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May 9, 2018

VIA: ELECTRONIC FILING

Ms. Carlotta S. Stauffer
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

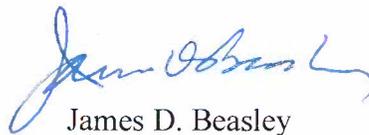
Re: Environmental Cost Recovery Clause
FPSC Docket No. 20180007-EI

Dear Ms. Stauffer:

Attached for filing in the above docket is a Petition of Tampa Electric Company for Approval to Modify Environmental Program for Cost Recovery through the Environmental Cost Recovery Clause relating to the company's Big Bend Station Effluent Limitations Guidelines Compliance Program.

Thank you for your assistance in connection with this matter.

Sincerely,



James D. Beasley

JDB/pp
Attachment

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Environmental Cost)
Recovery Clause)
_____)

DOCKET NO. 20180007

FILED: May 9, 2018

**PETITION OF TAMPA ELECTRIC COMPANY FOR APPROVAL TO
MODIFY ENVIRONMENTAL PROGRAM FOR COST RECOVERY
THROUGH THE ENVIRONMENTAL COST RECOVERY CLAUSE**

Tampa Electric Company (“Tampa Electric” or “the company”), by and through its undersigned counsel, and pursuant to Section 366.8255, Florida Statutes, and Florida Public Service Commission (“Commission”) Order Nos. PSC-94-0044-FOF-EI and PSC-94-1207-FOF-EI, hereby petitions the Commission for approval to modify the company’s existing environmental compliance program – Big Bend Station Effluent Limitations Guidelines Study Program (“Big Bend ELG Study Program – to include additional costs such that all prudent costs for the modification incurred after the date of this Petition may be recovered through the Environmental Cost Recovery Clause (“ECRC”). The company also will rename the program Big Bend Station Effluent Limitations Guidelines Compliance Program (“Big Bend ELG Compliance Program”). In support of its Petition, the company states:

1. Tampa Electric is an investor-owned electric utility subject to the Commission’s jurisdiction pursuant to Chapter 366, Florida Statutes. Tampa Electric serves retail customers in Hillsborough and portions of Polk, Pinellas and Pasco Counties in Florida. The company’s principal offices are located at 702 North Franklin Street, Tampa, Florida 33602.

2. The persons to whom all notices and other documents should be sent in connection with this docket are:

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3. On November 3, 2015 the Environmental Protection Agency (“EPA”) published the final Steam Electric Power Generating Effluent Limitations Guidelines (“ELG”) in the Federal Register. The effective date of the rule is January 4, 2016. The ELG establish limits for wastewater discharges from flue gas desulfurization (“FGD”) processes, fly ash and bottom ash transport water, leachate from ponds and landfills containing coal combustion residuals (“CCR”), gasification processes, and flue gas mercury controls. The final rule requires compliance as soon as possible after November 1, 2018, and no later than December 31, 2023. Since these limitations will be incorporated in the National Pollutant Discharge Elimination System (“NPDES”) permits, the exact compliance date will be determined through discussions with the Florida Department of Environmental Protection (“FDEP”), whom EPA has delegated to administer these permits.

Affected Tampa Electric Facilities

4. Tampa Electric facilities located at the company’s Big Bend Station are affected by the ELG. Big Bend Station operates four coal-fired steam electric power generating units equipped with electrostatic precipitators, Selective Catalytic Reduction (“SCR”) and wet Limestone Forced Oxidized (“LSFO”) Flue Gas Desulfurization (“FGD”) systems. The FGD system is designed to operate at a chloride concentration of no more than 30,000 ppm chlorides. Chloride control is obtained by blowing down the FGD system at approximately 230 gpm. This

blow-down stream is sent to a physical chemical treatment system to remove solids, some metals, ammonia and adjust pH prior to discharge to Tampa Bay via the once-through condenser cooling system water. This treatment system will need to be modified or replaced in order to achieve compliance with the new EPA regulations.

5. Other ELG waste stream categories present at Big Bend Station are bottom and fly ash transport water, which will be used for FGD scrubber make-up water, as allowed by the ELG. There are no other facilities at Big Bend Station affected by the ELG.

6. On February 2, 2016 Tampa Electric Company submitted its Petition for Approval of its Big Bend ELG Study Program for cost recovery through the Environmental Cost Recovery Clause. The Big Bend ELG Study Program was needed to determine the most appropriate ELG compliance measure for that station. The Big Bend ELG Study Program was approved in Order No. PSC-16-0248-PAA-EI issued June 28, 2016 in Docket No. 20160027-EI, and confirmed in Consummating Order No. PSC-16-0290-CO-EI issued July 25, 2016 in Docket No. 20160027-EI.

7. The Study identified the technically and commercially available technologies which could be viable candidates to treat the Tampa Electric Big Bend Station combined effluent streams in order to bring the streams into compliance with the more stringent requirements under the ELG Rule. The company has reviewed several options and selected the deep well injection solution based on total project costs, including annual operating costs. This option allows the company to use one option to comply with ELG Rule parameters. Although capital costs for the options considered varied, the deep well injection solution is one of the least costly when capital costs and annual operating costs are considered. Combined with the fact that the deep well

injection solution does not degrade unit performance as other options do, it is the best choice for Tampa Electric's Big Bend Station ELG Rule compliance.

