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February 26, 2018

VIA: ELECTRONIC FILING

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

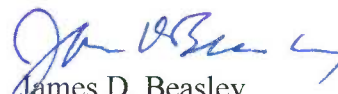
Re: Petition for a limited proceeding to approve first solar base rate adjustment
(SoBRA) effective September 1, 2018; FPSC Docket No. 20170260-EI

Dear Ms. Stauffer:

Attached for filing in the above docket are Tampa Electric Company's responses to Staff's Second Data Request (Nos. 1-3) dated February 14, 2018. Portions of response to Data Request No. 1 are confidential and are accompanied by a Request for Confidential Classification and Motion for Temporary Protective Order being separately filed on February 26, 2018 with your office.

Thank you for your assistance in connection with this matter.

Sincerely,


James D. Beasley

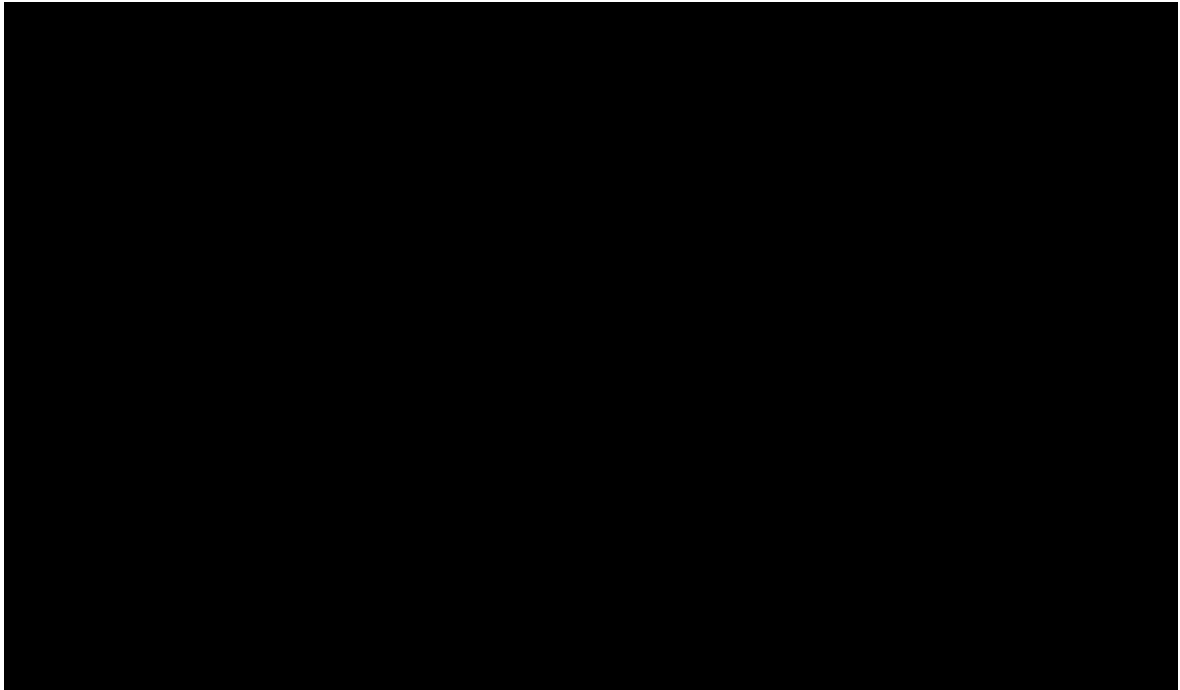
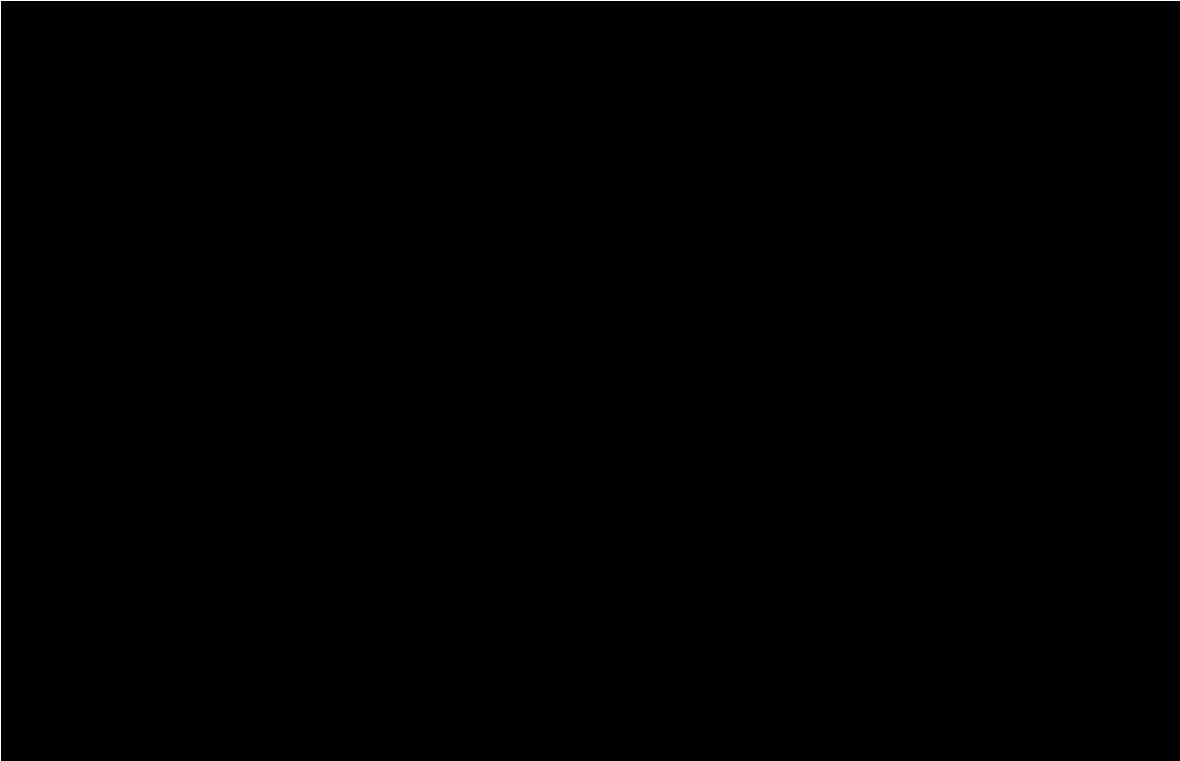
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Attachment

