

State of Florida



Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD
TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M-

DATE: February 23, 2017

TO: Office of Commission Clerk (Stauffer)

FROM: Division of Engineering (Lee) *BE*
Division of Accounting and Finance (Passett, D. Smith) *BE*
Division of Economics (Guffey) *SK9*
Office of the General Counsel (Janjic) *CS*

RE: Docket No. 170030-EI – Petition for limited proceeding for approval to include in base rates the revenue requirement for the Hines chillers uprate project, by Duke Energy Florida, LLC.

AGENDA: 03/07/17 – Regular Agenda – Tariff Filing – Interested Persons May Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Graham

CRITICAL DATES: 04/03/17 (60-Day Suspension Date)

SPECIAL INSTRUCTIONS: None

Case Background

By Order No. PSC-13-0598-FOF-EI, the Commission approved the Revised and Restated Stipulation and Settlement Agreement (RRSSA).¹ Paragraph 16(a) of the RRSSA includes

¹Order No. PSC-13-0598-FOF-EI, issued November 12, 2013, in Docket No. 130208-EI, *In re: Petition for limited proceeding to approve revised and restated stipulation and settlement agreement by Duke Energy Florida, Inc. d/b/a Duke Energy*. The Revised and Restated Agreement resolves outstanding issues in existing, continuing, and prospective Commission dockets, including Docket No. 100437-EI, which involves the examination of the outage and replacement fuel/power costs associated with DEF's Crystal River Unit 3 (CR3) steam generator replacement; Docket No. 130009-EI, the Commission's ongoing Nuclear Cost Recovery Clause; Docket No. 130001-EI, the Fuel and Purchased Power Cost Recovery Clause; Docket No. 130007-EI, the Environmental Cost Recovery Clause; and Docket No. 130091-EI, which involves DEF's petition for approval of a regulatory asset and associated amortization schedule for costs associated with DEF's Commission-approved thermal discharge compliance project.

provisions for Duke Energy Florida, LLC (DEF) to seek recovery of the prudently incurred revenue requirement of power uprates to existing DEF units, which may be placed in-service prior to year-end 2017, through a separate base rate increase at the time each unit is placed in service.

On May 20, 2016, DEF filed a petition for approval to include in base rates the revenue requirement for the Hines Chillers Uprate Project (Hines Project) in Docket No. 160128-EI, pursuant to Paragraph 16(a) of the RRSSA. The Hines Project consists of installation of chiller modules for the existing Hines Energy Center power block units, a large chilled water storage tank, an auxiliary power system, pumps and chilled water supply, return piping, and gas turbine air inlet chiller coils. The installation of the chiller system on the existing Hines Energy Center power block units (Hines Units 1-4) is designed to cool the gas turbine inlet air, thus increasing the capacity of each power block while maintaining fuel efficiency. Hines Units 1-4 have a total installed capacity of approximately 1,900 megawatts (MW). The project is expected to increase the summer capacity of those units by approximately 220 MW to meet the summer peak demand, which DEF projected to grow to 9,439 MW by the summer of 2018.

The Hines Project was granted a determination of need in 2014.² The estimated cost of the project was determined to be reasonable by Order No. PSC-16-0362-TRF-EI,³ and was to be implemented in two phases. Tariff sheets reflecting rate increases associated with Phase 1 were approved to be effective with the first billing cycle of November 2016. Phase 2 was expected to be completed in January 2017. However, DEF delayed the in-service date of the project after it discovered a leak in a water tank that is part of the common equipment. On October 18, 2016, DEF filed a motion requesting withdrawal of the approved tariffs, which was approved by Order No. PSC-16-0521-TRF-EI.⁴

Due to the delay of the in-service date of the project, DEF has continued billing customers consistent with the tariffs that were in effect. This is consistent with provision under Paragraph 16(a) of the RRSSA, which contemplates that customers would not be charged for the project cost until such project is placed into service.

On February 2, 2017, DEF filed the instant petition for approval to include in base rates the revenue requirement associated with the Hines Project, after the work to resolve the tank leak issue had been substantially completed. DEF states that the Hines Project will no longer be completed in two phases; rather, the entire project will now be completed at the same time. DEF currently estimates that the Hines Project will be completed and placed into commercial service by March 2017.

The Commission has jurisdiction pursuant to Section 366.06, Florida Statutes (F.S.).

²Order No. PSC-14-0590-FOF-EI, issued October 21, 2014, in Docket No. 140111-EI, *In re: Petition for determination of cost effective generation alternative to meet need prior to 2018, by Duke Energy Florida, Inc.*

³Order No. PSC-16-0362-TRF-EI, issued August 29, 2016, in Docket No. 160128-EI, *In re: Petition for approval to include in base rates the revenue requirement for the Hines Chillers Uprate Project, by Duke Energy Florida, LLC.*

⁴Issued November 21, 2016, in Docket No. 160128-EI, *In re: Petition for approval to include in base rates the revenue requirement for the Hines Chillers Uprate Project, by Duke Energy Florida, LLC.*

Discussion of Issues

Issue 1: Should the Commission approve DEF's petition to include in base rates the revenue requirement associated with the Hines Project?

