

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-**

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**DATE:** August 6, 2020

**TO:** Office of Commission Clerk (Teitzman)

**FROM:** Division of Engineering (Phillips) *TB*  
Division of Accounting and Finance (Higgins, Mouring) *MC ALM*  
Division of Economics (Forrest) *JD*  
Office of the General Counsel (Stiller, Trierweiler) *JC*

**RE:** Docket No. 20200144-EI – Petition for limited proceeding to true-up First and Second SoBRAs, by Tampa Electric Company.

**AGENDA:** 08/18/20 – Regular Agenda – Proposed Agency Action - Interested Persons May Participate

**COMMISSIONERS ASSIGNED:** All Commissioners

**PREHEARING OFFICER:** Graham

**CRITICAL DATES:** None

**SPECIAL INSTRUCTIONS:** None

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### Case Background

By Order No. PSC-2017-0456-S-EI, issued on November 27, 2017, the Florida Public Service Commission (Commission) approved Tampa Electric Company's (TECO or Company) Amended and Restated Stipulation and Settlement Agreement (2017 Settlement).<sup>1</sup> The 2017 Settlement allows for the inclusion of solar projects that meet certain criteria into base rates through a Solar Base Rate Adjustment (SoBRA) mechanism.

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<sup>1</sup>Order No. PSC-2017-0456-S-EI, issued November 27, 2017, in Docket No. 20170210-EI, *In re: Petition for limited proceeding to approve 2017 amended and restated stipulation and settlement agreement, by Tampa Electric Company*, and Docket No. 20160160-EI, *In re: Petition for approval of energy transaction optimization mechanism, by Tampa Electric Company*.

On June 5, 2018, the Commission approved TECO's First SoBRA in Order No. PSC-2018-0288-FOF-EI.<sup>2</sup> The First SoBRA consisted of two solar projects, Payne Creek and Balm, with a total installed capacity of 144.7 megawatts (MW). The base rate increase associated with the First SoBRA went into effect September 1, 2018. On December 7, 2018, the Commission approved TECO's Second SoBRA in Order No. PSC-2018-0571-FOF-EI.<sup>3</sup> The Second SoBRA consisted of five solar projects, Lithia, Grange Hall, Bonnie Mine, Peace Creek, and Lake Hancock, with a total installed capacity of 261.3 MW. The base rate increase associated with the Second SoBRA went into effect January 1, 2019.

On April 30, 2020, TECO filed a petition for a true-up of the First and Second SoBRAs. The Commission has jurisdiction pursuant to Sections 366.06 and 366.076, Florida Statutes (F.S.).

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<sup>2</sup>Order No. PSC-2018-0288-FOF-EI, issued on June 5, 2018, in Docket No. 20170260-EI, *In re: Petition for limited proceeding to approve first solar base rate adjustment (SoBRA), effective September 1, 2018, by Tampa Electric Company.*

<sup>3</sup>Order No. PSC-2018-0571-FOF-EI, issued on December 7, 2018, in Docket No. 20180133-EI, *In re: Petition for limited proceeding to approve second solar base rate adjustment (SoBRA), effective January 1, 2019, by Tampa Electric Company.*

## Discussion of Issues

**Issue 1:** What are the actual total costs for TECO’s First and Second SoBRA projects?

**Recommendation:** Based on staff’s review, the actual total costs for TECO’s First and Second SoBRA projects are as listed in Table 1-3. None of the projects exceed the \$1,500/kilowatt-alternative current (kW<sub>ac</sub>) cost cap requirement of the 2017 Settlement. (Phillips)

**Staff Analysis:** The 2017 Settlement allows TECO to recover the cost of solar projects that meet certain criteria through a base rate adjustment, using estimated costs and in-service dates with a true-up mechanism. Paragraph 6(c) of the 2017 Settlement states that the SoBRA rate adjustment for each tranche will be implemented on the earliest in-service date specified in paragraph 6(b) and based on estimated installation cost. Each SoBRA rate adjustment will subsequently be trued-up based on actual in-service dates and installation costs. Paragraph 6(d) of the 2017 Settlement specifies a total installed capital cost cap for each project of \$1,500/kW<sub>ac</sub>.

Staff has reviewed the actual in-service dates and installed cost variances for TECO’s First and Second SoBRA projects, which are discussed below. Based on staff’s analysis, each project is below the cost cap.

