reliability.
- A. Please discuss in detail the results of the studies discussed above.
 - B. Based on these results, how long (hours) can CR 1 and 2 can operate when *both* CR 4 and 5 are off-line before compliance limits are exceeded? Please explain.
 - C. Based on these results, and how long (hours) can CR 1 and 2 operate when *either* CR 4 or CR 5 is off-line before compliance limits are exceeded? Please explain.
5. Please complete the table below describing the historic performance of CR 4.

| | Forced Outage (Hours) | Planned Outage (Hours) |
|------|--------------------------|---------------------------|
| 2004 | | |
| 2005 | | |
| 2006 | | |
| 2007 | | |
| 2008 | | |
| 2009 | | |

| | Forced Outage (Hours) | Planned Outage (Hours) |
|-------------|----------------------------------|-----------------------------------|
| 2010 | | |
| 2011 | | |
| 2012 | | |
| 2013 | | |

6. Please complete the table below describing the historic performance of CR 5.

| | Forced Outage (Hours) | Planned Outage (Hours) |
|-------------|----------------------------------|-----------------------------------|
| 2004 | | |
| 2005 | | |
| 2006 | | |
| 2007 | | |
| 2008 | | |
| 2009 | | |
| 2010 | | |
| 2011 | | |
| 2012 | | |
| 2013 | | |

7. How many times, since 2004, have CR 4 and CR 5 been off-line at the same time?

A. For each instance how many hours were both units off-line?

8. Page 15 of the DEF's CR South Environmental Compliance Study states:

As expected, while the units can meet the BART PM limit using the normal CAPP coal, the units had difficulty meeting the PM limits with the alternate coal and reagents during the trials. The compliance planning team anticipated these challenges in the original projections for precipitator performance and plant output limits, and has used the data to determine what ESP changes are needed to meet the compliance targets. Once the recommended precipitator changes are completed, the PM performance should be sufficient to meet both the BART and MATS requirements while using the alternate coals and reagents. Additional testing will be required to confirm that compliance levels are being achieved.

- A. Please explain why the units will have difficulty meeting the PM limits with the alternate coal and reagents during the trials.
 - B. When will the additional testing to confirm that compliance levels are being achieved be completed?
 - C. Does DEF have a contingency plan if the additional testing indicates the compliance level will not be met?
 - If yes, please describe the plan.
 - If no, why not?
9. Please provide the FRCC study referred to in DEF's response to Staff's First Data Request, No. 30.
10. Page 5 of DEF's CR South Environmental Compliance Study contains Table 2-1, titled BART Emission Limits.
- A. In the same format as Table 2-1 please provide the current emissions and opacity for CR 1 and CR 2.
 - B. In the same format as Table 2-1 please provide the estimated emissions and opacity for CR 1 and CR 2 after switching to western bituminous coal and installation of the proposed systems.
11. Page 5 of DEF's CR South Environmental Compliance Study contains Table 2-2, titled MATS-Key Hazardous Air Pollutants Limits.

- A. In the same format as Table 2-2 please provide the current Crystal River site emissions.
- B. In the same format as Table 2-2 please provide the estimated Crystal River site emissions.

12. Please complete the table below summarizing the emissions at the Crystal River site.

| | | Averaging Period | Hg | HCl | NO _x | SO ₂ | Filterable PM |
|---------------------------------------|--------------|------------------------------|------------|--------------|-----------------|-----------------|---------------|
| | | | (lbs/Tbtu) | (lbs./MMBtu) | | | |
| MATS Limit | | N/A | | | | | |
| | | 90 days Ave. | | | | | |
| | | 30 days Ave. | | | | | |
| CAVR Limits | | N/A | | | | | |
| | | 30 days Ave. | | | | | |
| | | 3-hour stack test (for 2018) | | | | | |
| | | 3-hour stack test (for BART) | | | | | |
| Current Emission Level | CR 1&2 Ave. | N/A | | | | | |
| | | 90 days Ave. | | | | | |
| | | 30 days Ave. | | | | | |
| | | 3-hour stack test (for 2018) | | | | | |
| | | 3-hour stack test (for BART) | | | | | |
| | CR Site Ave. | N/A | | | | | |
| | | 90 days Ave. | | | | | |
| | | 30 days Ave. | | | | | |
| | | 3-hour stack test (for 2018) | | | | | |
| | | 3-hour stack test (for BART) | | | | | |
| Projected Emission Level after CR 1&2 | CR 1&2 Ave. | N/A | | | | | |
| | | 90 days Ave. | | | | | |
| | | 30 days Ave. | | | | | |
| | | 3-hour stack test (for 2018) | | | | | |

| Retrofits | Averaging Period | Hg | HCl | NO _x | SO ₂ | Filterable PM |
|--------------|------------------------------|------------------------------|--------------|-----------------|-----------------|---------------|
| | | (lbs/Tbtu) | (lbs./MMBtu) | | | |
| | | 3-hour stack test (for BART) | | | | |
| CR Site Ave. | N/A | | | | | |
| | 90 days Ave. | | | | | |
| | 30 days Ave. | | | | | |
| | 3-hour stack test (for 2018) | | | | | |
| | 3-hour stack test (for BART) | | | | | |

13. Has DEF requested a one-year extension for the MATS compliance deadline? If yes, what is the status of that request?

14. Page 53261 of the Federal Register Vol. 78, No. 168 dated August 29, 2013, under the heading Crystal River, states:

EPA has evaluated the cost-effectiveness of DSI under the shutdown option and concludes that, although FDEP should have evaluated DSI as a possible interim BART control option, DSI would not be cost-effective. EPA estimates that DSI would result in approximately \$46,000,000 in capital costs and \$54,000,000 in annual operating costs at the Crystal River facility, not including expenses for any necessary upgrades to the ESPs due to the increased loading from the DSI system or the potential costs due to local retrofit constraints.

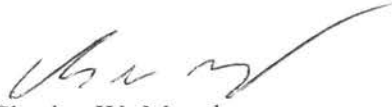
Is the DSI system described in the statement above different from the DSI system DEF is proposing in this docket? Please explain.

15 Please complete the table below summarizing the actual and projected capacity factor for Crystal River Units 1, 2, 4, and 5.

| | Capacity Factor (%) | | | |
|------|---------------------|------|------|------|
| | CR 1 | CR 2 | CR 4 | CR 5 |
| 2004 | | | | |
| 2005 | | | | |
| 2006 | | | | |
| 2007 | | | | |
| 2008 | | | | |
| 2009 | | | | |
| 2010 | | | | |
| 2011 | | | | |
| 2012 | | | | |
| 2013 | | | | |
| 2014 | | | | |
| 2015 | | | | |
| 2016 | | | | |
| 2017 | | | | |
| 2018 | | | | |

Please provide the requested information by March 3, 2014. Your response should identify the assigned docket number and may be filed electronically as provided in the Commission's Electronic Filing Requirements, posted on its Web site www.floridapsc.com under the Clerk's Office tab, or by submitting the response and 5 copies to Ms. Carlotta Stauffer, Commission Clerk, Florida Public Service Commission, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850. Please feel free to call me at (850)413-6191 if you have any questions.

Respectfully,


Charles W. Murphy
Senior Attorney

CWM/dml

cc: Office of Commission Clerk