8. With the Study now completed, the company must obtain environmental permitting and engage in the construction of a test injection well to ensure that the selected deep well injection method satisfies FDEP requirements. Once the test results are confirmed, the test injection well will be converted to a permanent deep injection well system of two wells to comply with the ELG Rule. Obtaining the approval for recovery of permitting, engineering, and construction costs for both the test well and the permanent deep injection well systems are the purpose of this Petition.

Estimated Big Bend ELG Compliance Program Costs

9. This Petition requests recovery of capital costs, estimated to be in a range of from \$18 million to \$26 million, for preconstruction design, engineering, permitting, and installation of two ejection wells, together with one of three options the company is considering for pretreatment of the effluent discharge. The pretreatment requirement will be determined after the FDEP review of the test well results. The capital costs could range from an estimated \$18 million if no water softening is required and the company's permit allows blending wastewater with county-treated effluent, to approximately \$21 million if 30% softening is required, and up to approximately \$26 million if full softening treatment is required. For purposes of illustration, the following table describes the component capital costs for the option of deep well injection with the pretreatment of 30% softening of the water prior to injection.

Capital Costs by Year
Deep Injection Wells with Pre-Treatment of 30% Water Softening

	2018	2019	2020	2021	Total
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
Capital					
Permitting and Pre-Construction Engineering Design	400	700	-	-	1,100
Construction Engineering	-	800	1,000	400	2,200
Well Construction (2 wells)	-	500	4,500	3,000	8,000
Water Treatment (Softening)	-	600	6,500	2,600	9,700
<i>Total</i>	400	2,600	12,000	6,000	21,000

10. The permit application for deep well injection will be submitted to the Florida Department of Environmental Protection and will address testing, hydro-geological impacts, and construction specifications. The cost estimates above estimate that permitting will be completed in 2019, and well engineering and construction costs will commence in 2019. Tampa Electric anticipates well construction will take approximately one year to complete.

11. After the test well is installed and reviewed, the company would proceed to obtain permanent deep well injection permits, convert the test well into a permanent deep injection well, and construct a second well. The deep well injection solution includes two permanent wells because a well must be available at all times for the Big Bend Station units' FGD systems to operate, and operation of the FGD systems is an environmental requirement to run the generating units. In addition, when maintenance is needed on one of the deep injection wells, another well must be available in order to run the units

12. O&M expenses will be incurred after the wells are in operation, with annual costs for 30% softening expected to be \$1.9 million annually. The O&M expenses of the other treatment options under consideration are shown in the following table. The treatment option selected will depend on FDEP's test well review and requirements for permanent well permits.

**Total Capital and Annual O&M Costs
Deep Injection Wells with Various Pre-Treatment Options**

	Capital Cost	Annual Operating Cost
	(\$000)	(\$000)
Deep well injection - with 30% softening	21,000	1,900
Deep well injection - with full softening	26,000	4,500
Deep well injection – with effluent blending	18,000	700

13. The Commission’s policy for initial cost recovery approval of an ECRC eligible project is set forth in Order No. PSC-94-0044-FOF-EI issued January 12, 1994 in Docket No. 930613-EI, In re: Gulf Power Company, (“the Gulf Order”) as follows:

Upon petition, we shall allow the recovery of costs associated with an environmental compliance activity through the environmental cost recovery factor if:

1. such costs were prudently incurred after April 13, 1993:
2. the activity is legally required to comply with a governmentally imposed environmental regulation enacted, became effective, or whose effect was triggered after the company's last test year upon which rates are based; and,
3. such costs are not recovered through some other cost recovery mechanism or through base rates.

14. Tampa Electric’s proposed modification of the Big Bend ELG Compliance Program qualifies for ECRC cost recovery under the Gulf Order. The costs of the program will be prudently incurred after April 13, 1993. The company’s planned activities under the Big Bend ELG Compliance Program are essential components of the company’s ability to comply with the EPA's legally required ELG Rule which was adopted and became effective after the company’s last test year upon which rates are based. None of the costs proposed under the Big Bend ELG Compliance Program are recovered through some other cost recovery mechanism or through base rates.

15. This program is a compliance activity associated with limitations on wastewater discharge. Capital costs to implement the modified Big Bend ELG Compliance Program should be allocated to rate classes on a demand basis, and operation and maintenance costs should be allocated to rate classes on an energy basis. Estimated costs will be further refined during engineering work, and the project cost estimates will be updated in future filings with the Commission.

16. Tampa Electric is not aware of any disputed issues of material fact relative to the matters set forth in this Petition or any relief requested.

WHEREFORE, Tampa Electric Company respectfully requests the Commission to approve at the annual hearing in this docket the company's proposed modified Big Bend Station ELG Compliance Program and the company's recovery of the expenses of the program through the ECRC in the manner described herein.

DATED this 9th day of May, 2018.

Respectfully submitted,



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