### In-Service Dates

Only two of the seven projects, Payne Creek and Lithia, entered commercial service on their estimated in-service dates. For the remaining five projects, TECO, under its engineering, procurement, and construction (EPC) contracts, sought and received liquidated damages from contractors for performance delays. TECO received a total of \$9,170,565 in liquidated damages, which it used to offset lost revenue from delayed in-service dates and to reduce the actual installed costs for solar projects. The estimated and actual in-service dates for each solar project are listed in Table 1-1.

**Table 1-1  
 In-Service Dates for First and Second SoBRAs**

Project Name	Estimated In-Service Date	Actual In-Service Date
<b>First SoBRA</b>		
Payne Creek Solar	September 1, 2018	September 1, 2018
Balm Solar	September 1, 2018	September 27, 2018
<b>Second SoBRA</b>		
Lithia Solar	January 1, 2019	January 1, 2019
Grange Hall Solar	January 1, 2019	January 2, 2019
Peace Creek Solar	January 1, 2019	March 1, 2019
Bonnie Mine Solar	January 1, 2019	January 23, 2019
Lake Hancock Solar	January 1, 2019	April 25, 2019

Source: Exhibit JSC-1 from Document No. 02326-2020

### Installed Costs

Pursuant to paragraph 6(d) of the 2017 Settlement, the allowable installed costs include all types of costs that have traditionally been allowed in rate base for solar projects, including EPC contracts. For TECO’s First and Second SoBRAs, the EPC contracts include major equipment (i.e., solar modules, inverters), balance of system (i.e., racking, collection cables), and development. The EPC contract accounts for the majority of the project costs followed by land, transmission interconnection, and owner’s costs. Each of the solar projects, excluding Payne Creek and Bonnie Mine, were below estimated installed costs. The cost variances for each category and the total cost variances are listed in Table 1-2.

**Table 1-2  
 Total Installed Cost Variances by Project**

<b>Project Name</b>	<b>EPC Cost (\$)</b>	<b>Land Cost (\$)</b>	<b>Transmission Cost (\$)</b>	<b>Owner’s Cost (\$)</b>	<b>Total (\$)</b>
<b>First SoBRA</b>					
Payne Creek Solar	938,410	(62,561)	(388,302)	1,142,852	1,630,400
Balm Solar	495,469	(1,697,613)	(837,914)	1,316,303	(723,755)
<b>Second SoBRA</b>					
Lithia Solar	(906,777)	(447,022)	(712,877)	650,184	(1,416,493)
Grange Hall Solar	(656,548)	(147,567)	(1,197,813)	478,840	(1,523,088)
Peace Creek Solar	40,841	(122,993)	(1,728,866)	559,812	(1,251,206)
Bonnie Mine Solar	(190,578)	(142,724)	(361,837)	1,128,941	433,803
Lake Hancock Solar	(1,692,012)	(44,975)	(355,295)	1,020,143	(1,072,140)

Source: Exhibit MDW-1 from Document No. 02326-2020

### **EPC Costs**

EPC costs represent approximately 83 percent of the total costs on average for the First and Second SoBRAs. Three of the seven solar projects' actual EPC costs were higher than estimated. Several factors contributed to the increased EPC costs, such as the requirement for the Balm and Peace Creek projects to install crushed concrete to improve road subgrade and design allowing for better access to solar substations, and for the Payne Creek project to purchase additional modules to account for those damaged during construction.

### **Land and Transmission Costs**

The land and transmission costs represent approximately 11 and 3 percent of the total costs on average, respectively, and for each of the solar projects were below the original estimated costs. For example, the Balm and Lithia projects closing costs, legal fees, and broker fees were lower than expected causing the land cost to be lower than originally estimated. The largest variances for transmission costs were for the Grange Hall and Peace Creek projects. TECO’s original transmission interconnection estimates were based on construction in or near wetlands, but the Company was able to avoid the wetlands, thereby lowering the transmission cost for each project.

### **Owner’s Costs**

The owner’s costs represent approximately 2 percent of the total costs on average, and for all of the solar projects were higher than estimated. The projects required additional staff for safety

oversight to ensure safety protocols were followed due to a number of safety incidents that occurred during the construction of the first two SoBRA projects. Other owner’s costs were associated with environmental or governmental requirements. For example, the Lithia project site was home to an atypical amount of gopher tortoises that required relocating, and the Lake Hancock project added a vegetation buffer to reduce visibility to nearby residential areas based on a requirement from the City of Bartow.

