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April 30, 2020

VIA: ELECTRONIC FILING

Mr. Adam J. Teitzman
Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: NEW DOCKET; In re: Petition of Tampa Electric Company to True-up First and Second SoBRAs

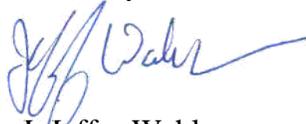
Dear Mr. Teitzman:

Attached for filing in the above docket are the following documents:

1. Tampa Electric Company's Petition for Limited Proceeding to True-up First and Second SoBRAs
2. Prepared Direct Testimony and Exhibit of Mark D. Ward
3. Prepared Direct Testimony and Exhibit of Jose A. Aponte
4. Prepared Direct Testimony and Exhibit of Jeffrey S. Chronister
5. Prepared Direct Testimony and Exhibit of William R. Ashburn

Thank you for your assistance in connection with this matter.

Sincerely,



J. Jeffrey Wahlen

JJW/bmp
Attachments

cc: All Parties of Record (w/attachment)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition of Tampa Electric Company)
To True-Up First and Second SoBRAs) Docket No. 2020____-EI
_____) Filed: April 30, 2020

**TAMPA ELECTRIC COMPANY’S PETITION
FOR LIMITED PROCEEDING TO
TRUE-UP FIRST AND SECOND SOBAs**

Pursuant to Sections 366.076, 120.57 and 366.06(3), Florida Statutes, and Rule 28-106.301, F.A.C., Tampa Electric Company (“Tampa Electric” or “the company”) petitions the Florida Public Service Commission (“FPSC” or “the Commission”) to true-up its First and Second SoBRAs, and states:

I. Introduction

A. 2017 Agreement

1. Tampa Electric is currently operating under its 2017 Amended and Restated Stipulation and Settlement Agreement (“2017 Agreement”) approved by the Commission.¹ Paragraph 6 of the company’s 2017 Agreement contains a provision that authorizes the company to recover the costs of certain qualifying solar generating projects through a solar base rate adjustment mechanism based on projected costs and estimated in-service dates, with a true-up for both.

2. The Commission has approved three SoBRAs totaling 550 MW of solar capacity for Tampa Electric. The First SoBRA was approved by Order No. PSC-2018-0288-FOF-EI, issued June 5, 2018, in Docket No. 20170260-EI (“First SoBRA Order”). The Second SoBRA was approved by Order No. PSC-2018-0571-FOF-EI, issued December 7, 2018, in Docket No.

¹ The Commission approved the 2017 Agreement by Order No. PSC-2017-0456-S-EI, issued on November 27, 2017 in Docket Nos. 20170210-EI and 20160160-EI.

20180133-EI (“Second SoBRA Order”). The annual revenue requirement for the solar projects in both SoBRAs and the resulting base rate changes were calculated using projected costs and the SoBRA rates went into effect based on estimated in-service dates. The Third SoBRA is not addressed in this petition.

3. Paragraph 6(c) of the 2017 Agreement states:

The Rate Change and In-Service Dates specified in the chart in Subparagraph 6(b) are “no sooner than” dates, and the SoBRA rate changes for each Tranche will be implemented effective on the earliest In-Service Date for that Tranche identified in such chart and subsequently trued up to reflect and correct for (1) any delay in the actual In-Service Dates of any of the projects in a particular Tranche beyond the applicable In-Service date for that Tranche and (2) the extent to which the actual installed costs of any project or projects vary from the projected costs used to set the SoBRA rate change.... (emphasis added)

4. Paragraph 6(n) of the 2017 Agreement states:

In order to determine the amount of each annual cost true-up, a revised SoBRA will be computed using the same data and methodology incorporated in the initial SoBRA, with the exception that the actual capital expenditures after sharing and the actual in-service date will be used in lieu of the capital expenditures on which the annualized revenue requirement was based. The difference between the cumulative base revenues since the implementation of the initial SoBRA factor and the cumulative base revenues that would have resulted if the revised SoBRA factor (for cost and In-Service date true-ups) had been in place during the same time period will be trued up with interest at the AFUDC rate shown in Exhibit B used for the projects, and will be made through a one-time, twelve-month adjustment through the CCR clause. On a going forward basis, the base rates will be adjusted to reflect the revised SoBRA factors.

5. Thus, for the First and Second SoBRAs, the 2017 Agreement requires the company to do the following for Commission approval:

- (a) determine the actual installed cost per kW_{ac} of the seven projects;

(b) recalculate the projected annual revenue requirement for the seven projects using the actual installed capital costs for the projects, but otherwise using the same data and methodology used for the projections;

(c) identify the actual in-service dates for the seven projects;

(d) develop final customer SoBRA rate factors to implement the SoBRA that reflect the actual annual revenue requirement for the seven projects (“Final SoBRA Factors”) and implement them on a date certain;

(e) calculate a SoBRA revenue true-up amount equal to the difference between (i) the cumulative base revenues from the implementation of the initial First and Second SoBRA factors beginning on the projected in-service dates through the date the Final SoBRA Factors will be implemented and (ii) the cumulative base revenues that would have been generated had the Final SoBRA Factors been in effect from the actual in-service dates of the projects through the date the Final SoBRA Factors, to be implemented from the date the projects went in service through the Final SoBRA Factors implementation date (“True-Up Amount”); and

(f) refund or credit the True-Up Amount with interest at the AFUDC rate shown in the 2017 Agreement through a one-time, twelve-month adjustment through the Capacity Cost Recovery Clause.

B. First SoBRA

6. Tampa Electric’s First SoBRA provided cost recovery for two solar projects: a 74.4 MW project in Hillsborough County called Balm Solar and a 70.3 MW project in Polk County called Payne Creek Solar. The First SoBRA Order found that these two projects were cost-effective within the meaning of the 2017 Agreement and approved estimated installed costs for Balm Solar and Payne Creek Solar of \$1,480 per kW_{ac} and \$1,324 per kW_{ac}, respectively. It also approved a

projected annual revenue requirement for the two projects of \$24,245,000 (with 25% incentive²) and tariff revisions to recover that amount with a September 1, 2018 effective date.

7. The Balm Solar project actually went into service on September 27, 2018 at an actual cost of \$1,478 per kW_{ac}. The annual revenue requirement for Balm Solar is \$12,879,000 calculated using its actual costs, without the 25% incentive and per the guidelines in the 2017 Agreement. The actual annual revenue requirement with incentive is \$12,926,000.

8. The Payne Creek project actually went into service on September 1, 2018 at an actual cost of \$1,342 per kW_{ac}. The annual revenue requirement for Payne Creek is \$11,105,000 calculated using its actual costs, without the 25% incentive and the per guidelines in the 2017 Agreement. The actual annual revenue requirement with incentive is \$11,416,000.

9. The combined actual annual revenue requirement with incentive for the two First SoBRA projects is \$24,342,000 or \$97,000 more than the projected revenue requirement.

C. Tampa Electric's Second SoBRA

10. The company's Second SoBRA recovered costs associated with five solar projects totaling 260.3 MW with a projected in-service date of January 1, 2019 for all five. The Second SoBRA Order found that the five projects were cost-effective within the meaning of the 2017 Agreement and the approved projected installed costs as follows:

² Paragraph 6(m) of the 2017 states: "If Tampa Electric's actual installed cost for a project is less than the Installed Cost Cap, the company's customers and the company will share in the beneficial difference with 75% of the difference inuring to the benefit of customers and 25% serving as an incentive to the company to seek such cost savings over the life of this 2017 Agreement." For purposes of this document, the term "with incentive" refers to the cost of a project including the 25% incentive in paragraph 6(m).

<u>Project</u>	<u>MW</u>	<u>Cost per kW_{ac}</u>
Lithia	74.5	\$1,494
Grange Hall	61.1	1,437
Peace Creek	55.4	1,492
Bonnie Mine	37.5	1,464
Lake Hancock	<u>31.8</u>	1,494
	<u>260.3</u>	

11. The Second SoBRA Order also approved a projected total annual revenue requirement for all five projects of \$46,045,000, broken down as follows:

<u>Project</u>	<u>Estimated Revenue Requirement</u>
Lithia	13,291
Grange Hall	10,611
Peace Creek	9,868
Bonnie Mine	6,601
Lake Hancock	5,674

12. The Lithia project actually went into service on January 1, 2019 at an actual cost of \$1,481 per kW_{ac}. The annual revenue requirement with incentive for Lithia is \$13,211,000 calculated using its actual costs and the guidelines in the 2017 Agreement.

13. The Grange Hall project actually went into service on January 2, 2019 at an actual cost of \$1,430 per kW_{ac}. The annual revenue requirement with incentive for Grange Hall is \$10,570,000 calculated using its actual costs and the guidelines in the 2017 Agreement.

14. The Peace Creek project actually went into service on March 1, 2019 at an actual cost of \$1,479 per kW_{ac}. The annual revenue requirement with incentive for Peace Creek is \$9,808,000 calculated using its actual costs and the guidelines in the 2017 Agreement.

15. The Bonnie Mine project actually went into service on January 23, 2019 at an actual cost of \$1,496 per kW_{ac}. The annual revenue requirement with incentive for Bonnie Mine is \$6,704,000 calculated using its actual costs and the guidelines in the 2017 Agreement.

16. The Lake Hancock project actually went into service on April 25, 2019 at an actual cost of \$1,459 per kW_{ac}. The annual revenue requirement for Lake Hancock is \$5,578,000 calculated using its actual costs and the guidelines in the 2017 Agreement.

17. The combined actual annual revenue requirement with incentive for the five Second SoBRA projects is \$45,871,000 or \$174,000 less than the projected revenue requirement.

18. The combined actual revenue requirement with incentive for the seven projects in the First and Second SoBRAs is \$70,213,000, which is \$77,000 less than the projected total revenue requirement with incentive.

II. Preliminary Information

19. The Petitioner's name and address are:

Tampa Electric Company
702 North Franklin Street
Tampa, Florida 33602

20. Any pleading, motion, notice, order or other document required to be served upon Tampa Electric or filed by any party to this proceeding shall be served upon the following individuals:

James D. Beasley
jbeasley@ausley.com
J. Jeffry Wahlen
jwahlen@ausley.com
Malcolm N. Means
mmeans@ausley.com
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Paula K. Brown
regdept@tecoenergy.com
Manager, Regulatory Coordination
Tampa Electric Company
Post Office Box 111
Tampa, FL 33601
(813) 228-1444
(813) 228-1770 (fax)

21. Tampa Electric is an investor-owned public utility regulated by the Commission pursuant to Chapter 366, Florida Statutes, and is a wholly-owned subsidiary of Emera, Inc. Tampa

Electric's principal place of business is located at 702 North Franklin Street, Tampa, Florida 33602.

