

STATE OF FLORIDA



COMMISSIONERS:  
ART GRAHAM, CHAIRMAN  
JULIE I. BROWN  
DONALD J. POLMANN  
GARY F. CLARK  
ANDREW GILES FAY

DIVISION OF ECONOMICS  
JUDY HARLOW  
DIRECTOR  
(850) 413-6410

# Public Service Commission

February 1, 2019

## Staff's Third Data Request

Paula K. Brown  
Manager, Regulatory Coordination  
Tampa Electric Company  
Office Box 111  
Tampa, FL 33601

### Re: Docket 20180204-EI; Petition of Tampa Electric for Approval of Shared Solar Tariff

Dear Ms. Brown:

By this letter, the Commission respectfully requests the following information from Tampa Electric Company (TECO or the Company).

**Please refer to TECO's Petition in Docket No. 20180204-EI (the Petition) and the Company's responses to Staff's First Set of Interrogatories (Nos. 1-30), for the following questions.**

1. Refer to the Company's response to No. 1 and the tab in its Excel attachment labeled "Input Data."
  - a. Please explain how installed cost per unit (\$/kW-AC) remained constant with the reduction of capacity of the system from 17.7 MW to 17.5 MW.
  - b. Please explain why O&M costs escalate only after 2021.
2. Refer to TECO's response to No. 1 and the tab in its Excel attachment labeled "CE Costs."
  - a. Please describe the responsibilities for the Program manager.
  - b. Please describe the responsibilities for the Renewable manager and explain why they are included in first-year expenses. As part of this response, please specify if this is related to "Owner Costs" identified in Docket No. 20180133, such as salary for the Director of Renewables.

- c. Please explain why no Marketing costs are included in the first-year O&M expenses, but are included for years 2 through 30 of the program.
3. Refer to TECO’s responses to Nos. 1 and 24 and their Excel attachments, specifically associated with Fixed O&M.
  - a. Please explain variation in Fixed O&M costs between these two responses. For example, No. 1 (Tab “Rev Req,” Row 7) has a nominal sum value of \$7.07 million, and No. 24 (“Q24 horizontal,” Row 37) has a nominal sum value of \$5.55 million.
  - b. Please provide the annual and cumulative values (nominal and net present value) separately for Fixed O&M costs associated with the solar facility and the SSR-1 program management costs.
  - c. Please provide the total amount of SSR-1 program management cost as its percentage of total project cost (in nominal and net present value).
4. Please refer to the Company’s response to No. 18. Would TECO continue to seek its petition of the SSR-1 Tariff if it was specific to the 17.5 MW located at Lake Hancock, with additional MW expansion requiring future Commission approval? Please explain.
5. For clarity, please file a revised tariff sheet No. 3.300 to add the following sentence to the last paragraph: “The Fuel Charge and Environmental Cost Recovery Charge applies to the remainder of the monthly billing determinants.”

**Please refer to the data in Tables 1 and 2 below, which were presented in filings made by the Company in Docket Nos. 20180001-EI and 20190001-EI respectively, to answer the following question.**

Table 1 (2019 Projection)

Source of Data	Plant	Net Capability (MW)	Net Generation (MWh)	Net Capacity Factor (%)
Schedule E4, Projection Filing, August 24, 2018 20180001-EI	TIA Solar	1.6	220	18.5
	Big Bend Solar	19.4	2,400	16.6
	Legoland Solar	1.5	150	13.4
	Future Solar	405	56,930	18.9
	TOTAL	427.5	59,700	18.8

Table 2 (Mid-Course Correction filing – revision to 2019 Projection)

Source of Data	Plant	Net Capability (MW)	Net Generation (MWh)	Net Capacity Factor (%)
Schedule E4, Mid-Course Filing, January 15, 2019 20190001-EI	TIA Solar	1.6	230	19.3
	Big Bend Solar	19.4	2,600	18
	Legoland Solar	1.5	170	15.2
	Future Solar	405	61,330	20.4
	TOTAL	427.5	64,330	20.2

6.

- a. Is the MWh generation for the SSR-1 portion of Lake Hancock included in the data in Tables 1 and 2 as “Future Solar” or is it otherwise included in the development of the approved/proposed fuel factors? Please explain.
- b. If the MWh generation for the SSR-1 portion of Lake Hancock is not included in either Table 1 or Table 2, please describe the financial impact of the SSR-1 Tariff on a typical bill for a non-participant residential customer (at full SSR-1 subscription).
- c. Please identify the Net Capability, Net Generation, and Net Capacity Factor for the 17.5 MW SSR-1 portion of Lake Hancock.

7. Refer to Staff’s First Data Request, No. 24, and its Excel attachment. Please provide the annual data requested by category identified in the table included as part of No. 24. Provide all requested data in an electronic Microsoft Excel file with all formulae intact.