**Total Costs**

Pursuant to paragraph 6(d) of the 2017 Settlement, in addition to the installed costs discussed above, TECO is eligible to include allowance for funds used during construction (AFUDC) associated with SoBRA projects, which represent approximately 2 percent of the total costs on average. The actual cost for each project, inclusive of the variances above and AFUDC, are listed on a total cost and per kW<sub>ac</sub> cost basis in Table 1-3. Based on staff’s analysis, each project is below the cost cap specified in paragraph 6(d) of the 2017 Settlement of \$1,500 per kW<sub>ac</sub>. Staff has reviewed the total actual costs, and they appear reasonable and consistent with the 2017 Settlement.

**Table 1-3  
 Total Costs for First and Second SoBRAs**

<b>Project Name</b>	<b>Total Cost (\$)</b>	<b>Total Cost (\$/kW<sub>ac</sub>)</b>
<b>First SoBRA</b>		
Payne Creek Solar	94,359,584	1,342
Balm Solar	109,963,383	1,478
<b>Second SoBRA</b>		
Lithia Solar	111,364,821	1,481
Grange Hall Solar	87,347,026	1,430
Peace Creek Solar	81,943,638	1,479
Bonnie Mine Solar	56,102,532	1,496
Lake Hancock Solar	46,403,012	1,459

Source: Exhibit MDW-1 from Document No. 02326-2020

**Conclusion**

Based on staff’s review, the actual total costs for TECO’s First and Second SoBRA projects are as listed in Table 1-3. None of the projects exceed the \$1,500/kW<sub>ac</sub> cost cap requirement of the 2017 Settlement.

**Issue 2:** What is the adjusted annual revenue requirement for TECO’s First and Second SoBRA projects?

**Recommendation:** The total adjusted cumulative annual revenue requirement associated with TECO’s First and Second SoBRA projects is \$70,213,000. (Higgins)

**Staff Analysis:** The 2017 Settlement established a framework for TECO to recover costs associated with the construction and operation of solar generating facilities meeting certain criteria. Under the framework, TECO can petition the Commission to implement project-specific estimated annual revenue requirements, beginning on specified dates, subject to certain agreed-upon conditions.<sup>4</sup> The revenue collected is subject to true-up. The actual annual revenue requirement and its difference from the currently-approved annual revenue requirement is the focus of staff’s recommendation in this issue.<sup>5</sup>

The Company is requesting the Commission approve a revised cumulative annual revenue requirement based on the actual installed costs of the plants associated with its previously-approved First and Second SoBRA projects.<sup>6</sup> The revised cumulative annual revenue requirement for the First and Second SoBRA projects is specifically associated with the following generating plants: Balm, Payne Creek, Lithia, Grange Hall, Peace Creek, Bonnie Mine, and Lake Hancock.

The revised cumulative annual revenue requirement is formulated using the actual capital cost, shown in Table 1-3, in addition to incentives permitted under paragraph 6(m) of the 2017 Settlement, for each of the First and Second SoBRA projects in place of the originally-estimated capital cost. With regard to the incentive, according to subparagraph 6(m), if TECO’s actual installed cost for a project is less than the cost cap of \$1,500 per kWac, the Company and its customers share in the difference, 75 percent and 25 percent respectively.<sup>7</sup> TECO witness Jose A. Aponte describes the incentive’s design and effect as serving to “encourage [TECO] to build solar projects for recovery under a SoBRA at the lowest possible cost.” As necessitated by the updated base capital costs (Issue 1) of the individual First and Second SoBRA facilities, the relative incentives for all plants have been trueed up from their estimated values as part of this issue. All other components of the estimated annual revenue requirement calculation remain the same, e.g., operation and maintenance expense, rate of depreciation, capital structure, and tax rates. The specific true-up produced by this change is the subject of Issue 3. The proposed revised cumulative annual revenue requirement of \$70,213,000, as compared to the previously-estimated \$70,290,000, represents a reduction of \$77,000.

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<sup>4</sup>2017 Settlement, ¶6(b).

<sup>5</sup>Order Nos. PSC-2018-0288-FOF-EI and PSC-2018-0571-FOF-EI.

<sup>6</sup>*Id.*

<sup>7</sup>2017 Settlement, ¶6(m).