22. Tampa Electric serves more than 750,000 retail customers in Hillsborough and portions of Polk, Pinellas and Pasco Counties, Florida.

23. This Petition represents an original pleading and is not in response to any proposed action by the Commission. Accordingly, the Petitioner is not responding to any proposed agency action.

III. Tampa Electric's Proposed Base Rate True-Up and Credit

24. Tampa Electric seeks approval to include the final base rate true-up with its Fourth SoBRA base rate change, subject to Commission approval, since the revenue requirement true-up is not large enough to change any of the base rates. The company plans to submit a petition for approval of the Fourth SoBRA charges in the summer of 2020 for implementation with the first billing cycle for January 2021 or another date to be decided by the Commission. The company also requests that the FPSC approve the company's proposed revenue true-up credit as described in paragraph 5(e), above, in the amount of \$5,096,041. An estimated true-up credit of \$ 4,856,329 was included in the company's approved 2020 mid-course capacity factors, and Tampa Electric also requests that the FPSC allow the company to credit the difference between these two amounts, the \$239,712 final true-up amount to customers through the Capacity Cost Recovery Clause during 2021.

IV. Statement on Disputed Issues of Material Fact

25. Tampa Electric is not aware of any disputed issues of material fact at this time, and does not believe any disputed issues of material fact will arise in this docket.

V. Statement of Ultimate Facts Alleged and Providing the Basis for Relief

26. The ultimate facts that entitle Tampa Electric to the relief requested herein are:

- (a) The facts specified in paragraphs 1 through 18, above.
- (b) The actual installed cost per kW_{ac} of the seven projects in the First and Second

SoBRAs are:

<u>Project</u>	<u>Cost per kW_{ac}</u>
Balm	\$1,478
Payne Creek	1,342
Lithia	1,481
Grange Hall	1,430
Peace Creek	1,479
Bonnie Mine	1,496
Lake Hancock	1,459

- (c) The recalculated annual revenue requirement for the seven projects in the First and Second SoBRA using the actual installed capital costs for the projects, but otherwise using the same data and methodology used for the projections are:

<u>Project</u>	<u>Annual Revenue Requirement</u>
Balm	\$12,926,000
Payne Creek	11,416,000
Lithia	13,211,000
Grange Hall	10,570,000
Peace Creek	9,808,000
Bonnie Mine	6,704,000
Lake Hancock	5,578,000

- (d) The actual in-service dates for the seven projects in the First and Second SoBRAs are:

<u>Project</u>	<u>Date</u>
Balm	September 27, 2018
Payne Creek	September 1, 2018
Lithia	January 1, 2019
Grange Hall	January 2, 2019
Peace Creek	March 1, 2019
Bonnie Mine	January 23, 2019
Lake Hancock	April 25, 2019

(e) The First and Second SoBRA revenue true-up amount is a credit of \$5,096,041 and is equal to the difference between (i) the cumulative base revenues from the implementation of the initial First and Second SoBRAs beginning on their projected in-service dates through the first billing cycle in January 2021 and (ii) the cumulative base revenues that would have been generated had the Final SoBRA Factors been in effect from the actual in-service dates of each of the projects through the first billing cycle in January 2021 (“True-Up Amount”). A schedule showing the calculation of this amount, including interest at the AFUDC rate, is provided in Exhibit ____ (JSC-1) of witness Jeffrey S. Chronister, attached to this petition and is incorporated herein by reference.

VI. Relief Requested

27. For the reasons set forth above, Tampa Electric requests that the Commission:

(a) approve the actual installed cost per kW_{ac} of the First and Second SoBRA projects as specified herein;

(b) approve the final annual revenue requirement for the First and Second SoBRA Projects as specified herein;

(c) allow the company to include the base rate changes necessary to reflect actual installed costs for the First and Second SoBRAs with the changes to be made for its Fourth SoBRA effective for the first billing cycle in January 2021;

(d) approve the First and Second SoBRA revenue true-up credit of \$5,096,041 and authorize the company to credit the net final true-up amount of \$239,712 to customers through the Capacity Cost Recovery Clause during 2021; and

(e) grant other such relief as is reasonable and proper.

28. Tampa Electric is entitled to the relief requested pursuant to Chapters 366 and 120, Florida Statutes.

29. The relief requested herein is consistent with the 2017 Agreement and FPSC Order No. PSC-2017-0456-S-EI.

VII. Conclusion

30. For the reasons shown above, Tampa Electric Company respectfully requests that the Commission grant this Petition and the relief requested herein.

DATED this 30th day of April, 2020.

Respectfully submitted,



JAMES D. BEASLEY
J. JEFFRY WAHLEN
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Ausley McMullen
Post Office Box 391
Tallahassee, Florida 32302
(850) 224-9115

ATTORNEYS FOR TAMPA ELECTRIC COMPANY

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Petition, filed on behalf of Tampa Electric Company, has been furnished by electronic mail on this 30th day of April, 2020 to the following:

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Attorney



BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 2020____-EI
IN RE: PETITION BY TAMPA ELECTRIC COMPANY
FOR A LIMITED PROCEEDING TO TRUE-UP FIRST
AND SECOND SOBRAS

REDACTED

PREPARED DIRECT TESTIMONY AND EXHIBIT
OF
MARK D. WARD

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

PREPARED DIRECT TESTIMONY

OF

MARK D. WARD

1
2
3
4
5
6 Q. Please state your name, address, occupation and employer.

7
8 A. My name is Mark D. Ward. My business address is 702 N.
9 Franklin Street, Tampa, Florida 33602. I am employed by
10 Tampa Electric Company ("Tampa Electric" or "company") as
11 Director of Renewables.

12
13 I. Introduction

14
15 Q. Please provide a brief outline of your educational
16 background and business experience.

17
18 A. I earned a Bachelor of Science in Mechanical Engineering
19 from University of Alabama in Huntsville in 1984. I have
20 thirty-six years of combined professional experience as
21 a Department of Defense contractor and working for public
22 utilities and independent power producers. Twenty-four
23 years of my experience has been with electric utilities
24 and independent power producers.

25

1 I worked for Tampa Electric from 1996 to 2001, where I
2 served as Manager of Generation Planning and provided
3 management support for the development of Tampa
4 Electric's Bayside Power project. From 2001 to 2007, I
5 served in mid- to senior level management positions at
6 various companies involved in the power industry. These
7 companies included Entergy Asset Management, an
8 unregulated subsidiary of Entergy, the Shaw Group, an
9 engineering and construction firm, and TXU, a regulated
10 electric utility. From 2007 to 2014, I served as President
11 of the Mesa Power Group. Mesa Power was a renewable energy
12 developer with a primary focus in large scale wind
13 development. From 2014 to 2016, I managed an energy
14 consulting practice with clients primarily in solar, wind
15 and combined heat and power.

16
17 I was re-hired by Tampa Electric in December 2016 as
18 Director of Renewables. My responsibilities in this
19 position include management oversight with respect to
20 Tampa Electric's renewable energy strategies and
21 projects. This includes the execution of Tampa Electric's
22 600 MW of utility scale solar projects described in the
23 2017 Amended and Restated Stipulation and Settlement
24 Agreement ("2017 Agreement") that was approved by the
25 Commission in Order No. PSC-2017-0456-S-EI, issued in

1 Docket Nos. 20170210-EI and 20160160-EI on November 27,
2 2017.

3
4 **Q.** Have you previously testified or submitted written
5 testimony before the Florida Public Service Commission
6 ("Commission")?
7

8 **A.** Yes. I submitted direct and rebuttal testimony on behalf
9 of Tampa Electric in Docket No. 19981890-EI (In re:
10 Generic Investigation into Aggregate Electric Utility
11 Reserve Margins Planned for Peninsular Florida). I
12 submitted direct and rebuttal testimony on behalf of Tampa
13 Electric on the prudence of replacement fuel and purchased
14 power costs in Docket No. 19990001-EI (In re: Fuel and
15 Purchased Power Cost Recovery Clause and Generating
16 Performance Incentive Factor). I submitted direct
17 testimony on behalf of Tampa Electric regarding the Gannon
18 Repowering Project in Docket No. 19992014-EI (In re:
19 Petition by Tampa Electric Company to Bring Generating
20 Units into Compliance with Clean Air Act).
21

22 In addition, while working for Mesa Power Group, LLC, I
23 submitted direct testimony before the Minnesota Public
24 Utilities Commission on behalf of AWA Goodhue, LLC in MPUC
25 Docket No. IP6701/WS-08-1233 (In the matter of the

1 Application by AWA Goodhue Wind, LLC for a Site Permit
2 for a Large Wind Energy Conversion System for a 78 MW Wind
3 Project in Goodhue County).

4
5 I also served as a member of a panel of witnesses during
6 the November 6, 2017 hearing on the 2017 Agreement, and
7 most recently, I testified before this Commission in
8 Docket No. 20170260-EI, petition for limited proceeding
9 to approve First Solar Base Rate Adjustment ("First
10 SoBRA"), effective September 1, 2018, by Tampa Electric
11 Company. I submitted direct testimony in Docket No.
12 20180133-EI, petition for limited proceeding to approve
13 Second Solar Base Rate Adjustment, effective January 1,
14 2019, by Tampa Electric Company ("Second SoBRA) and in
15 Docket No. 20190136-EI, petition for limited proceeding
16 to approve Third Solar Base Rate Adjustment, effective
17 January 1, 2020, by Tampa Electric Company.

18
19 **Q.** What are the purposes of your direct testimony?

20
21 **A.** My testimony serves two purposes. My testimony shows that
22 the actual installed costs for the seven solar projects
23 in the company's first two tranches of utility scale
24 solar, which were part of the company's First and Second
25 SoBRAs ("Seven Projects"), are below the \$1,500 per

1 kilowatt alternating current ("kW_{ac}") installed cost cap
2 contained in the 2017 Agreement. I also describe the
3 actual in-service dates for the Seven Projects and explain
4 why five of them did not enter service on their planned
5 in-service dates. My description of the actual costs for
6 the Seven Projects discusses how and why the company
7 received liquidated damages for some of the Seven Projects
8 and how those amounts were determined.

9
10 I discuss the two First and five Second SoBRA projects in
11 a section dedicated to each SoBRA.

12
13 **Q.** Have you prepared an exhibit to support your direct
14 testimony?