Year	SSR-1 CPVRR Analysis Assumptions (\$million) [Nominal]									
	17.5 MW Lake Hancock Portion						SSR-1 Program			Total
	Generation Capital	Transmission & Distribution Capital	Property	O&M	Taxes	Owner Expenses	Program Expenses	Program Salaries	Other	
2019										
2020										
2021										
2022										
2023										
2024										
2025										
2026										
2027										
2028										
2029										
2030										
2031										
2032										
2033										
2034										
2035										
2036										
2037										
2038										
2039										
2040										
2041										
2042										
2043										
2044										
2045										
2046										
2047										
2048										

8. Refer to Staff’s First Data Request, No. 24. Please explain why Owner Expenses are listed as zero, given that Owner Expenses were included in Docket 20180133-EI for the remainder of the Lake Hancock Project.

9. Please provide an estimate of TECO’s annual system fuel costs for the period 2019 through 2048 and the amount of annual system fuel costs reduced by the 17.5 MW portion of the Lake Hancock solar project. As part of this response, please complete the table below for each of the subscription scenarios below. Provide all requested data in an electronic Microsoft Excel file with all formulae intact.

95 percent

50 percent

0 percent

Year	Total System Fuel Costs		Lake Hancock (17.5 MW) Avoided System Fuel Costs	
	(\$ Nominal)	(\$ NPV)	(\$ Nominal)	(\$ NPV)
2019				
2020				
2021				
2022				
2023				
2024				
2025				
2026				
2027				
2028				
2029				
2030				
2031				
2032				
2033				
2034				
2035				
2036				
2037				
2038				
2039				
2040				
2041				
2042				
2043				
2044				
2045				
2046				
2047				
2048				

10. Please provide an estimate of TECO’s annual system environmental O&M costs for the period 2019 through 2048 and the amount of annual system environmental O&M costs reduced by the 17.5 MW portion of the Lake Hancock solar project. As part of this response, please complete the table below for each of the subscription scenarios below. Provide all requested data in an electronic Microsoft Excel file with all formulae intact.

95 percent

50 percent

0 percent

Year	Total System Environmental O&M Costs		Lake Hancock (17.5 MW) Avoided System Environmental O&M Costs	
	(\$ Nominal)	(\$ NPV)	(\$ Nominal)	(\$ NPV)
2019				
2020				
2021				
2022				
2023				
2024				
2025				
2026				
2027				
2028				
2029				
2030				
2031				
2032				
2033				
2034				
2035				
2036				
2037				
2038				
2039				
2040				
2041				
2042				
2043				
2044				
2045				
2046				
2047				
2048				

11. Please provide an estimate of TECO’s annual system environmental capital expense costs for the period 2019 through 2048 and the amount of annual system environmental capital expense costs reduced by the 17.5 MW portion of the Lake Hancock solar project. As part of this response, please complete the table below for each of the subscription scenarios below. Provide all requested data in an electronic Microsoft Excel file with all formulae intact.

95 percent

50 percent

0 percent

Year	Total System Environmental Capital Expense Costs		Lake Hancock (17.5 MW) Avoided System Environmental Capital Expense Costs	
	(\$ Nominal)	(\$ NPV)	(\$ Nominal)	(\$ NPV)
2019				
2020				
2021				
2022				
2023				
2024				
2025				
2026				
2027				
2028				
2029				
2030				
2031				
2032				
2033				
2034				
2035				
2036				
2037				
2038				
2039				
2040				
2041				
2042				
2043				
2044				
2045				
2046				
2047				
2048				

12. Please provide TECO's projected annual retail energy sales to residential customers for its system. by year, for the period 2019-2048. Provide all requested data in an electronic Microsoft Excel file with all formulae intact.

<b>Year</b>	<b>Residential Energy Retail Sales</b>
	<b>GWh</b>
2019	
2020	
2021	
2022	
2023	
2024	
2025	
2026	
2027	
2028	
2029	
2030	
2031	
2032	
2033	
2034	
2035	
2036	
2037	
2038	
2039	
2040	
2041	
2042	
2043	
2044	
2045	
2046	
2047	
2048	



Staff Data Request 3

Page 9

Please file all responses electronically no later than February 8, 2019, via the Commission's website at [www.floridapsc.com](http://www.floridapsc.com) by selecting the Clerk's Office tab and Electronic Filing Web form. Please feel free to call me at 850-413-6701 if you have any questions.

Sincerely,

*/s/Charles Morgan II*

Charles Morgan II  
Public Utility Analyst I  
[cmorgan@psc.state.fl.us](mailto:cmorgan@psc.state.fl.us)

CC: James Beasley, Ausley McMullen  
J. Jeffry Wahlen, Ausley McMullen