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: August 27, 2021

TO: Office of Commission Clerk (Teitzman)

FROM: Division of Engineering (Doehling, Knoblauch) 78

Division of Economics (Wu)

Office of the General Counsel (Weisenfeld) 727

RE: Docket No. 20210087-EI – Petition for approval of new environmental program

for cost recovery through Environmental Cost Recovery Clause, by Tampa

Electric Company.

AGENDA: 09/08/21 – Regular Agenda – Proposed Agency Action – Interested Persons May

Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Fay

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

Case Background

On April 21, 2021, Tampa Electric Company (TECO or Company) petitioned the Florida Public Service Commission (Commission) to approve the Bayside Station Section 316(b) Compliance Project (Project) for cost recovery through the Environmental Cost Recovery Clause (ECRC). TECO stated that the project is required to comply with the Environmental Protection Agency's (EPA) final rule regarding Section 316(b) of the Clean Water Act.

The EPA adopted a rule pursuant to Section 316(b) of the Clean Water Act on September 7, 2004. This rule established requirements for reducing mortality of aquatic organisms as a result of cooling water intake structures (CWIS) at existing power plants. In 2004, TECO requested Commission approval for cost recovery through the ECRC for a Comprehensive Demonstration

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Study, which was needed to comply with the new Section 316(b) rule. Cost recovery for the study was approved by the Commission in Docket No. 20041300-EI.¹

The 2004 Section 316(b) rule changes were challenged and the EPA published a final rule regarding Section 316(b) (EPA Rule or Rule) on August 15, 2014, which outlined the requirements for CWIS at existing facilities.² The EPA Rule requires that the best technology available be applied to the design and operation of CWIS to minimize adverse impacts to aquatic life. In 2018, TECO petitioned the Commission for cost recovery through the ECRC for its Big Bend Unit 1 Section 316(b) Impingement Mortality project in order to comply with the EPA Rule. The Commission approved ECRC cost recovery for the Big Bend project by Order No. PSC-2018-0594-FOF-EI, issued December 20, 2018.³ The proposed Bayside Station Section 316(b) Compliance Project is substantially similar to the previously approved Big Bend Unit 1 Section 316(b) Impingement Mortality project.

Pursuant to Section 366.8255, Florida Statutes (F.S.), the Florida Legislature authorized the recovery of prudently incurred investor-owned electric utility environmental compliance costs through the ECRC. The method for cost recovery for such costs was first established by Order No. PSC-94-0044-FOF-EI, issued on January 12, 1994.⁴ The Commission has jurisdiction over this matter pursuant to Section 366.8255, F.S.

¹ Order No. PSC-05-0164-PAA-EI, issued February 10, 2005, in Docket No. 20041300-EI, *In re: Petition for approval of new environmental program for cost recovery through Environmental Cost Recovery Clause by Tampa Electric Company.*

² Federal Register, Volume 79, No. 158, pp. 48300-48439, codified at Title 40, Part 125, Subpart J, Code of Federal Regulations.

³ Order No. PSC- 2018-0594-FOF-EI, issued December 20, 2018, in Docket No. 20180007-EI, *In re: Environmental cost recovery clause.*

⁴ Order No. PSC-94-0044-FOF-EI, issued January 12, 1994, in Docket No. 19930613-EI, *In re: Petition to establish an environmental cost recovery clause pursuant to Section 366.0285, Florida Statutes by Gulf Power Company.*

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Discussion of Issues

Issue 1: Should the Commission approve Tampa Electric Company's petition for approval of the Bayside Station Section 316(b) Compliance Project for cost recovery through the Environmental Cost Recovery Clause?

Recommendation: Yes. Staff recommends that TECO's Bayside Station Section 316(b) Compliance Project is necessary to comply with the EPA's Section 316(b) rule. Consistent with prior ECRC orders, operation and maintenance (O&M) costs associated with the Project should be allocated to appropriate rate classes on an energy basis and capital costs should be allocated on a demand basis. (Doehling, Wu)

Staff Analysis: The EPA Rule establishes requirements for CWIS at existing facilities. The Rule requires that the best technology available be applied to the design and operation of CWIS to minimize impingement mortality⁵ and entrainment⁶ of aquatic life. The Rule allows for seven different approaches for impingement mortality compliance. For entrainment compliance, the Rule requires the evaluation of closed-cycle cooling, alternative water supplies, and fine mesh screens for a site-specific determination by the Florida Department of Environmental Protection (DEP) Director. In addition, the Rule requires that a Compliance Optimization Study be performed once the Project is in-service to validate the effectiveness of the Project.

In its petition, TECO states that it evaluated its compliance options and identified modified traveling screens with a fish return as the most cost-effective solution to comply with the EPA Rule. TECO also stated that its Project is required to comply with the impingement mortality requirements of the Rule. While the Project may also reduce the entrainment of aquatic life, entrainment compliance must be determined after the Project is in-service, based on the DEP Director's review of the Project's performance. If the DEP Director determines that additional improvements are needed to meet entrainment requirements, TECO intends to address them through a subsequent petition.