**TAMPA ELECTRIC COMPANY
DOCKET NO. 20170260-EI
STAFF'S SECOND DATA REQUEST
REQUEST NO. 1
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1. Please refer to TECO's response to Staff's First Data Request, No. 1. In this response, the Company explains its methodologies for developing and forecasting both future fuel and emissions prices. Does TECO test the veracity, and/or compare its fuel and emissions price forecasts to other publically available data resources, such as the Energy Information Administration (EIA)? If so, what were the results?
 - A. Yes, Tampa Electric compares its fuel price forecasts for natural gas and coal against other sources. The first graph below shows Tampa Electric's forecasted price of natural gas at Henry Hub compared to other sources, both publicly available and as a subscribed service. The second graph shows Tampa Electric's price forecast for "standard" coal at the mine mouth in the Illinois Basin (source of most coal for Tampa Electric) compared to both public and subscriber service sources. The comparison is not as direct as for natural gas due to the quality and locational differences for different types of coal. Nonetheless, the relative price compared to near-term spot prices, e.g., in *Coal Daily*) and longer term modeled prices (EIA average mine-mouth) show that Tampa Electric's coal price forecast is consistent with both near term market prices and longer-term comparative sources. Tampa Electric's fuel price forecasts for natural gas and coal are reasonable for planning purposes and consistent with other sources.