Table 2-1 displays the estimated annual First and Second SoBRA revenue requirements by project and plant.

**Table 2-1  
 First and Second SoBRA Estimated Annual Revenue Requirement<sup>8</sup>**

Plant	Revenue Requirement (\$000)
<b>First SoBRA</b>	
Balm Solar	\$12,937
Payne Creek Solar	11,308
<b>Subtotal</b>	<u>\$24,245</u>
<b>Second SoBRA</b>	
Lithia Solar	\$13,291
Grange Hall Solar	10,611
Peace Creek Solar	9,868
Bonnie Mine Solar	6,601
Lake Hancock Solar	5,674
<b>Subtotal</b>	<u>\$46,045</u>
<b>Grand Total</b>	<u>\$70,290</u>

Source: Order No. PSC-2018-0288-FOF-EI, Order No. PSC-2018-0571-FOF-EI, and the Direct Testimony of TECO witness Jose A. Aponte, page 5.

Table 2-2 displays the proposed adjusted annual First and Second SoBRA revenue requirements associated with each project and plant.

**Table 2-2  
 First and Second SoBRA Adjusted Annual Revenue Requirement**

Plant	Revenue Requirement (\$000)
<b>First SoBRA</b>	
Balm Solar	\$12,934
Payne Creek Solar	11,408
<b>Subtotal</b>	<u>\$24,342</u>
<b>Second SoBRA</b>	
Lithia Solar	\$13,211
Grange Hall Solar	10,570
Peace Creek Solar	9,808
Bonnie Mine Solar	6,704
Lake Hancock Solar	5,578
<b>Subtotal</b>	<u>\$45,871</u>
<b>Grand Total</b>	<u>\$70,213</u>

Source: TECO's response to Staff's First Data Request, No. 1 (Document No. 02688-2020).

**Conclusion**

Staff recommends the total adjusted annual revenue requirement associated with the First and Second SoBRA projects is \$70,213,000, or \$77,000 less than originally estimated.

<sup>8</sup>Order Nos. PSC-2018-0288-FOF-EI and PSC-2018-0571-FOF-EI.

**Issue 3:** What is the appropriate true-up amount that should be reflected in the Capacity Cost Recovery Clause (CCRC), pursuant to paragraph 6(n) of the 2017 Settlement?

**Recommendation:** Staff recommends the appropriate true-up amount associated with the First and Second SoBRA projects that should be reflected in the CCRC, pursuant to paragraph 6(n) of the 2017 Settlement, is a credit of \$5,096,041. Due to the inclusion of an estimated credit of \$4,856,329 in TECO’s mid-course correction filing, an outstanding credit balance of \$239,712 remains and is to be incorporated in TECO’s 2021 Capacity Cost Recovery factors. (Higgins)

**Staff Analysis:** The 2017 Settlement established a framework for TECO to recover costs associated with the construction and operation of solar generating facilities meeting certain criteria. Under the framework, the Company can petition the Commission to implement project-specific estimated annual revenue requirements beginning on specified dates subject to certain agreed-upon conditions.<sup>9</sup> The revenue collected is subject to true-up. The true-up amount (Total True-up) is the focus of staff’s recommendation in this issue. The relevant time period used in formulating the Total True-up is September 1, 2018, through December 31, 2020.

As discussed in Issue 1, all actual capital costs and some in-service dates of the plants comprising the First and Second SoBRA projects differ from the values originally assumed. Relative to the revenue collected, these two differences inherently produce two distinct true-ups; a cost true-up, and an in-service date or “timing” true-up. The cost true-up is the difference between the revised annual revenue requirement that incorporates actual capital costs and the current annual revenue requirement based on estimated capital costs from the point of (actual) plant in-service through December 31, 2020. The timing true-up simply captures the effect of matching a specific plant’s assumed in-service date to its actual in-service date. Staff notes that not all individual plants require a timing true-up. The net dollar impact/Total True-up, as required by paragraph 6(n) of TECO’s 2017 Settlement is then flowed through the CCRC.<sup>10</sup>

Table 3-1 displays the components and associated amounts of the proposed First and Second SoBRA Projects Total True-up.

**Table 3-1**  
**First and Second SoBRA Projects Total True-up**

Component	Amount (09/01/2018 through 12/31/2020)
Total Cost True-up	\$93,176
Total Timing True-up	4,490,688
Total Interest <sup>11</sup>	512,177
<b>Total</b>	<b>\$5,096,041</b>

Source: Direct Testimony of TECO witness Jeffery S. Chronister, page 19.