15
16 **A.** Yes. Exhibit No. _____ (MDW-1) was prepared under my
17 direction and supervision. It consists of the following
18 seven documents:

19 Document No. 1 Payne Creek Solar Project Actual and
20 Estimated Installed Costs by Category

21 Document No. 2 Balm Solar Project Actual and
22 Estimated Installed Costs by Category

23 Document No. 3 Lithia Solar Project Actual and
24 Estimated Installed Costs by Category

25 Document No. 4 Grange Hall Solar Project Actual and

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Estimated Installed Costs by Category
Document No. 5 Peace Creek Solar Project Actual and
Estimated Installed Costs by Category
Document No. 6 Bonnie Mine Solar Project Actual and
Estimated Installed Costs by Category
Document No. 7 Lake Hancock Solar Project Actual and
Estimated Installed Costs by Category

Q. How does your prepared direct testimony relate to the prepared direct testimony of the company's other three witnesses?

A. My prepared direct testimony describes the Seven Projects in the company's First and Second SoBRAs, as well as their actual in-service dates and installed cost per kW_{ac}. Tampa Electric witness Jeffrey S. Chronister discusses how liquidated damages associated with the projects were apportioned among the Seven Projects and reduced the company's project installed costs, as well as the true-up credit required by the 2017 Agreement. Witness Jose A. Aponte uses the final actual installed project cost, net of liquidated damages, to calculate the true-up for the annual revenue requirements for the First and Second SoBRAs. The company's cost of service and rate design witness, William R. Ashburn, uses the trued-up to actual

1 revenue requirement to develop the proposed permanent
2 customer rates for the First and Second SoBRAs and
3 proposes a way to implement those changes.
4

5 **II. First SoBRA Projects: Payne Creek Solar and Balm Solar**

6
7 **Q.** Do the two projects in the company's First SoBRA differ
8 from the specifications mentioned in your direct
9 testimony in Docket No. 20170260-EI?
10

11 **A.** No, the project design and specifications do not differ
12 materially from planned and are as described in my Direct
13 Testimony submitted in Docket No. 20170260-EI. The
14 initial costs were estimates; therefore, there is a cost
15 difference for each project. In addition, while Payne
16 Creek Solar was fully operational and placed in service
17 on September 1, 2018 as contemplated in the 2017
18 Agreement, Balm Solar became fully operational and was
19 placed in service on September 27, 2018.
20

21 **Q.** What do you mean by the term "placed in service?"
22

23 **A.** The solar project is considered to be placed in service
24 when the project has all modules installed and
25 electrically connected, all inverters have been installed

1 and commissioned, and the project substation is energized
2 and transmitting the solar power to the Tampa Electric
3 transmission system. Tampa Electric notified the Florida
4 Public Service Commission when the projects were placed
5 in service and eligible for cost recovery through the
6 Solar Base Rate Adjustments.

7
8 **Q.** Please explain why Balm Solar was placed in service later
9 than originally expected.

10
11 **A.** Balm Solar received its environmental and construction
12 permits almost two months later than expected, and the
13 contractor was not able to start construction on the
14 project until the last week in May 2018. The contractor
15 was able to mitigate some of the delay by working
16 weekends, which allowed the project to begin commercial
17 service on September 27, 2018.

18
19 **Q.** How did the company manage the actual costs of the two
20 First SoBRA projects?

21
22 **A.** Payne Creek Solar and Balm Solar were turnkey EPC
23 projects. The cost for each project was fixed by the terms
24 of the contract, and any cost increases were submitted as
25 change orders.

1 Actual costs were managed by Tampa Electric's project
2 management and accounting teams. The contractor sent
3 invoices to Tampa Electric monthly for work completed.
4 Prior to paying the invoice, Tampa Electric inspected the
5 project to verify the work had been completed and
6 additional costs were justified.

7
8 **Q.** What are the total actual and estimated installed costs
9 for the two First SoBRA Projects?

10
11 **A.** The estimated installed costs of the Payne Creek and Balm
12 Solar Projects are \$1,324 per kW_{ac} and \$1,480 per kW_{ac},
13 respectively. The actual installed costs are \$1,342 per
14 kW_{ac} for the Payne Creek Solar project and \$1,478 per kW_{ac}
15 for the Balm Solar Project. The weighted-average cost for
16 First SoBRA projects is \$1,412 per kW_{ac}.

17
18 **Q.** What costs were included in the actual costs for purposes
19 of this true-up filing?

20
21 **A.** The actual total installed cost broken down by major
22 category for the First SoBRA Projects is shown on Document
23 Nos. 1 and 2 of my exhibit. The actual costs included are
24 the same categories or types of costs as those included in
25 the company's estimated costs, as submitted in Docket No.

1 20170260-EI and in accordance with the 2017 Agreement.
2 These include the types of costs that traditionally have
3 been allowed in rate base and are eligible for cost recovery
4 via a SoBRA. These costs include: EPC costs; development
5 costs including third party development fees, if any;
6 permitting and land acquisition costs; taxes; utility costs
7 to support or complete development; transmission
8 interconnection cost and equipment costs; costs associated
9 with electrical balance of system, structural balance of
10 system, inverters and modules; Allowance for Funds Used
11 During Construction ("AFUDC") at the weighted average cost
12 of capital from Exhibit B of the 2017 Agreement; owner's
13 costs and other traditionally allowed rate base costs.

14
15 **Q.** Are all of the costs incurred to make the two First SoBRA
16 projects fully operational included in the actual total
17 installed cost amounts presented in your exhibit?

18
19 **A.** Yes. All costs incurred to bring the First SoBRA projects
20 into service are included in the installed costs presented
21 in my exhibit.

22
23 **Q.** Did the company receive liquidated damages for either of
24 the two First SoBRA projects, and if so, how were liquidated
25 damages reflected in the actual installed costs for the

1 projects?

2

3 **A.** Yes. The company received liquidated damages for, and used
4 them (1) to offset the lost revenue associated with the
5 project's in-service date and (2) to reduce the actual
6 installed capital cost of the projects, as applicable. The
7 manner in which the company accounted for liquidated
8 damages for the projects in the First and Second SoBRAs is
9 explained by company witness Chronister in his direct
10 testimony. The actual installed costs for the two First
11 SoBRA projects described in my testimony reflect the
12 application of liquidated damages as applicable.

13

14 **Q.** What are liquidated damages?

15

16 **A.** For more than 30 years, I have been involved in negotiation
17 and administration of business contracts and have
18 practical, work experience with liquidated damages. As used
19 in this context, the term "liquidated damages" refers to
20 the pre-arranged dollar amounts in the contracts Tampa
21 Electric executed with solar developers or EPC contractors
22 to compensate Tampa Electric for "damages" associated with
23 performance delays. In general, the contracts contained
24 provisions that compensated Tampa Electric for delays
25 beyond the planned "commercial operation (in-service)" or

1 "substantial completion" date as defined in the contracts.

2

3 **Q.** Did the company receive liquidated damages from the solar
4 developers who built the Seven Projects?

5

6 **A.** Yes.

7

8 **Q.** How was the amount of liquidated damages paid by each
9 developer determined?

10

11 **A.** The amounts ultimately were determined through negotiation
12 for the number of days the project was delayed. The amounts
13 were calculated pursuant to the liquidated damages
14 provisions in the contracts as a starting point for the
15 negotiations.

16

17 Once the amounts were determined and paid, Tampa Electric's
18 accounting department apportioned the amounts between
19 reimbursement for lost revenues and then to reduce the
20 capital costs of the projects. This process is described in
21 the testimony of witness Chronister.

22

23 **Q.** What is the difference between the estimated and actual
24 installed costs for the two projects in the First SoBRA?

25

1 **A.** Payne Creek Solar total installed costs are approximately
2 \$18 per kW_{ac} greater, and Balm Solar total installed costs
3 are about \$2 per kW_{ac} lower than the estimated project
4 costs.

5
6 **Q.** Please explain the variances between actual and estimated
7 costs by category for the Payne Creek project.

8
9 **A.** The module, major equipment, balance of system, and
10 development costs for each project are components of the
11 turnkey contract price.

12
13 Payne Creek Solar's estimated turnkey contract price is
14 \$84,650,369. The turnkey contract price is the sum of the
15 modules, major equipment, balance of system, and
16 development costs as listed in the "Estimated" column shown
17 in Document No. 1 of my exhibit.

18
19 The Payne Creek Solar actual cost is the sum of the modules,
20 major equipment, balance of system, and development costs
21 and is \$85,588,779. These costs are listed in Document No.
22 1 of my exhibit in the column entitled "Actual". The
23 variance between the actual and estimated EPC contract
24 costs for Payne Creek Solar is \$938,410. The variance is
25 due to change orders for additional modules needed as

1 "breakage spares" and additional costs to provide more
2 durable roads.

3
4 The owner's costs variance is approximately \$1.1 million
5 greater than estimated, due to additional Tampa Electric
6 project management and safety personnel required to monitor
7 workmanship and contractor safety practices on the project
8 site.

9
10 The Payne Creek total all-in cost variance is approximately
11 \$1.3 million or \$18 per kW_{ac} greater than expected.

12
13 **Q.** Please explain the variances between actual and estimated
14 costs by category for the Balm project.

15
16 **A.** As is the case for Payne Creek, the module, major equipment,
17 balance of system, and development costs for each project
18 are components of the turnkey EPC contract price.

19 Balm Solar's estimated turnkey EPC contract price with
20 First Solar is \$86,238,085. Balm Solar's turnkey EPC
21 contract price is the sum of the modules, major equipment,
22 balance of system, and development costs listed in the
23 "Estimated" column in Document No. 2 of my exhibit.

24
25 The Balm Solar actual EPC contract cost is the sum of the

1 modules, major equipment, balance of system, and
2 development costs and is \$86,733,554. The costs are listed
3 in the column entitled "Actual" shown in Document No. 2 of
4 my exhibit The Balm development costs are included in the
5 actual balance of system costs.

6
7 The variance between the actual and estimated turnkey
8 contract costs for Balm Solar is \$495,469. Most of this
9 variance is due to change orders resulting from
10 constructing more durable roads and retaining the Florida
11 Highway Patrol to manage traffic at the project's entrance.
12 The owner's costs variance is approximately \$1.3 million.
13 The higher owner's costs are primarily due to additional
14 Tampa Electric project management and safety personnel
15 required to monitor workmanship and contractor safety
16 practices on the project site. The land cost variance is
17 approximately \$1.7 million less than estimated.

18
19 The variance between the actual and estimated total all-in
20 cost for Balm Solar is approximately \$(127,000) or \$2 per
21 kW_{ac} lower than the estimated all-in cost.