The work to be completed includes retrofitting existing coarse mesh screens with modified traveling screens and the installation of two return pipes to release fish away from the influence of the CWIS. Staff notes that this project is substantially similar to TECO's Commission-approved Big Bend Unit 1 Section 316(b) Impingement Mortality Project. Engineering work for the Bayside Station Section 316(b) Compliance Project will begin near the end of 2021, construction in the third quarter of 2022, and is expected to be placed in-service in the fourth quarter of 2023.

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⁵ Impingement mortality occurs when aquatic life are pinned against the CWIS screens.

⁶ Entrainment occurs when small aquatic life pass through the CWIS screens and enter the cooling system.

⁷ Order No. PSC- 2018-0594-FOF-EI, issued December 20, 2018, in Docket No. 20180007-EI, *In re: Environmental cost recovery clause*.

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The estimated cost for the Project is \$10.1 million, including the compliance optimization study, as seen in Table 1-1. The Project has an expected service life of 20 years, with annual in-service O&M costs of \$512,000 beginning in 2024. The costs in Table 1-1 were developed by TECO based on actual costs from TECO's Big Bend Unit 1 Section 316(b) Impingement Mortality Project. Labor costs from central Florida were used along with estimates on the major equipment such as the traveling screens. A draft layout of the fish return system was created, and material requirements were estimated. Further, Table 1-2 shows the estimated annual impact of the Project on residential customer bills.

Issue 1

Table 1-1
Estimated Capital and O&M Costs

Estimated Capital and Oakii Costs						
	2021	2022	2023	2024	2025	Total
	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)	(\$000)
Capital						
Engineering	375	75	75	-	-	525
Equipment	450	4,425	1,125	-	-	6,000
Construction	-	1,850	750	-	-	2,600
Owners Costs	125	125	125	-	-	375
Demolition / Retirement	-	30	30	-	-	60
Total Capital	950	6,505	2,105	-	-	9,560
Compliance Optimization Study	-	-	-	270	270	540
In-Service Annual O&M						
Variable O&M	-	-	-	134	134	N/A
Operating Labor	-	-	-	50	50	N/A
Maintenance Material	-			198	198	N/A
Maintenance Labor	-	-	-	130	130	N/A
Total O&M	-	-	-	512	512	N/A

Source: TECO's petition

Table 1-2 Residential Bill Impact (1,000 kWh Monthly Usage)

 Year
 Estimated Annual Impact

 2022
 \$ 0.162

 2023
 \$ 0.050

 2024
 \$ 0.320

 2025
 \$ 0.004

Source: TECO's response to Staff's Third Data Request No. 2

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Based on TECO's petition and the Company's responses to staff's data requests, staff recommends that TECO's ECRC Project is necessary for compliance with the EPA Rule. The Commission's criteria for ECRC recovery relevant to this docket, established by Order No. PSC-94-0044-FOF-EI, are:

- (1) The activities are legally required to comply with 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
- (2) None of the expenditures are being recovered through some other cost recovery mechanism or through base rates.

Staff recommends that the activities proposed in TECO's petition meet these criteria. These activities are necessary for TECO to comply with governmentally imposed environmental regulation. The need for the above-referenced compliance activities were triggered after TECO's last test year upon which rates are currently based. 9 Specifically, the need for these activities was triggered by the renewal of the facility's National Pollutant Discharge Elimination System Permit, which requires compliance with the EPA Rule. Finally, the costs of the proposed compliance activities are not currently being recovered through some other cost recovery mechanism or through base rates. Staff notes that the reasonableness and prudence of individual expenditures related to the Project will continue to be subject to the Commission's review in future ECRC proceedings.

Conclusion

Staff recommends that TECO's Bayside Station Section 316(b) Compliance Project is necessary to comply with the EPA's Section 316(b) Rule. Consistent with prior ECRC orders, O&M costs associated with the Project should be allocated to appropriate rate classes on an energy basis and capital costs should be allocated on a demand basis. 10

⁸ Document Nos. 04587-2021, 07715-2021, and 08704-2021 dated June 8, July 12, and August 4, 2021, respectively.

⁹ On August 6, 2021, a joint Stipulation and Settlement Agreement between TECO and intervening parties was filed in Docket No. 20210034-EI. The hearing for TECO's current rate case is set for October 21, 2021, by Order No. PSC-2021-0301-PCO-EI. The costs of the Project are not included in the Settlement Agreement.

¹⁰ Order No. PSC-2017-0483-PAA-EI, issued December 22, 2017, in Docket No. 20170168-EI, In re: Petition for approval of the second phase of CCR program for cost recovery through the environmental cost recovery clause, by Tampa Electric Company, Order No. PSC-16-0248-PAA-EI, issued June 28, 2016, in Docket No. 20160027-EI, In re: Petition for approval of new environmental program for cost recovery through Environmental Cost Recovery Clause, by Tampa Electric Company.

Docket No. 20210087-EI Issue 2

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Issue 2: Should this docket be closed?

Recommendation: Yes. This docket should be closed upon issuance of a Consummating Order unless a person whose substantial interests are affected by the Commission's decision files a protest within 21 days of the issuance of the Proposed Agency Action Order. (Weisenfeld)

Staff Analysis: At the conclusion of the protest period, if no protest is filed, this docket should be closed upon the issuance of a Consummating Order.