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Regarding emissions, Tampa Electric has been monitoring forecasted carbon prices since the draft Clean Power Plan was issued. The company reviewed any forecasts that other IOUs included with their Commission filings, as well as public forecasts found on the internet, such as those of Synapse Energy. At the time of conducting analysis for this petition, Tampa Electric then contracted with a global consulting services company, ICF International, Inc., to obtain a CO₂ forecast that utilized the most current assumptions and market conditions. The consultant compared projections for various regions of the country and included low, medium, and high forecasts. Tampa Electric estimated the NO_x cost using a recent, very small sale of Tampa Electric's NO_x Ozone Season allowances.

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2. Please refer to the Direct Testimony of TECO witness Ward for this question. Witness Ward testified, at page 6, line 24 – page 7, line 1, “[t]he company plans 150 MW of PV solar generation with an in-service date of September 1, 2018.” The witness also testified, at page 7, lines 6 – 9, “the company’s planned first tranche, which consists of two projects totaling 145 MW with projected in-service date of September 1, 2018.” Please reconcile these two statements.
 - A. The statement on page 6, line 24 – page 7, line 1 references the maximum amount of cost-effective photovoltaic (“PV”) solar generation that Tampa Electric can construct and recover through its Solar Base Rate Adjustment (“SoBRA”) at that time, as specified in the company’s 2017 Amended and Restated Stipulation and Settlement Agreement and FPSC Order No. PSC-2017-0456-S-EI, issued November 27, 2017.

The statement on page 7, lines 6 – 9 references the actual amount of cost-effective PV solar generation expected to enter commercial service by September 1, 2018. Payne Creek Solar will produce 70.3 MW_{ac} of PV solar generation and Balm Solar will produce 74.4 MW_{ac} of PV solar generation. Therefore, on September 1, 2018, Tampa Electric will have nearly 145 MW_{ac} of PV solar generation begin commercial service and qualify for recovery under its SoBRA.

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3. Please refer to TECO's response to Staff's First Data Request, No. 14, for the following questions.
 - a. Referring to TECO's response to sub-question (a), please explain how the full year book depreciation of \$6.1 million was derived, and provide related work papers in Microsoft Excel, with formulas intact, to support your response.
 - b. Referring to TECO's response to sub-question (b), please define the term "original cost." Please specify the amount of the "original cost" for each Tranche 1 solar project, and provide a detailed breakdown of the components that comprise it.

- A. Tampa Electric provided an Excel file labeled "Q13 – Tranche 1 Full First Year Bonus Depreciation" on February 2, 2018, as part of the response to Staff's First Data Request, No. 13(c).
 - a. In the Excel file, the total project costs including AFUDC are shown in cells E2 through E7. The useful life of the solar asset is listed as the book life shown on row 14 as thirty years. Annual book depreciation is 1/30th of the total capital cost of the depreciable assets. By adding the Book Depreciation for Balm Solar to Payne Creek Solar, the \$6.1 million figure was derived.
 - b. Original cost is the project's total capital cost including AFUDC at the in-service date. The original cost of the Payne Creek project is \$91.7 million, and the original cost of the Balm Solar project is \$91.4 million. Please see the detailed breakdown of the cost components in the following tables. These costs were provided in Mark Ward's Direct Testimony, Exhibit No. MDW-1, Document No. 3 for Payne Creek Solar and Document No. 6 for Balm Solar. The original cost is the Total All-in-Cost less the cost for land because land is not depreciable.

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Payne Creek Solar Estimated Costs (\$)

Project Output (MW-ac)	70.3
Modules	30,827,672
Major Equipment	23,811,685
Balance of System	28,417,389
Development	1,593,623
Transmission Interconnect	4,400,000
Land	1,408,400
Owners Costs	419,383
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Total Installed Cost (\$)	90,878,151
AFUDC (\$)	2,195,318
Total All-in-Cost (\$)	93,073,469
Total (\$/kW-ac)	1,324

Balm Solar Estimated Costs (\$)

Project Output (MW-ac)	74.4
Modules	29,263,256
Major Equipment	25,206,219
Balance of System	30,081,657
Development	1,686,953
Transmission Interconnect	2,500,000
Land	18,720,128
Owners Costs	443,970
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Total Installed Cost (\$)	107,902,183
AFUDC (\$)	2,188,259
Total All-in-Cost (\$)	110,090,442
Total (\$/kW-ac)	1,480
