

# Hopping Green & Sams

Attorneys and Counselors

June 28, 2013

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**VIA HAND DELIVERY**

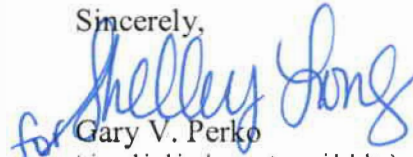
Ms. Ann Cole, Commission Clerk  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, Florida 32399-0850

Re: Docket No. 130091-EI- Petition of Duke Energy Florida, Inc. to approve establishment of a regulatory asset and associated three-year amortization schedule for costs associated with PEF's previously approved thermal discharge compliance project.

Dear Ms. Cole:

Please find enclosed the original and five (5) copies of Duke Energy Florida, Inc.'s ("DEF's") responses to Staff's Second Data Request in the above referenced docket.

Thank you for your assistance in this matter. Please call me at (850) 222-7500 should you have any questions.

Sincerely,  
  
for Gary V. Perko  
(signed in his absence to avoid delay)

GVP/srl  
Attachments

COM \_\_\_\_\_  
AFD 2  
APA \_\_\_\_\_  
ECO \_\_\_\_\_  
ENG 1  
GCL 1  
IDM 1  
TEL \_\_\_\_\_  
CLK \_\_\_\_\_

**DUKE ENERGY FLORIDA, INC.'S  
RESPONSES TO STAFF'S SECOND DATA REQUEST  
DOCKET No. 130091-EI**

- 1. Please confirm whether the thermal compliance discharge project was developed in concept in 2008 to replace the modular cooling towers at CR1 and CR2 and handle additional cooling needs due to the CR3 uprate.**

Response: Yes, the thermal discharge project was developed to replace the modular cooling towers and handle the additional cooling needs due to the CR3 uprate project.

- 2. Please identify when the thermal discharge compliance project was expected to be completed?**

Response: The thermal discharge project was originally expected to be completed in 2011 in advance of completion of the planned final phase of the power uprate project. After the 2009 CR3 delamination, this expectation was revised to maintain the ability to bring the new tower into service prior to the first summer coming out of the extended outage while minimizing additional spend on the project.

- 3. Please describe what parts of the thermal discharge compliance project have to be dismantled and when that dismantlement will be completed.**

Response: At this time, the Company has only identified one item associated with the thermal discharge compliance project that may need to be dismantled: the meteorological tower (Met Tower). Dismantlement of the Met Tower will not occur unless and until the Company has been relieved of its obligation to maintain an emergency plan for Crystal River 3, per the requirements of the Nuclear Regulatory Commission.

- 4. Please refer to page 5 the testimony of Daniel Roderick in Docket No. 080007-EI, dated August 29, 2008. Also, refer to page 2 of the April 1, 2013 petition in Docket No. 130007-EI. What is the reason for the difference in the 58% for project costs in 2009 for ECRC recovery and the 64% for ECRC recovery in the 2013 petition?**

Response: Mr. Roderick, in his August 29, 2008 testimony, stated that the 58% was a preliminary estimate of how much would be allocated to ECRC. Based on additional information, the allocation was refined to 64%, and the Company has used that percentage from 2009 to the present. The allocation is based on a ratio of the additional heat rejection expected from the EPU and the heat removed by the modular cooling towers. The EPU heat rejection to the discharge canal was expected to be  $\sim .84$  BBTUs/Hr and the modular cooling towers removed  $\sim 1.49$  BBTUs/Hr for a total needed capacity of  $\sim 2.33$  BBTUs/Hr. Therefore,  $1.49/2.33 = .64$  or approximately 64%.

5. **Please refer to Exhibit TGF-1, page 23 of 27, of the April 1, 2013 testimony of Thomas Foster. Does the \$18,095,351 actual net investment for December 2012 represent 64% of the net investment in the project through 2012? Please explain.**

Response: The \$18.1 million net investment is based on allocating 64% of the capital spend to ECRC. Due to differing recovery mechanisms between ECRC and NCRC, the ECRC net investment also includes AFUDC on this capital spend. In NCRC the AFUDC is collected as it is incurred.

6. **Are there plans to continue the modular cooling towers project (Project 11)? If so, please explain and also state when Project 11 is projected to be discontinued.**

Response: No. As addressed in the April 2, 2012 and August 1, 2012 Docket No. 120007-EI testimony of Witness West, demobilization and dismantlement activities for the modular cooling towers (Project No. 11) occurred in mid-2012.

7. **Are the modular cooling towers leased? If so, does DEF expect the leasing to continue?**

Response: Yes, the towers were leased. No, this project has ended and DEF is no longer leasing them; they were removed from the site in 2012.

8. **Will DEF have to derate CR 1&2 without the modular cooling towers? Please explain. Please include in the response a discussion regarding the use of the Helper Towers and how they can now be dedicated to CR 1&2.**

Response: DEF does not expect to have to derate CR 1 & 2 for thermal water temperature limit reasons without the modular cooling towers. CR 1, 2 and 3 each utilize a once-through cooling water process whereby the condenser cooling water is removed from the Gulf of Mexico via an intake canal and discharged to a common discharge canal. The discharge canal sends the cooling water back to the Gulf of Mexico. DEF has a National Pollutant Discharge Elimination System (NPDES) industrial wastewater permit from the Florida Department of Environmental Protection (FDEP) to discharge cooling water from CR 1, 2, and 3 units to the Gulf of Mexico. The FDEP NPDES permit includes a limit on the temperature of the cooling water discharge of 96.5 degrees Fahrenheit on a three-hour rolling average measured at the point of discharge to the Gulf of Mexico. To maintain compliance with this thermal limit, DEF's existing helper cooling towers will continue to be available to offset any heat rejection from CR 1 and 2. These helper cooling towers have been in operation since 1993. Heat rejection to the Gulf is directly related to the MW's that are generated by a given unit. The heat that has been rejected to the Gulf has historically been driven by CR units 1, 2 and 3. CR Units 1 and 2 have a combined capacity of 869MW summer. CR3 had a capacity of approximately 860MW summer. With the retirement of CR3, roughly 50 percent of the heat rejection has been eliminated. The reduction in thermal load due to the CR3 retirement is greater than the heat load the modular cooling towers were designed to offset.

- 9. By stopping the thermal discharge compliance project, is there a risk of derates at CR1 and CR2?**

Response: Stopping the thermal discharge project does not increase the risk of derates at CR1 and CR2 to meet the temperature limits of the NPDES permit.

- 10. Since 2006, has the Gulf inlet or intake temperature decreased, increased, or stayed the same?**

Response: Data from DEF's monitoring of intake temperatures demonstrates that Gulf temperatures (daily maximum condenser inlet) have stayed essentially the same since 2006.

- 11. Is DEF opposed to another amortization schedule?**

Response: DEF is not opposed to a different amortization schedule as long as it is reasonable and consistent with prior Commission precedent/action.