22
23 **Q.** How are owner's costs determined for the two First SoBRA
24 projects?
25

1 **A.** Owner's costs include costs of work performed by Tampa
2 Electric employees assigned to the solar projects who were
3 not employed prior to the last rate case, consultants that
4 were retained by the company to assist in development,
5 project management, and safety activities, and legal
6 support.

7

8 **III. Second SoBRA Projects: Lithia, Grange Hall, Peace Creek,**
9 **Bonnie Mine and Lake Hancock Solar**

10

11 **Q.** Do the five projects in the company's Second SoBRA differ
12 from the specifications mentioned in your direct
13 testimony in Docket No. 20180133-EI?

14

15 **A.** No, the project design and specifications do not differ
16 materially from planned and are as described in my Direct
17 Testimony submitted in Docket No. 20180133-EI. The
18 initial costs were estimates; therefore, there is a cost
19 difference for each project. I explain these differences
20 later in my testimony.

21

22 **Q.** Were the five Second SoBRA projects placed in service on
23 or before the dates projected in Docket No. 20180133-EI?

24

25 **A.** No. All five of the projects were projected to be in-

1 service on January 1, 2019. One of the projects was placed
2 in service on January 1, 2019 as projected, and one was
3 placed in service a day later. The other three projects
4 were placed in service more than three weeks after the
5 projected January 1, 2019 date; however, our customers
6 will be made whole for the delays, even the one-day delay,
7 via the revenue true-up described by company witness
8 Chronister.

9
10 The actual in-service dates for the five Second SoBRA
11 projects are:

<u>Project</u>	<u>Actual In-Service Date</u>
Lithia	January 1, 2019
Grange Hall	January 2, 2019
Peace Creek	March 1, 2019
Bonnie Mine	January 23, 2019
Lake Hancock	April 25, 2019

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18
19 **Q.** Please explain why Grange Hall Solar was placed in service
20 a day later than projected.

21
22 **A.** The contractor damaged a medium voltage cable late in the
23 commissioning process. This required replacing the entire
24 length of the cable. This installation and commissioning
25 pushed the schedule out by one day.

1 **Q.** Please explain why Peace Creek Solar was placed in service
2 later than projected.

3

4 **A.** Peace Creek Solar's in-service date was delayed due to
5 the lack of a qualified labor pool to perform work needed
6 to meet the contract schedule. This hindered daily
7 production and caused delays to the project. The EPC
8 contractor was not able to recover from the shortage of
9 qualified labor. This resulted in a two-month delay.

10

11 **Q.** Please explain why Bonnie Mine Solar was placed in service
12 later than projected.

13

14 **A.** Bonnie Mine Solar's Environmental Resource and County
15 permits were issued one month later than what the EPC
16 contractor had planned. In addition, site conditions
17 caused additional delays with the project's civil work
18 for the project contractor. The permit delay and
19 additional civil work caused Bonnie Mine Solar to be
20 placed in service three weeks later than planned.

21

22 **Q.** Please explain why Lake Hancock Solar was placed in
23 service later than projected.

24

25 **A.** Lake Hancock Solar replaced Mountain View Solar when

1 Mountain View's county approval was appealed. Lake
2 Hancock Solar was delayed because it received its permits
3 later than planned, and a smaller than expected qualified
4 labor pool delayed the construction of the project.

5
6 **Q.** How did the company manage the actual costs of the five
7 Second SoBRA projects?

8
9 **A.** All five projects are turnkey projects. The cost of each
10 project was fixed by the terms of the EPC contract, and
11 any cost increases were submitted as change orders.

12
13 Actual costs were managed by Tampa Electric's project
14 management and accounting teams. Contractors sent
15 invoices to Tampa Electric monthly for work completed.
16 Prior to paying each invoice, Tampa Electric inspected
17 the project to verify the work had been completed and
18 additional costs were justified.

19
20 **Q.** What are the total actual and estimated installed costs
21 for the five Second SoBRA Projects?

22
23 **A.** The actual installed costs for four of the five Second
24 SoBRA projects are lower than their projected costs. The
25 estimated and actual installed costs per kW_{ac} of the five

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Second SoBRA projects are:

<u>Project</u>	<u>Estimated</u>	<u>Actual</u>
Lithia	\$1,494	\$1,481
Grange Hall	\$1,437	\$1,430
Peace Creek	\$1,492	\$1,479
Bonnie Mine	\$1,464	\$1,496
Lake Hancock	\$1,494	\$1,459

The weighted-average cost for Second SoBRA projects is \$1,468 per kW_{ac}.

Q. What costs were included in the actual costs for the five Second SoBRA projects for purposes of this true-up filing?

A. The actual total installed cost broken down by major category for the Second SoBRA Projects is shown on Document Nos. 3 through 7 of my exhibit. The actual costs included are the same categories or types of costs as those included in the company's estimated costs, as submitted in Docket No. 20180133-EI and in accordance with the 2017 Agreement.

As is the case with the First SoBRA projects, they include the types of costs that traditionally have been allowed in rate base and are eligible for cost recovery via a SoBRA.

1 Specifically, the installed costs include: EPC costs;
2 development costs including third party development fees,
3 if any; permitting and land acquisition costs; taxes;
4 utility costs to support or complete development;
5 transmission interconnection cost and equipment costs;
6 costs associated with electrical balance of system,
7 structural balance of system, inverters and modules;
8 Allowance for Funds Used During Construction ("AFUDC") at
9 the weighted average cost of capital from Exhibit B of the
10 2017 Agreement, owner's costs; and other traditionally
11 allowed rate base costs.

12
13 **Q.** Are all of the costs incurred to make the five Second SoBRA
14 projects fully operational included in the actual total
15 installed cost amounts presented in your exhibit?

16
17 **A.** Yes. All costs incurred to bring the Second SoBRA projects
18 into service are included in the actual installed costs
19 presented in my exhibit.

20
21 **Q.** Did the company receive liquidated damages for any of the
22 five Second SoBRA projects, and if so, how are liquidated
23 damages reflected in the actual installed costs for the
24 projects?

25

1 **A.** Yes. The company received liquidated damages for, and used
2 them (1) to offset the lost revenue associated with the
3 project's later in-service date and (2) to reduce the actual
4 installed capital cost of, all five of the projects in the
5 Second SoBRA. The manner in which the company accounted for
6 liquidated damages for the projects in the First and Second
7 SoBRAs is explained by company witness Chronister in his
8 direct testimony. The actual installed costs for the five
9 Second SoBRA projects described in my testimony reflect the
10 application of liquidated damages as applicable.

11
12 **Q.** Taking liquidated damages into account, what is the
13 difference between the estimated and actual installed
14 costs for the five Second SoBRA projects?

15
16 **A.** The actual installed cost for the Lithia, Grange Hall,
17 Peace Creek, and Lake Hancock solar projects are \$13, \$7,
18 \$13, and \$35 per kW_{ac} lower than projected, respectively.
19 The actual installed cost of the Bonnie Mine project is
20 \$32 per kW_{ac} higher than projected.

21
22 **Q.** Please explain the variances between actual and estimated
23 costs by category for the Lithia project.

24
25 **A.** The modules, major equipment, balance of system, and

1 development costs for each project are components of the
2 turnkey EPC contract price.

3
4 Lithia Solar's estimated turnkey contract price is
5 \$90,200,000. The turnkey contract price is the sum of the
6 modules, major equipment, balance of system, and
7 development costs as listed in the "Estimated" column shown
8 in Document No. 3 of my exhibit.

9
10 Lithia Solar's actual cost is the sum of the modules, major
11 equipment, balance of system and development costs, which
12 is \$89,293,223. These costs are listed in Document No. 3 of
13 my exhibit in the column entitled "Actual".

14
15 The variance between the actual and estimated contract
16 costs for Lithia Solar is \$(906,777). The variance is due
17 to the liquidated damages applied to EPC costs.

18
19 The owner's costs variance is \$650,184. The higher owner's
20 costs are primarily due to the relocation of more than 200
21 gopher tortoises, site management, and safety oversight at
22 the project site. The land cost variance is \$447,022 less
23 than estimated.

24
25 The variance between the actual and estimated total all-in

1 cost for Lithia Solar is approximately \$(935,179) or \$13
2 per kW_{ac} lower than the estimated all-in cost.

3

4 **Q.** Please explain the variances between actual and estimated
5 costs by category for the Grange Hall project.

6

7 **A.** The modules, major equipment, balance of system, and
8 development costs for each project are components of the
9 turnkey EPC price.

10

11 Grange Hall Solar's estimated turnkey contract price is
12 \$73,300,000. The turnkey EPC contract price is the sum of
13 the modules, major equipment, balance of system, and
14 development costs as listed in the "Estimated" column shown
15 in Document No. 4 of my exhibit.

16

17 Grange Hall Solar's actual cost is the sum of the modules,
18 major equipment, balance of system, and development costs,
19 which is \$72,643,452. These costs are listed in Document
20 No. 4 of my exhibit in the column entitled "Actual".

21

22 The variance between the actual and estimated contract
23 costs for Grange Hall is \$(656,548). The variance is due to
24 applying the liquidated damages to the contract cost.

25 The variance between the actual and estimated total all-in

1 cost for Grange Hall Solar is \$(452,974), or \$7 per kW_{ac}
2 lower than the estimated all-in cost.

3

4 **Q.** Please explain the variances between actual and estimated
5 costs by category for the Peace Creek project.

6

7 **A.** The modules, major equipment, balance of system, and
8 development costs for each project are components of the
9 turnkey contract price.

10

11 Peace Creek Solar's estimated turnkey contract price is
12 \$64,500,000. The turnkey EPC contract price is the sum of
13 the modules, major equipment, balance of system, and
14 development costs as listed in the "Estimated" column shown
15 in Document No. 5 of my exhibit.

16

17 Peace Creek Solar's actual cost is the sum of the modules,
18 major equipment, balance of system, and development costs,
19 which is \$64,540,841. These costs are listed in Document
20 No. 5 of my exhibit in the column entitled "Actual".

21

22 The variance between the actual and estimated contract
23 costs for Peace Creek is \$40,841, or less than one tenth of
24 one percent greater than the estimated cost.

25 The transmission interconnection cost variance is

1 \$(1,728,866), and the owner's costs variance is \$559,812.
2 The higher owner's costs are primarily due to having
3 construction and safety site managers to ensure workmanship
4 and safety protocols were followed by the contracts.

5
6 The variance between the actual and estimated total all-in
7 cost for Peace Creek Solar is \$(656,362), or \$13 per kW_{ac}
8 lower than the estimated all-in cost.

