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Public Service Commission

January 17, 2013

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

STAFF'S FIRST 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.

For questions 1 and 2, please refer to Page 53261 of Federal Register Vol. 78, No. 168, which states:

On May 2, 2013, FDEP supplemented Florida's regional haze SIP with an April 30, 2013, letter from Duke Energy (formerly known as Progress Energy) notifying FDEP of the Company's binding decision to pursue Option 1 under the Crystal River BART construction permit and shut down Units 1 and 2 by December 31, 2020.

1. In addition to Option 1, mentioned above, please summarize all options evaluated by DEF which led to the April 30, 2013, letter being sent to DEP.
2. Please provide DEF's April 30, 2013, letter to DEP notifying DEP of the Company's binding decision to shut down Crystal River Units 1 and 2 by December 31, 2020.

For questions 3 through 6, please refer to DEF's 2013 Review of Integrated Clean Air Compliance Plan filed on April 1, 2013, in Docket No. 130007-EI¹ (2013 Compliance Plan).

3. On page 24 DEF discusses many factors that were considered in its evaluation of retiring CR 1 and 2. Please describe, in detail, the following factors:
 - a. Construction Risk
 - b. Facility Age and Condition
 - c. Long-term Operability
4. On page 24 DEF states that, "the current condition of the units (Crystal River Units 1 and 2) are not conducive to continued operations for an additional 25 years." Please describe in detail the specific conditions that are not conducive to the continued operation of Crystal River Units 1 and 2.
5. On page 24 DEF states that, "the physical layout [of Crystal River Units 1 and 2] is very tight and construction of the emissions control systems would be quite involved and would require extensive unit outages to accommodate the removal of most of the ducts, fans and stacks beyond the air heaters." In addition to the extensive unit outages, are there any other risks associated with the removal of the ducts, fans and stacks beyond the air heaters?
 - a. If yes, please describe these risks.
 - b. Will the physical layout impact DEF's proposed DSI and ACI systems? Please explain answer.

¹ Exhibit PQW-1.

6. On page 21 DEF states that:

the viability and cost of the options for bridge power purchases, transmission system requirements, limited continued Crystal River Units 1 and 2 operations and new generation are all being considered to establish a reasonable path forward to ensure cost effective and reliable service. Once these investigations have been completed, a recommendation for the planned retirement date for the Crystal River Units 1 and 2 units will be finalized.

Has the investigation discussed in DEF's statement been finalized? If yes, please provide a summary of the results of the investigation.

7. Assuming Crystal River Units 1 and 2 are retired in 2016, please list in a format similar to Table 3.3 of DEF's 2013 Ten-Year Site Plan, required transmission projects.
8. Assuming Crystal River Units 1 and 2 are retired in 2020, please list in a format similar to Table 3.3 of DEF's 2013 Ten-Year Site Plan, required transmission projects.
9. Please complete the table below summarizing the emission limits set by MATS. Please identify and add any limits or requirements not included in the table that are required by MATS.

		Limit	Averaging Period
Hg	lbs/Tbtu		
NOx	lbs/MMBtu		
SO2	lbs/MMBtu		
Filterable PM	lbs/MMBtu		

10. Please complete the table below summarizing the emission limits set by CAVR. Please identify and add any limits or requirements not included in the table that are required by CAVR.

		Limit	Averaging Period
Hg	lbs/Tbtu		
NOx	lbs/MMBtu		
SO2	lbs/MMBtu		
Filterable PM	lbs/MMBtu		

11. Please complete the table below summarizing the current emission levels of Crystal River Units 1 and 2. In this context, please identify and add any relevant emissions not included in the table.

		Current Emission Levels	Averaging Period
Hg	lbs/Tbtu		
NOx	lbs/MMBtu		
SO2	lbs/MMBtu		
Filterable PM	lbs/MMBtu		

12. Please complete the table below summarizing the projected emission levels of Crystal River Units 1 and 2 with the emission controls, proposed in DEF's Petition to Modify Scope of Existing Environmental Compliance Program (Petition),² in place. In this context, please identify and add any relevant emissions not included in the table.

		Projected Emission Levels	Averaging Period
Hg	lbs/Tbtu		
NOx	lbs/MMBtu		
SO2	lbs/MMBtu		
Filterable PM	lbs/MMBtu		

13. Please describe how the Projected Emission Levels, contained in DEF's response to question 12, were developed.
14. Please explain why the Projected Emission Levels, contained in DEF's response to question 12, are reasonable.

For questions 15 through 17, please refer to DEF's Petition.

15. On page 5 DEF states that:

based on the results of those evaluations and tests of alternate coals at CR 1 and 2, DEF has determined that the use of alternate coals with installation of less expensive pollution controls would provide a cost-effective means for DEF to continue operating CR 1 and 2 in compliance with MATS.

² Filed on December 31, 2013, in the instant Docket.

Please provide the results of the test and evaluations described in this statement.

16. On page 5 DEF states that, "DEF expects to incur annual O&M costs of approximately \$2 million while the new pollution controls remain in operation." Does DEF anticipate that the use of alternate coals will increase or decrease the fuel costs associated with Crystal River Units 1 and 2? Please explain.

a. If yes, please provide an approximation of the annual increase or decrease associated with the alternate coal.