Recommendation: Yes. Staff recommends that the \$19,335,560 revenue requirement, based on the most recently available Earnings Surveillance Report (ESR), is the appropriate amount. (Lee, D. Smith, Passett)

Staff Analysis: DEF is seeking to recover its estimated revenue requirement of \$19,363,385 for the Hines Project pursuant to Paragraph 16(a) of the RRSSA. As discussed earlier, the Hines Project will no longer be completed in phases. Therefore, DEF is requesting that the Commission approve the revenue requirement and rate increase for the whole project.

Cost Estimates for Hines Project

In Docket No. 160128-EI, DEF's construction cost estimate for the Hines Project was \$150.6 million, which was approximately \$9 million less than the \$160 million estimate provided in the need determination proceeding in Docket No. 140111-EI. In that proceeding, the Commission found the construction cost estimate comparable to a similar project. In addition, DEF entered into an Engineering Procurement Construction (EPC) contract with an experienced third party contractor. Each piece of equipment must meet all applicable tests before DEF will accept the equipment as complete from the EPC contractor. The Commission determined the estimated cost of the project to be reasonable by Order No. PSC-16-0362-TRF-EI, issued August 29, 2016.⁵

Based on information DEF filed in this docket, the updated construction cost estimate is approximately \$150.6 million, which is the same as the estimate DEF provided in Docket No. 160128-EI. DEF achieved several major project milestones. Specifically, the station service transformer, cooling tower, chiller modules, thermal energy storage tank, secondary pump, battery building, all interconnect piping and electrical equipment, chiller coils and ductwork to support chiller operation have been installed and tested.

As discussed earlier, DEF delayed the in-service date of the project due to the tank leak issue. To ensure that the issue with the tank leak was fully resolved, DEF and its contractor decided to drain the tank, apply a monolithic seal inside the tank, and then completely re-fill the tank to test for additional leaks. The work to resolve the tank leak issue has been substantially completed. Before the project can be completed, DEF must operate the entire system at full capacity to confirm that the equipment meets the performance standard requirements set forth in the contract. Based on DEF's actions and the Commission's prior decision on the reasonableness of the estimated cost, staff recommends that the construction cost estimate be considered reasonable.

While doing the final check of the remaining common equipment, DEF and its contractor discovered an issue with the condensate system. DEF currently anticipates that the project may

⁵Order No. PSC-16-0362-TRF-EI, issued August 29, 2016, in Docket No. 160128-EI, *In re: Petition for approval to include in base rates the revenue requirement for the Hines Chillers Uprate Project, by Duke Energy Florida, LLC*. The order also recognized that costs will be reset in DEF's next general base rate case proceeding if actual costs differ from what was approved in Docket No. 160128-EI.

come on-line by the end of March 2017. However, this in-service date may be pushed back if the issue with the condensate system cannot be resolved by the end of March. The impact of the potential delay of this in-service date to the effective date of the tariff is discussed in Issue 2.

Revenue Requirement

Based on the estimated cost of the Hines Project, DEF calculated a revenue requirement of \$19,363,385.⁶ In accordance with Paragraph 16(a) of the RRSSA, DEF utilized the capital structure from its November 2016 ESR, its most recent actual available at the time of its filing, and a 10.50 percent return of equity to calculate the revenue requirement.⁷ The revenue requirement calculation also includes the recovery of O&M expenses, depreciation expense, property insurance, property tax, and income tax. Subsequent to the filing of its petition using the November 2016 ESR, DEF submitted its most recent ESR for December 2016. Staff has calculated a revised revenue requirement of \$19,335,560 based on the capital structure provided in the December 2016 ESR. This represents a \$27,825 revenue requirement reduction. Staff recommends that the \$19,335,560 revenue requirement based on the most recently available ESR is the appropriate amount as shown on Attachment A.

Conclusion

Staff recommends that the \$19,335,560 revenue requirement based on the most recently available ESR is the appropriate amount as shown on Attachment A.

⁶Exhibit C, p. 1 of 2, of Document No. 01331-17 (DEF's Petition).

⁷November 2016 Earnings Surveillance Report.

Issue 2: Should the Commission approve DEF's proposed tariffs and associated charges?