9
10 **Q.** Please explain the variances between actual and estimated
11 costs by category for the Bonnie Mine project.

12
13 **A.** The modules, major equipment, balance of system, and
14 development costs for each project are components of the
15 turnkey contract price.

16
17 Bonnie Mine Solar's estimated turnkey contract price is
18 \$48,600,000. The turnkey contract price is the sum of the
19 modules, major equipment, balance of system, and
20 development costs as listed in the "Estimated" column shown
21 in Document No. 6 of my exhibit.

22
23 Bonnie Mine Solar's actual cost is the sum of the modules,
24 major equipment, balance of system, and development costs,
25 which is \$48,409,422. These costs are listed in Document

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No. 6 of my exhibit in the column entitled "Actual".

The variance between the actual and estimated contract costs for Bonnie Mine Solar is \$(190,578), or 0.4 percent less than the estimated costs.

The transmission interconnection cost variance is \$(361,837), and the owner's costs variance is \$1,128,941. The higher owner's costs are primarily due to using additional construction and safety managers to ensure workmanship and safety protocols were followed during project construction.

The variance between the actual and estimated total all-in cost for Bonnie Mine Solar is approximately \$1,202,532, or \$32 per kW_{ac} higher than the estimated all-in cost.

Q. Please explain the variances between actual and estimated costs by category for the Lake Hancock project.

A. The modules, major equipment, balance of system, and development costs for each project are components of the turnkey contract price.

Lake Hancock Solar's estimated turnkey contract price for

1 the 31.8 MW of capacity included in the SoBRA is
2 \$38,802,424. The turnkey contract price is the sum of the
3 modules, major equipment, balance of system, and
4 development costs as listed in the "Estimated" column shown
5 in Document No. 7 of my exhibit.

6
7 Lake Hancock Solar's actual cost is the sum of the modules,
8 major equipment, balance of system, and development costs,
9 which is \$37,110,412. These costs are listed in Document
10 No. 7 of my exhibit in the column entitled "Actual".

11
12 The variance between the actual and estimated contract
13 costs for Lake Hancock Solar is \$(1,692,012). The variance
14 is due to the liquidated damages applied to the actual EPC
15 contract costs.

16
17 The transmission interconnection cost variance is
18 \$(355,295), and the owner's costs variance is \$1,020,143.
19 The higher owner's costs are primarily due to required
20 vegetation buffer costs and the additional construction and
21 safety managers needed to ensure workmanship and safety
22 protocols were followed during the construction of the
23 project.

24
25 The variance between the actual and estimated total all-in

1 cost for Lake Hancock Solar is \$(1,072,140), or \$35 per kW_{ac}
2 lower than the estimated all-in cost.

3
4 **Q.** How are owner's costs determined for the five Second SoBRA
5 projects?

6
7 **A.** As is the case for the two First SoBRA projects, owner's
8 costs for the five Second SoBRA projects include costs of
9 work performed by Tampa Electric employees assigned to the
10 solar projects who were not employed prior to the last rate
11 case, consultants retained by the company to assist in
12 development, project management, safety activities, and
13 legal support.

14
15 **IV. Summary**

16
17 **Q.** Please summarize your direct testimony.

18
19 **A.** Tampa Electric's Payne Creek Solar (70.3 MW) and Balm
20 Solar (74.4 MW) became fully operational and were placed
21 in service on September 1, 2018 and September 27, 2018,
22 respectively.

23
24 The Lithia (74.5 MW), Grange Hall (61.1 MW), Peace Creek
25 (55.4 MW), Bonnie Mine (37.5 MW) and Lake Hancock (31.8

1 MW), projects were placed in service on January 1, January
2 2, January 23, March 1 and April 25, 2019, respectively.

3
4 Balm Solar's actual installed cost is \$1,478 per kW_{ac},
5 which is \$2 per kW_{ac} less than the estimated cost of \$1,480
6 per kW_{ac}.

7
8 Payne Creek Solar's actual installed cost is \$1,432 per
9 kW_{ac}, which is \$18 per kW_{ac} more than the estimated all-in
10 cost. The variance is primarily due to constructing more
11 durable roads and including costs for breakage or "spare"
12 modules.

13
14 Lithia Solar's actual installed cost is \$1,481 per kW_{ac},
15 which is \$13 per kW_{ac} less than the estimated cost of
16 \$1,494 per kW_{ac}.

17
18 Grange Hall Solar's actual installed cost is \$1,430 per
19 kW_{ac}, which is \$7 per kW_{ac} less than the estimated cost of
20 \$1,437 per kW_{ac}.

21
22 Peace Creek Solar's actual installed cost is \$1,479 per
23 kW_{ac}, which is \$13 per kW_{ac} less than the estimated cost
24 of \$1,492 per kW_{ac}.

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Bonnie Mine Solar's actual installed cost is \$1,496 per kW_{ac}, which is \$32 per kW_{ac} more than the estimated cost of \$1,464 per kW_{ac}. The variance is primarily due to costs for additional construction and safety site managers to oversee construction.

Lake Hancock Solar's actual installed cost is \$1,459 per kW_{ac}, which is \$35 per kW_{ac} less than the estimated cost of \$1,494 per kW_{ac}. The variance is primarily due to liquidated damages that offset the actual EPC contract cost.

The actual installed cost of each of the Seven Projects falls below the SoBRA cost cap of \$1,500 per kW_{ac}. The weighted average of the Seven Projects is \$1,448 per kW_{ac}.

Q. Does this conclude your prepared direct testimony?

A. Yes, it does.

EXHIBIT

OF

MARK D. WARD

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2	Balm Solar Project Actual and Estimated Installed Costs by Category	35
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Payne Creek Solar Actual and Estimated Costs

	Actual	Estimated	Difference
Project Output (MW _{ac})	70.3	70.3	-
EPC Contract Costs:			
Major Equipment	██████████	██████████	\$ (107,664)
Balance of System	██████████	██████████	2,356,859
Development	<u>282,837.8</u>	<u>1,593,623</u>	<u>(1,310,785)</u>
Total EPC Contract	85,588,779	84,650,369	938,410
Trans. Interconnect	4,011,698	4,400,000	(388,302)
Land	1,345,839	1,408,400	(62,561)
Owner's Costs	<u>1,562,235</u>	<u>419,383</u>	<u>1,142,852</u>
Total Installed Cost	92,508,551	90,878,151	1,630,400
AFUDC	<u>1,851,033</u>	<u>2,195,318</u>	<u>(344,285)</u>
Total All-in Cost	\$ 94,359,584	\$ 93,073,469	\$ 1,286,115
Total (\$/kW _{ac})	1,342	1,324	18

Notes:

¹ Major Equipment includes modules, inverters, and transformers

² Balance of System includes racking, posts, collection cables, EPC contractor and project management

Balm Solar Actual and Estimated Costs

	Actual	Estimated	Difference
Project Output (MW _{ac})	74.4	74.4	-
EPC Contract Costs:			
Major Equipment	██████████	██████████	\$ (1,059,555)
Balance of System	██████████	██████████	2,879,854
Development	<u>362,124</u>	<u>1,686,953</u>	<u>(1,324,829)</u>
Total EPC Contract	86,733,554	86,238,085	495,469
Trans. Interconnect	1,662,086	2,500,000	(837,914)
Land	17,022,515	18,720,128	(1,697,613)
Owner's Costs	<u>1,760,273</u>	<u>443,970</u>	<u>1,316,303</u>
Total Installed Cost	107,178,428	107,902,183	(723,755)
AFUDC	<u>2,784,955</u>	<u>2,188,259</u>	<u>596,696</u>
Total All-in Cost	\$ 109,963,383	\$ 110,090,442	\$ (127,059)
Total (\$/kW _{ac})	1,478	1,480	(2)

Notes:

¹ Major Equipment includes modules, inverters, and transformers

² Balance of System includes racking, posts, collection cables, EPC contractor and project management

Lithia Solar Actual and Estimated Costs

	Actual	Estimated	Difference
Project Output (MW _{ac})	74.5	74.5	-
EPC Contract Costs:			
Major Equipment	██████████	██████████	\$ (3,603,118)
Balance of System	██████████	██████████	4,663,481
Development	<u>432,860</u>	<u>2,400,000</u>	<u>(1,967,140)</u>
Total EPC Contract	89,293,223	90,200,000	(906,777)
Trans. Interconnect	3,287,123	4,000,000	(712,877)
Land	13,352,978	13,800,000	(447,022)
Owner's Costs	<u>1,550,184</u>	<u>900,000</u>	<u>650,184</u>
Total Installed Cost	107,483,507	108,800,000	(1,316,493)
AFUDC	<u>2,881,314</u>	<u>2,500,000</u>	<u>381,314</u>
Total All-in Cost	\$ 110,364,821	\$ 111,300,000	\$ (935,179)
Total (\$/kW _{ac})	1,481	1,494	(13)

Notes:

¹ Major Equipment includes modules, inverters, and transformers

² Balance of System includes racking, posts, collection cables, EPC contractor and project management

Grange Hall Solar Actual and Estimated Costs

	Actual	Estimated	Difference
Project Output (MW _{ac})	61.1	61.1	-
EPC Contract Costs:			
Major Equipment	██████████	██████████	\$ (725,323)
Balance of System	██████████	██████████	1,512,962
Development	<u>355,813</u>	<u>1,800,000</u>	<u>(1,444,187)</u>
Total EPC Contract	72,643,452	73,300,000	(656,548)
Trans. Interconnect	3,402,187	4,600,000	(1,197,813)
Land	8,252,433	8,400,000	(147,567)
Owner's Costs	<u>978,840</u>	<u>500,000</u>	<u>478,840</u>
Total Installed Cost	85,276,912	86,800,000	(1,523,088)
AFUDC	<u>2,070,114</u>	<u>1,000,000</u>	<u>1,070,114</u>
Total All-in Cost	\$ 87,347,026	\$ 87,800,000	\$ (452,974)
Total (\$/kW _{ac})	1,430	1,437	(7)

Notes:

¹ Major Equipment includes modules, inverters, and transformers

² Balance of System includes racking, posts, collection cables, EPC contractor and project management