17. On page 5 DEF states that, "the less expensive pollution controls are estimated to be approximately \$28 million." Please provide an itemized break down of the \$28 million estimate, by component. Please identify and include in this break down the components contained in Table B-1 of DEF's 2013 Compliance Plan.

For questions 18 through 21 please refer to page 4 of DEF's Petition which states that:

DEF compared the quantitative and qualitative merits of pursuing the following alternatives:

Alternative 1: Retire CR 1 and 2 in April 2016 before the MATS compliance deadline (assuming one year extension) and meet system requirements with purchased power and/or new resources in a manner that the grid would support.

Alternative 2: Establish a MATS compliance plan for CR South and configure the units to operate in compliance through mid-2018, and establish a resource plan to provide for replacement combined cycle generation in that timeframe. This alternative includes a competitive solicitation for combined cycle energy and capacity starting in 2018, identification of additional resources needed in 2016 and beyond, and a transmission plan that supports the required resources.

The results of the quantitative economic analysis indicate that the lifecycle projected system cost (CPVRR) for the option of limited continued operation of CR 1 and 2 through mid-2018 (Alternate 2) was \$307 million lower overall than the system CPVRR for the option retiring the units in mid-2016 (Alternate 1).

18. For Alternative 1 and 2, please complete the table below summarizing the results of DEF's quantitative economic analysis. Please present all values in \$M in \$2014.

	Generation	Transmission	Fuel	O&M	Other	Total	Bill Impact \$/1,000 kWh (Nominal)
2014							
2015							
2016							
2017							
2018							
2019							
2020							
2021							
2022							
2023							
2024							
2025							
2026							
2027							
2028							
2029							
2030							
2031							
2032							
2033							
2034							
2035							
2036							
2037							
2038							
2039							
2040							
2041							

19. For Alternative 1 and 2, please complete the table below summarizing DEF's projected generation expansion plan.

	Generation Additions	Generation Retirements
2014		
2015		
2016		
2017		
2018		
2019		
2020		
2021		
2022		
2023		
2024		
2025		
2026		
2027		
2028		
2029		
2030		
2031		
2032		
2033		
2034		
2035		
2036		
2037		
2038		
2039		
2040		
2041		

20. For Alternative 1 and 2, please complete the table below summarizing DEF's projected energy source mix.

	Oil	Coal	Natural Gas	Other
2013				
2014				
2015				
2016				
2017				
2018				
2019				
2020				
2021				
2022				

21. For Alternative 1 and 2, please complete the table below summarizing DEF's projected summer reserve margin requirements. Please provide values in megawatts.

	Installed Capacity	Firm Capacity Import	Firm Capacity Export	QF	Total Capacity Available	Summer Firm Peak Demand	Reserve Margin	
							MW	% of Peak
2013								
2014								
2015								
2016								
2017								
2018								
2019								
2020								
2021								
2022								

22. Please provide a simplified diagram of Crystal River Units 1 and 2 with and without the emission control projects proposed in the Petition.

23. Please identify, with pinpoint citation, all rules and/or regulations upon which DEF is basing its Petition.

24. With respect to DEF's CPVRR analysis presented in its Petition, please identify the source(s) used to develop its fuel forecast and any environmental forecasts.
25. With respect to DEF's CPVRR analysis presented in its 2013 Compliance Plan, please identify the source(s) used to develop its fuel forecast and any environmental forecasts.
26. Please provide a milestone schedule for the ACI system proposed in DEF's Petition.
27. Please provide a milestone schedule for the DSI system proposed in DEF's Petition.
28. Please provide a milestone schedule to change the ESPs proposed in DEF's Petition.
29. Other than the proposed projects, did DEF evaluate any alternatives that would allow DEF to operate CR 1 and 2 in compliance with MATS through mid-2018?
 - a. If yes, please describe the other alternatives and why they were not chosen.
 - b. If no, please explain why not.

30. On page 5 of the Petition, DEF states that:

the qualitative planning assessment concluded that the limited continued operations alternative (Alternative 2) has a significant positive impact on system reliability if operations of CR 1 and 2 are continued until replacement generation can be added near Crystal River, or until transmission projects can be completed to address grid concerns.

Please identify and describe the "significant positive impact[s]" and "grid concerns" referenced in this statement.

31. Please complete the table below summarizing the projected impact the proposed projects will have on ECRC and Fuel factors.

	ECRC Factor Impact \$/1,000 kWh	Fuel Factor Impact \$/1,000 kWh
2014		
2015		
2016		
2017		
2018		
2019		

	ECRC Factor Impact \$/1,000 kWh	Fuel Factor Impact \$/1,000 kWh
2020		
2021		
2022		
2023		
2024		
2025		
2026		
2027		
2028		
2029		
2030		

32. How does DEF intend to recover the capital costs associated with the proposed projects while CR 1 and 2 are still in-service?
33. How does DEF intend to recover the unrecovered portion of the capital costs associated with the proposed projects after CR 1 and 2 are retired?

Please provide the requested information by February 10, 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