<sup>9</sup>2017 Settlement, ¶6(b).

<sup>10</sup>*Id.*

<sup>11</sup>“Total Interest” is calculated at an annual AFUDC rate of 6.46 percent.

On March 25, 2020, the Company petitioned the Commission to reduce its then-approved CCRC rates.<sup>12,13</sup> Incorporated in its request was a First and Second SoBRA-related preliminary credit/refund of \$4,856,329. The Commission approved TECO's request on May 14, 2020, thereby reducing the outstanding balance of the proposed Total True Up to \$239,712 at year-end 2020.<sup>14</sup> According to TECO witness Chronister, the Company will include the remaining Total True-Up balance as part of its requested 2021 CCRC factors. TECO's CCRC petition for factors effective in 2021 is due to be filed by September 3, 2020.

### **Conclusion**

Staff recommends the appropriate true-up amount associated with the First and Second SoBRA projects that should be reflected in the CCRC, pursuant to paragraph 6(n) of the 2017 Settlement, is a credit of \$5,096,041. Due to the inclusion of an estimated credit of \$4,856,329 in TECO's mid-course correction filing, an outstanding credit balance of \$239,712 remains and is to be incorporated in TECO's 2021 Capacity Cost Recovery factors.

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<sup>12</sup>Order No. PSC-2019-0484-FOF-EI, issued November 18, 2019, in Docket No. 20190001-EI, *In re: Fuel and purchased power cost recovery clause with generating performance incentive factor*.

<sup>13</sup>Commission Document No. 01597-2020.

<sup>14</sup>Order No. PSC-2020-0154-PCO-EI, issued May 14, 2020, in Docket No. 20200001-EI, *In re: Fuel and purchased power cost recovery clause with generating performance incentive factor*.

**Issue 4:** What is the appropriate base rate adjustment for TECO's First and Second SoBRA projects and how should the Company implement this adjustment?

**Recommendation:** The appropriate base rate adjustment for TECO's First and Second SoBRA projects is an annual revenue requirement reduction of \$77,000, which should be reflected in the Company's Fourth SoBRA revenue requirement calculation. (Forrest)

**Staff Analysis:** Issue 3 addresses the true-up for the period September 1, 2018 through December 31, 2020. This issue addresses the adjustment of base rates effective January 1, 2021. As discussed in Issue 2, staff recommends that the revised annual revenue requirement is \$77,000 less than originally estimated.

TECO witness Ashburn stated in his testimony that, per the 2017 Settlement, the base rate adjustments are to be spread over all the rate classes. Witness Ashburn stated that TECO applied the \$77,000 reduction to its calculation of base rates for all customer classes and found that the true-up adjustment was *de minimis* and did not shift any of the last digits in current rates. As a result, TECO proposed to incorporate the \$77,000 revenue requirement reduction in the revenue requirement calculation of the Fourth SoBRA filing.

TECO filed its Fourth SoBRA petition on July 31, 2020, to be effective with the first billing cycle in January 2021.<sup>15</sup> Additionally, the Company states that the First and Second SoBRA true-up amount is scheduled to take effect in January 2021. As such, TECO proposed in the Fourth SoBRA petition to deduct \$77,000 from its Fourth SoBRA revenue requirement calculation to adjust for the First and Second SoBRA revenue requirement true-up amount. Staff believes this is an appropriate approach given that the true-up amount would not impact current rates.

## Conclusion

The appropriate base rate adjustment for TECO's First and Second SoBRA projects is a reduction of \$77,000, which should be reflected in the Company's Fourth SoBRA revenue requirement calculation. This proposal ensures that the general body of ratepayers benefits from the revised revenue requirement.

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<sup>15</sup>Document No. 04171-2020, in Docket No. 202000064-EI, Petition by Tampa Electric Company for a limited proceeding to approve Fourth SoBRA effective January 1, 2021.

**Issue 5:** Should this docket be closed?

**Recommendation:** Yes. If no protest is filed by a person whose substantial interests are affected within 21 days of the issuance of the Order, this docket should be closed upon the issuance of a Consummating Order. (Stiller)

**Staff Analysis:** If no protest is filed by a person whose substantial interests are affected within 21 days of the issuance of the Order, this docket should be closed upon the issuance of a Consummating Order.