Peace Creek Solar Actual and Estimated Costs

	Actual	Estimated	Difference
Project Output (MW _{ac})	55.4	55.4	-
EPC Contract Costs:			
Major Equipment	██████████	██████████	\$ (33,558)
Balance of System	██████████	██████████	1,606,438
Development	<u>267,962</u>	<u>1,800,000</u>	<u>(1,532,038)</u>
Total EPC Contract	64,540,841	64,500,000	40,841
Trans. Interconnect	2,971,134	4,700,000	(1,728,866)
Land	11,577,007	11,700,000	(122,993)
Owner's Costs	<u>959,812</u>	<u>400,000</u>	<u>559,812</u>
Total Installed Cost	80,048,794	81,300,000	(1,251,206)
AFUDC	<u>1,894,844</u>	<u>1,400,000</u>	<u>494,844</u>
Total All-in Cost	\$ 81,943,638	\$ 82,600,000	\$ (656,362)
Total (\$/kW _{ac})	1,479	1,492	(13)

Notes:

¹ Major Equipment includes modules, inverters, and transformers

² Balance of System includes racking, posts, collection cables, EPC contractor and project management

Bonnie Mine Solar Actual and Estimated Costs

	Actual	Estimated	Difference
Project Output (MW _{ac})	37.5	37.5	-
EPC Contract Costs:			
Major Equipment	██████████	██████████	\$ 7,029,294
Balance of System	██████████	██████████	(6,137,509)
Development	<u>317,638</u>	<u>1,400,000</u>	<u>(1,082,362)</u>
Total EPC Contract	48,409,422	48,600,000	(190,578)
Trans. Interconnect	538,163	900,000	(361,837)
Land	4,157,276	4,300,000	(142,724)
Owner's Costs	<u>1,428,941</u>	<u>300,000</u>	<u>1,128,941</u>
Total Installed Cost	54,533,803	54,100,000	433,803
AFUDC	<u>1,568,729</u>	<u>800,000</u>	<u>768,729</u>
Total All-in Cost	\$ 56,102,532	\$ 54,900,000	\$ 1,202,532
Total (\$/kW _{ac})	1,496	1,464	32

Notes:

¹ Major Equipment includes modules, inverters, and transformers

² Balance of System includes racking, posts, collection cables, EPC contractor and project management

Lake Hancock Solar Actual and Estimated Costs

	Actual	Estimated	Difference
Project Output (MW _{ac})	31.8	31.8	-
EPC Contract Costs:			
Major Equipment	██████████	██████████	\$ (1,002,221)
Balance of System	██████████	██████████	127,967
Development	<u>210,121</u>	<u>1,027,879</u>	<u>(817,758)</u>
Total EPC Contract	37,110,412	38,802,424	(1,692,012)
Trans. Interconnect	2,278,645	2,633,939	(355,295)
Land	5,801,085	5,846,061	(44,975)
Owner's Costs	<u>1,212,870</u>	<u>192,727</u>	<u>1,020,143</u>
Total Installed Cost	46,403,012	47,475,152	(1,072,140)
AFUDC	<u>-</u>	<u>-</u>	<u>-</u>
Total All-in Cost	\$ 46,403,012	\$ 47,475,152	\$ (1,072,140)
Total (\$/kW _{ac})	1,459	1,494	(34)

Notes:

¹ Major Equipment includes modules, inverters, and transformers

² Balance of System includes racking, posts, collection cables, EPC contractor and project management



BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 2020____-EI
IN RE: PETITION BY TAMPA ELECTRIC COMPANY
FOR A LIMITED PROCEEDING TO TRUE-UP FIRST
AND SECOND SOBRAS

PREPARED DIRECT TESTIMONY AND EXHIBIT
OF
JOSE A. APONTE

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

PREPARED DIRECT TESTIMONY

OF

JOSE A. APONTE

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3
4
5
6 Q. Please state your name, address, occupation and employer.

7
8 A. My name is Jose A. Aponte. My business address is 702 N.
9 Franklin Street, Tampa, Florida 33602. I am employed by
10 Tampa Electric Company ("Tampa Electric" or "company") as
11 Manager of Resource Planning. My primary responsibilities
12 include identifying the need for future resource additions
13 and analyzing the economic and other operational impacts
14 to Tampa Electric's system associated with the addition of
15 resource options.

16
17 Q. Please provide a brief outline of your educational
18 background and business experience.

19
20 A. I graduated from the University of South Florida with a
21 Bachelor's degree and a Master of Science degree in
22 Mechanical Engineering. I am a registered Project
23 Management Professional ("PMP").

24
25 In 1999, I was employed by Tampa Electric as an engineer

1 in the Inventory Management and Supply Chain Logistics
2 team. In 2004, I became supervisor for the Materials and
3 Quality Assurance Department at the Big Bend Power
4 Station. Since 2008, I have held several positions in the
5 Resource Planning department at Tampa Electric.

6
7 I have twenty-one years of accumulated electric utility
8 experience working in the areas of planning, systems
9 integration, data analytics, project economic analysis,
10 and engineering. I was appointed to my current position,
11 Manager of Resource Planning, in December 2017.

12
13 **Q.** What is the purpose of your direct testimony?

14
15 **A.** The purpose of my direct testimony is to sponsor and
16 explain the calculation of the revenue requirement based
17 on actual installed project costs for the seven projects
18 in the company's first and second SoBRA tranches. i.e.,
19 its First and Second SoBRAs.

20
21 **Q.** Have you prepared an exhibit to support your direct
22 testimony?

23
24 **A.** Yes, Exhibit No. ____ (JAA-1) was prepared by me or under
25 my direction and supervision. It is titled "Revenue

1 Requirement True-Up for First and Second SoBRAs.”

2
3 **Q.** How does your testimony relate to the prepared direct
4 testimony of Tampa Electric’s other witnesses?

5
6 **A.** Tampa Electric witness Ward’s direct testimony describes
7 the actual in-service dates and installed cost per
8 kilowatt alternating current (“kW_{ac}”) for (1) the two
9 projects, Payne Creek Solar and Balm Solar, for which
10 cost recovery was granted by the Commission via the
11 company’s First SoBRA in Docket No. 20170260-EI and (2)
12 the five projects (Lithia Solar, Grange Hall Solar, Peace
13 Creek Solar, Bonnie Mine Solar, and Lake Hancock Solar)
14 for which cost recovery was granted by the Commission via
15 the Second SoBRA in Docket No. 20180133-EI.

16
17 I will refer to the Balm, Payne Creek, Lithia, Grange
18 Hall, Peace Creek, Bonnie Mine, and Lake Hancock solar
19 projects collectively as the “Seven Projects” throughout
20 my testimony.

21
22 I use the actual installed project costs of the Seven
23 Projects in witness Ward’s direct testimony to calculate
24 the actual revenue requirement for the First and Second
25 SoBRAs and compare them to the estimated revenue

1 requirement determined in Docket Nos. 20170260-EI and
2 20180133-EI.

3
4 The company's cost of service and rate design witness,
5 William Ashburn, uses the actual revenue requirement
6 described in my direct testimony to develop final customer
7 rates for the First and Second SoBRAs. The company
8 proposes that these rates become effective with the first
9 billing cycle in January 2021.

10
11 The testimony of witness Chronister describes the revenue
12 true-up for the period the estimated First and Second
13 SoBRA rates were charged to customers to reflect actual
14 project in-service dates and costs, which is passed along
15 to customers through the capacity clause. Mr. Chronister
16 also explains how the liquidated damages paid by solar
17 developers were apportioned among the Seven Projects and
18 reduced the actual installed costs of certain of those
19 projects.

20
21 **Annual Revenue Requirement True-Up**

22 **Q.** What is the annual revenue requirement authorized to
23 recover the costs associated with the First and Second
24 SoBRAs?
25

1 **A.** The estimated annual revenue requirement for the First
2 SoBRA is \$24,245,000. The estimated annual revenue
3 requirement for the Second SoBRA is \$46,045,000.

4
5 These amounts were calculated using the projected
6 installed costs for the seven projects in the First and
7 Second SoBRAs as described in witness Ward's direct
8 testimony in Docket Nos. 20170260-EI and 20180133-EI, and
9 in accordance with the revenue requirement cost recovery
10 provisions in the 2017 Agreement.

11
12 **Q.** What are the total estimated annual revenue requirement for
13 each of the seven projects?

14
15 **A.** The total estimated annual revenue requirements by project
16 for the First and Second SoBRAs as approved by the
17 Commission are:

18	<u>Project</u>	<u>Revenue Requirement</u>
19	Balm	\$12,937,000
20	Payne Creek	11,308,000
21	Lithia	13,291,000
22	Grange Hall	10,611,000
23	Peace Creek	9,868,000
24	Bonnie Mine	6,601,000
25	Lake Handcock	5,674,000

1 Q. Are these estimated annual revenue requirements final
2 amounts?

3

4 A. No. Subparagraph 6(g) of the 2017 Agreement specifies that
5 the approved projected annual revenue requirement amount
6 will be trued up to reflect the actual installed cost of
7 the projects covered by the First and Second SoBRAs.

8

9 Q. What is the total actual cost annual revenue requirement
10 for the First and Second SoBRAs?

11

12 A. The actual annual revenue requirement for the First and
13 Second SoBRAs together is \$70,213,000. This amount is
14 calculated using the actual installed costs for the Seven
15 Projects as described in witness Ward's direct testimony in
16 this docket, and in accordance with the revenue requirement
17 cost recovery provisions in the 2017 Agreement. A summary
18 of the annual revenue requirement calculation by project is
19 shown in my exhibit, Exhibit No. ____ (JAA-1).

20

21 Q. Does the revised annual revenue requirement for the First
22 and Second SoBRAs presented in Exhibit No. ____ (JAA-1)
23 reflect an incentive savings adjustment?

24

25 A. Yes. Subparagraph 6(m) of the 2017 Agreement contains an

1 incentive designed to encourage Tampa Electric to build
2 solar projects for recovery under a SoBRA at the lowest
3 possible cost. According to subparagraph 6(m), if Tampa
4 Electric's actual installed cost for a project is less than
5 the Installed Cost Cap, the company's customers and the
6 company will share in the beneficial difference with 75
7 percent of the difference inuring to the benefit of
8 customers and 25 percent serving as an incentive to the
9 company to seek such cost savings over the life of this
10 2017 Agreement. The company has included the effect of the
11 incentive in its actual revenue requirement for the First
12 and Second SoBRAs.

13
14 **Q.** Does the 2017 Agreement include an example of how the
15 incentive mechanism would work?

16
17 **A.** Yes. According to subparagraph 6(m), if the actual
18 installed cost of a solar project is \$1,400 per kW_{ac}, the
19 final cost to be used for purposes of computing cost
20 recovery under this 2017 Agreement and the true-up of the
21 initial SOBRA would be \$1,425 kW_{ac} [0.25 times (\$1,500 -
22 \$1,400) + \$1,400].