Recommendation: Yes. The Commission should give staff administrative authority to approve tariffs and associated charges that implement the Commission vote in Issue 1 regarding the Hines Project. The charges should go in to effect with the first billing cycle in April 2017. If the commercial in-service date of the project is delayed, then the tariffs should become effective after the Hines Project is completed and is in commercial service. DEF should notify staff before the delayed implementation. (Guffey)

Staff Analysis: As discussed in Issue 1, staff is recommending a reduction in the revenue requirement for the Hines Project. DEF provided Exhibit D in its petition showing the allocation of DEF's proposed revenue requirement to all its rate classes as a uniform percentage (1.10 percent) consistent with the terms of the RRSSA. Under DEF's proposal, a residential customer who uses 1,000 kilowatt-hours will see a \$0.56 increase on the monthly bill (excluding Gross Receipt Tax). DEF's current and proposed base rate comparisons are shown in Exhibit E to the petition and proposed tariffs are shown in Exhibit F to the petition. DEF requested that the tariffs become effective with the first billing cycle of April 2017. If the commercial in-service date of the Hines Project is delayed, then the tariffs should become effective with the first billing cycle after the project is completed and placed in commercial service. DEF should notify staff before the delayed implementation.

Customer Notification

In its March bill inserts, DEF will notify customers of the request to increase rates associated with the Hines Project to be effective in April. DEF will include a second bill insert in April bills showing all Commission-approved base rates, for all rate classes that are effective April 2017. If the commercial in-service date of the Hines Project is delayed, then DEF should notify staff before the delayed implementation to see if another notice is needed.

Conclusion

Based on the Commission vote in Issue 1, DEF should recalculate the rates and associated charges and file revised tariff sheets (if DEF's proposed rates are affected by the change in the revenue requirements approved in Issue 1) for administrative approval by staff. The proposed tariffs and associated charges should go into effect with the first billing cycle of April 2017. If the commercial in-service date of the project is delayed, then the tariffs and associated charges should become effective at the time the Hines Project is completed and is in commercial service, consistent with Paragraph 16(a) of the RRSSA, which contemplates that customers would not be charged for the project cost until such project is placed into service.

Issue 3: Should this docket be closed?

Recommendation: If Issues 1 and 2 are approved, the tariff should go into effect with the first billing cycle in April 2017, or later if the commercial in-service date is delayed. If a protest is filed within 21 days of the issuance of the order, the tariff should remain in effect, with any revenues held subject to refund, pending resolution of the protest. If no timely protest is filed, this docket should be closed upon the issuance of a consummating order. (Janjic)

Staff Analysis: If Issues 1 and 2 are approved, the tariff should go into effect with the first billing cycle in April 2017, or later if the commercial in-service date is delayed. If a protest is filed within 21 days of the issuance of the order, the tariff should remain in effect, with any revenues held subject to refund, pending resolution of the protest. If no timely protest is filed, this docket should be closed upon the issuance of a consummating order.

DUKE ENERGY FLORIDA, LLC
 DOCKET NO. 170030-EI
HINES PROJECT REVENUE REQUIREMENT CALCULATION

Line No.	HINES PROJECT		
	DEF ESR Nov 2016	Commission ESR Dec 2016	
	<u>Capital Structure Weighted Cost: (a)</u>		
1	Long Term Debt	1.80%	1.81%
2	Short Term Debt	0.02%	0.02%
3	Customer Deposits	<u>0.04%</u>	<u>0.04%</u>
4	Total (L1 + L2 + L3)	<u>1.86%</u>	<u>1.87%</u>
5	Overall Rate of Return (a)	<u>6.66%</u>	<u>6.65%</u>
6	Average Jurisdictional Rate Base	\$135,234,000	\$135,234,000
7	Interest Expense (L4 x L6)	\$2,515,352	\$2,528,876
8	Interest Income Tax (L7 x 38.575%)	(\$970,297)	(\$975,514)
9	Operating Expenses	(\$6,212,000)	(\$6,212,000)
10	Operating Expenses Income Tax (L9 x 38.575%)	2,396,279	2,396,279
11	Interest Income Tax (L8)	970,297	975,514
12	Net Operating Income Loss (L9 + L10 + L11)	<u>(\$2,845,424)</u>	<u>(\$2,840,207)</u>
	<u>Revenue Requirement Calculation</u>		
13	Average Jurisdictional Rate Base (L6)	\$135,234,000	\$135,234,000
14	Rate of Return (L5)	6.66%	6.65%
15	Required Return (L13 x L14)	<u>9,006,584</u>	<u>8,993,061</u>
16	Net Operating Income Loss (L12)	(2,845,424)	(2,840,207)
17	Net Operating Income Deficiency (L15 + L16)	<u>11,852,008</u>	<u>11,833,268</u>
18	Net Operating Income Multiplier	1.634	1.634
19	Revenue Requirement (L17 x L18)	<u>\$19,363,385</u>	<u>\$19,335,560</u>
20	Difference		<u>(\$27,825)</u>

Note:

(a) Source - November 2016 ESR and December 2016 ESR, Schedule 4, Page 3 of 4.