23
24 **Q.** Please describe the calculation of the incentive for the
25 First and Second SoBRAs based on the company's actual

1 installed costs.

2

3 **A.** Witness Ward provides the actual installed costs for the
4 Seven Projects including interconnection, allowance for
5 funds used during construction ("AFUDC"), and land costs.
6 The calculation of the actual installed costs including the
7 incentive for each project is as follows.

8

9 <u>Project</u>	<u>Actual Costs Including Incentive per kW_{ac}</u>
10 Balm Solar	$0.25 * (\$1,500 - \$1,478) + \$1,478 = \$1,483$
11 Payne Creek	$0.25 * (\$1,500 - \$1,342) + \$1,342 = \$1,381$
12 Lithia	$0.25 * (\$1,500 - \$1,481) + \$1,481 = \$1,486$
13 Grange Hall	$0.25 * (\$1,500 - \$1,430) + \$1,430 = \$1,447$
14 Peace Creek	$0.25 * (\$1,500 - \$1,479) + \$1,479 = \$1,484$
15 Bonnie Mine	$0.25 * (\$1,500 - \$1,496) + \$1,496 = \$1,497$
16 Lake Hancock	$0.25 * (\$1,500 - \$1,459) + \$1,459 = \$1,469$

17

18 **Q.** How does the revised incentive calculation differ from the
19 estimated incentive calculation for the First and Second
20 SoBRAs?

21

22 **A.** The formula is the same as that formula used in Docket Nos.
23 20170260-EI and 20180133-EI, but the estimated installed
24 costs used in those dockets have been replaced with the
25 actual installed costs provided by witness Ward.

<u>Project</u>	<u>Estimated Costs Including Incentive per kW_{ac}</u>
Balm Solar	0.25 * (\$1,500 - \$1,480) + \$1,480 = \$1,485
Payne Creek	0.25 * (\$1,500 - \$1,324) + \$1,324 = \$1,368
Lithia	0.25 * (\$1,500 - \$1,494) + \$1,494 = \$1,496
Grange Hall	0.25 * (\$1,500 - \$1,437) + \$1,437 = \$1,453
Peace Creek	0.25 * (\$1,500 - \$1,492) + \$1,492 = \$1,494
Bonnie Mine	0.25 * (\$1,500 - \$1,464) + \$1,464 = \$1,473
Lake Hancock	0.25 * (\$1,500 - \$1,494) + \$1,494 = \$1,496

10 **Q.** How do the projected and actual incentive amounts compare
11 for each of the Seven Projects?

13 **A.** A comparison of the projected and actual incentive amounts
14 for each of the Seven Projects is shown below:

<u>Project</u>	<u>Estimated</u>	<u>Actual</u>	<u>Difference</u>
Balm	5	5	0
Payne Creek	44	39	(5)
Lithia	2	5	3
Grange Hall	15	17	2
Peace Creek	2	5	3
Bonnie Mine	9	1	(8)
Lake Hancock	2	10	8

24 **Q.** Are investment tax credits included in the calculation of
25 the actual First and Second SoBRA revenue requirement?

1 **A.** Yes. Thirty percent investment tax credits were applied in
2 the calculation of the estimated and actual First and Second
3 SoBRA annual revenue requirements.

4
5 **Q.** Did the company credit the value of liquidated damages
6 received from solar developers to reduce the actual
7 installed costs of certain of the Seven Projects?

8
9 **A.** Yes. The company apportioned liquidated damages to six of
10 the Seven Projects. The amount of liquidated damages
11 apportioned to the six projects and how they reduced the
12 actual installed cost of those projects is shown in the
13 direct testimony of witness Chronister. The rationale the
14 company used to apportion the liquidated damages is
15 explained in the direct testimony of witness Chronister.

16
17 **Q.** How is the actual annual revenue requirement you calculated
18 for the First and Second SoBRAs to be applied?

19
20 **A.** The SoBRA rates are to be adjusted to reflect the revised
21 revenue requirement based on actual costs. The actual First
22 and Second SoBRA rates are described and explained in
23 witness Ashburn's testimony, but because the difference
24 between the estimated and actual revenue requirements is
25 small, the company proposes that the revenue difference be

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included in its Fourth SoBRA.

In addition, the 2017 Agreement requires the company to calculate a true-up to reflect differences between the actual and estimated installed cost and in-service dates for the projects, for the period of time the estimated SoBRA rates were in effect.

Q. Does the 2017 Agreement state how this revenue requirement true-up is to be calculated?

A. Yes. Subparagraph 6(n) of the 2017 Agreement states that a revised SoBRA will be computed using the same data and methodology incorporated in the initial SoBRA, with the exception that the actual capital expenditures after sharing and the actual in-service date will be used in lieu of the capital expenditures on which the annualized revenue requirement was based. The difference between the cumulative base revenues since the implementation of the initial SoBRA factor and the cumulative base revenues that would have resulted if the revised SoBRA factor (for cost and in-service date true-ups) had been in place during the same time period will be trued up with interest at the AFUDC rate used for the projects, and will be made through a twelve-month adjustment via the Capacity Clause. This true-

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up is described and explained in witness Chronister's testimony.

Q. Please summarize your direct testimony.

A. The First and Second SoBRA estimated annual revenue requirements totaled \$70,290,000. Using the actual installed costs provided by witness Ward, I calculated the actual annual revenue requirement for the First and Second SoBRAs to be \$70,213,000, or \$77,000 less than the estimated amount. These amounts include incentive and are calculated in accordance with the 2017 Agreement.

Q. Does this conclude your direct testimony?

A. Yes, it does.

EXHIBIT

OF

JOSE A. APONTE

**First SoBRA Actual Revenue Requirements
145 MW of Solar (Tranche 1)**

(\$000)	2018
Balm Solar	10,434
Payne Creek	10,442
Capital RR	20,876
Balm Solar	533
Payne Creek	503
FOM	1,036
Land RR	2,073
TOTAL RR	23,985

**First SoBRA Actual Revenue Requirements with
Sharing Mechanism
145 MW of Solar (Tranche 1)
with 75%/25% Incentive
vs \$1,500/kW Maximum**

(\$000)	2018
Balm Solar	10,480
Payne Creek	10,753
Capital RR	21,233
Balm Solar	533
Payne Creek	503
FOM	1,036
Land RR	2,073
TOTAL RR	24,342

**Second SoBRA Actual Revenue Requirements
260 MW of Solar (Tranche 2)**

(\$000)	2019
Lithia	11,130
Grange Hall	9,074
Peace Creek	8,073
Bonnie Mine	5,959
Lake Hancock	4,658
Capital RR	38,894
Lithia	547
Grange Hall	448
Peace Creek	407
Bonnie Mine	275
Lake Hancock	233
FOM	1,911
Land RR	4,828
TOTAL RR	45,633

**Second SoBRA Actual Revenue Requirements with
Sharing Mechanism
260 MW of Solar (Tranche 2)
with 75%/25% Incentive
vs \$1,500/kW Maximum**

(\$000)	2019
Lithia	11,169
Grange Hall	9,198
Peace Creek	8,106
Bonnie Mine	5,964
Lake Hancock	4,695
Capital RR	39,132
Lithia	547
Grange Hall	448
Peace Creek	407
Bonnie Mine	275
Lake Hancock	233
FOM	1,911
Land RR	4,828
TOTAL RR	45,871



**BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION**

**DOCKET NO. 2020____-EI
IN RE: PETITION BY TAMPA ELECTRIC COMPANY
FOR A LIMITED PROCEEDING TO TRUE-UP FIRST
AND SECOND SOBRAS**

REDACTED

**PREPARED DIRECT TESTIMONY AND EXHIBIT
OF
JEFFREY S. CHRONISTER**

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

PREPARED DIRECT TESTIMONY

OF

JEFFREY S. CHRONISTER

1
2
3
4
5
6 Q. Please state your name, address, occupation and employer.

7
8 A. My name is Jeffrey S. Chronister. My business address is
9 702 North Franklin Street, Tampa, Florida 33602. I am
10 employed by Tampa Electric Company ("Tampa Electric" or
11 "the company") as Vice President Finance and Controller,
12 Tampa Electric.

13
14 I. Introduction

15
16 Q. Please describe your duties and responsibilities in that
17 position?

18
19 A. I am responsible for maintaining the financial books and
20 records of the company and for the determination and
21 implementation of accounting policies and practices for
22 Tampa Electric. I am also responsible for budgeting
23 activities within the company.

24
25 Q. Please provide a brief outline of your educational

1 background and business experience.

2

3 **A.** I graduated from Stetson University in 1982 with a
4 Bachelor of Business Administration degree in Accounting.
5 Upon graduation I joined Coopers & Lybrand, an independent
6 public accounting firm, where I worked for four years
7 before joining the company in 1986. I started in Tampa
8 Electric's Accounting department, moved to TECO Energy's
9 Internal Audit department in 1987, and returned to the
10 Accounting department in 1991. I am a Certified Public
11 Accountant in the State of Florida and I am a member of
12 both the American Institute of Certified Public
13 Accountants ("AICPA") and the Florida Institute of
14 Certified Public Accountants ("FICPA"). I have served as
15 Controller of Tampa Electric since July 2009, and in my
16 current position since July 2018.

17

18 **Q.** Have you previously testified before the Florida Public
19 Service Commission ("Commission")?

20

21 **A.** Yes, I have testified or filed testimony before this
22 Commission in several dockets. I testified for Tampa
23 Electric in Docket No. 20130040-EI, which was Tampa
24 Electric's last base rate proceeding. I filed testimony in
25 Docket No. 20080317-EI, Tampa Electric Company's Petition

1 for An Increase in Base Rates and Miscellaneous Service
2 Charges, Docket No. 19960007-EI, Tampa Electric's
3 Environmental Cost Recovery Clause, and Docket No.
4 19960688-EI, Tampa Electric's environmental compliance
5 activities for purposes of cost recovery. I also filed
6 testimony in Docket No. 20170271-EI, Petition for recovery
7 of costs associated with named tropical systems during the
8 2015, 2016, and 2017 hurricane seasons and replenishment of
9 storm reserve subject to final true-up, Tampa Electric
10 Company.

11
12 **Q.** What are the purposes of your direct testimony?

13
14 **A.** All of my testimony relates to (1) the two projects, Payne
15 Creek Solar and Balm Solar, for which cost recovery was
16 granted by the Commission via the company's First SoBRA
17 in Docket No. 20170260-EI and (2) the five projects
18 (Lithia Solar, Grange Hall Solar, Peace Creek Solar,
19 Bonnie Mine Solar, and Lake Hancock Solar) for which cost
20 recovery was granted by the Commission via the Second
21 SoBRA in Docket No. 20180133-EI. I will refer to the Balm,
22 Payne Creek, Lithia, Grange Hall, Peace Creek, Bonnie Mine
23 and Lake Hancock solar projects collectively as the "Seven
24 Projects" throughout my testimony.

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My testimony serves two purposes. My first purpose is to describe the calculation of two SoBRA true-ups - the timing true-up and the cost true-up. These true-ups are for the seven projects in the company's First and Second SoBRAs. The timing true-up is related to the actual project in-service dates for the seven projects compared to the period that the company began charging customers the First and Second SoBRA rates. The cost true-up is related to the actual installed project costs for the seven projects compared to the estimated costs used to set SoBRA rates. These true-ups are passed through the capacity clause.

My second purpose is to explain how the liquidated damages paid by solar developers for projects in the First and Second SoBRAs were apportioned among those projects and reduced the actual installed costs of certain of those projects. The liquidated damage amounts I explain in my testimony were used by Tampa Electric witness Mark Ward in his calculation of the final installed costs for each of the Seven Projects.

Q. Have you prepared an exhibit to support your direct testimony?

1 **A.** Yes, Exhibit No. ____ (JSC-1) was prepared by me or under
2 my direction and supervision. Document No. 1 reflects
3 the calculation of the True-Up Amounts. Document No. 2
4 shows how the liquidated damages paid to the company by
5 the developers involved in the First and Second SoBRA
6 projects were apportioned to those projects.

7

8 **Q.** How does your testimony relate to the prepared direct
9 testimony of Tampa Electric's other witnesses?

10

11 **A.** Tampa Electric witness Ward's direct testimony describes
12 the actual in-service dates and installed cost per
13 kilowatt alternating current ("kW_{ac}") for the Seven
14 Projects in the First and Second SoBRAs. Witness Aponte
15 uses the actual installed project costs in witness Ward's
16 direct testimony to calculate the actual revenue
17 requirement for the First and Second SoBRAs and compares
18 it to the estimated revenue requirement determined in
19 Docket Nos. 20170260-EI and 20180133-EI. The company's
20 cost of service and rate design witness, William R.
21 Ashburn, uses the actual revenue requirement described in
22 witness Aponte's direct testimony to develop final
23 customer rates for the First and Second SoBRAs that will
24 be effective with the first billing cycle in January 2021.
25 My testimony relates to the testimony of these witnesses

1 in that the timing true-up I present reflects the in-
2 service dates presented in Witness Ward's testimony and
3 the cost true-up I present reflects the installed cost
4 and revenue requirements presented in Witness Ward and
5 Witness Aponte's testimonies, respectively.

6
7 **II. True-Up Calculations**

8
9 **Q.** Please provide perspective for the true-ups related to
10 SoBRA revenues.

11
12 **A.** The first consideration is the applicability of the true-
13 ups. Below I will describe how the 2017 Agreement provides
14 for the true-up of SoBRA revenues. The next consideration
15 is that there are two types of true-up involved. The
16 timing true-up is related to the actual project in-service
17 dates for the SoBRA projects compared to the period that
18 the company began charging customers the SoBRA rates. The
19 cost true-up is related to the actual installed project
20 costs for the SoBRA projects compared to the estimated
21 costs used to set SoBRA rates. The timing true-up is
22 calculated for the period from the beginning of each
23 tranche's SoBRA billing to the project in-service dates,
24 while the cost true-up applies to the period from the
25 project in-service dates to January 2021, when the final

1 SoBRA rates are put in place.

2

3 **Q.** Does the 2017 Agreement provide for a true-up of SoBRA
4 revenues?

5

6 **A.** Yes. The 2017 Agreement made room for the possibility that
7 the estimated and actual annual revenue requirement and in-
8 service dates for the Seven Project could end up being
9 different and included provisions to protect customers
10 should differences occur.

11

12 Subparagraph 6(n) of the 2017 Agreement states that a
13 revised SoBRA will be computed using the same data and
14 methodology incorporated in the initial SoBRA, with the
15 exception that the actual capital expenditures after
16 sharing will be used in lieu of the capital expenditures on
17 which the estimated annualized revenue requirement was
18 based. The difference between the cumulative base revenues
19 since the implementation of the initial SoBRA factor and
20 the cumulative base revenues that would have resulted if
21 the revised SoBRA factor had been in place during the same
22 time period will be trued up with interest at the AFUDC
23 rate used for the projects, and will be made through a one-
24 time, twelve-month adjustment. The true-up also reflects

1 any differences between the actual and estimated in-service
2 dates for the Seven Projects.

3
4 **Q.** Please describe the calculation of the timing true-up.

5
6 **A.** The timing true-up consists of the portion of the annual
7 revenue requirement for each of the Seven Projects from
8 the estimated in-service date to the actual in-service
9 date. The company charged rates to customers based on the
10 estimated annual revenue requirement for the Seven
11 Projects beginning on the estimated in-service dates for
12 the projects, and some of the projects did not go in-
13 service until after the estimated date. The company owes
14 its customers the ratable portion of the annual revenue
15 requirement attributable to any period when the new SoBRA
16 rates were in effect and the underlying projects were not
17 in service. The company also owes its customers any
18 applicable interest. The calculation of the timing true-
19 up is shown on Page 3 of Document No. 1 in my exhibit.

20
21 **Q.** Please describe the calculation of the cost true-up.

22
23 **A.** The cost true-up consists of the difference between the
24 estimated and actual (final) revenue requirement for the
25 projects from the time when each project went in service

1 to January 1, 2021, which is the date the company proposes
2 that the base rate adjustment to reflect the final First
3 and Second SOBRA rates will become effective. The company
4 owes its customers this true-up plus any applicable
5 interest. The calculation of the cost true-up is shown in
6 Document No. 1 in my exhibit.
7

8 **Q.** What is the dollar amount of the timing true-up?
9

10 **A.** The dollar amount of the timing true-up is \$(4,490,688),
11 as shown on Line 10, Page 1 of Document No. 1 in my
12 exhibit. At Page 3 of Document No. 1, I show the estimated
13 revenue requirement for each of the Seven Projects as
14 approved by the Commission and, using the daily average
15 for the estimated annual revenue requirement for each
16 project, show the revenue requirement attributable to the
17 period of time the individual projects were not in service
18 as estimated, if any. This schedule uses the actual in-
19 service dates by project as described in the testimony of
20 Mr. Mark Ward. The company calculated the interest due on
21 the true-up amount using the AFUDC rate specified in the
22 2017 Agreement.
23

24 **Q.** What is the dollar amount of the cost true-up?
25

1 **A.** The dollar amount of the cost true-up is \$(93,176), as
2 shown on Line 9, Page 1 of Document No. 1 in my exhibit.
3 The calculation compares the estimated annual revenue
4 requirement for each project with the actual final annual
5 revenue requirement and shows the difference for the
6 period when a project was placed in service to January 1,
7 2021. This schedule uses the actual in-service dates by
8 project as described in the testimony of witness Ward and
9 the actual annual revenue requirements by project
10 presented by witness Aponte. The company calculated the
11 interest due on the true-up amount using the AFUDC rate
12 specified in the 2017 Agreement.

13
14 The cost true-up is applicable beginning at the in-service
15 date of the project. Since Tampa Electric returned the
16 entire amount of revenue collected prior to the in-service
17 date, a cost true-up amount is not needed for those days
18 and would be double-counted. On Page 4 of Document 1 of
19 my exhibit, I provide the calculation of adjusted monthly
20 average true-up amounts to reflect the project in-service
21 dates. The adjustment is calculated using the actual in-
22 service dates and the daily average for the difference
23 between estimated and actual annual revenue requirement
24 for each project.

25

1 The company calculated the interest due on the true-up
2 amount using the AFUDC rate specified in the 2017
3 Agreement.

4
5 **Q.** For what period will the true-up be applied to customer
6 bills?

7
8 **A.** An estimated \$4.9 million First and Second SoBRA true-up
9 was included in the capacity clause in February 2020 and
10 will be returned to customers in the company's mid-course
11 capacity factors effective for the period June 2020 through
12 December 2020. The final net true-up amount consisting of
13 the difference between the estimated and actual true-up
14 amounts, a credit of approximately \$240,000, will be
15 applied to customer bills beginning with the first billing
16 cycle of January 2021 through the final billing cycle of
17 December 2021.

18
19 **Q.** Although the true-ups are being provided to customers in
20 two parts, what is the total amount of the true-ups?

21
22 **A.** The total true-up amount to be passed through the capacity
23 clause is a credit of \$5,096,041.

24
25 **Q.** If the total true-up was applied all in the same manner,

1 what would be the effect of the true-up amount on a typical
2 1,000 kWh residential bill?

3
4 **A.** The total true-up amount would reduce a typical residential
5 bill by \$0.30 per 1,000 kWh. Since the greater portion of
6 the true-up will be returned to customers in the 2020 mid-
7 course capacity factors effective from June 2020 through
8 December 2020, the remaining net true-up amount to be
9 applied in the calculation of the 2021 capacity factors is
10 a credit of \$239,712, which represents a \$0.01 reduction
11 for a typical residential bill.

12
13 **III. Liquidated Damages**

14
15 **Q.** In general, what are liquidated damages?

16
17 **A.** The term "liquidated damages" refers to the pre-arranged
18 dollar amounts established in construction contracts to
19 compensate the paying party for deficient performance by
20 the construction contractor. Tampa Electric includes
21 liquidated damage provisions in construction contracts to
22 mitigate the risk of financial burden that would result
23 from a construction contractor not performing their duties
24 properly. Liquidated damages protect customers from bearing
25 negative financial impact and help keep project costs at

1 appropriate levels. Customers benefit by being protected
2 from rate burdens that would result from deficient
3 contractor performance.

4
5 **Q.** Please describe liquidated damages related to the SoBRA
6 solar projects.

7
8 **A.** Tampa Electric included liquidated damage provisions in the
9 contracts with the First and Second SoBRA solar developers
10 to compensate Tampa Electric for damages associated with
11 performance delays. In general, the contracts contained
12 provisions that compensated Tampa Electric for delays
13 beyond the planned "substantial completion" or "commercial
14 operation" dates as defined in the contracts. The process
15 by which the company received payments as liquidated
16 damages is discussed in the testimony of witness Ward.

17
18 **Q.** How did the company apportion liquidated damages for the
19 Seven Projects?

20
21 **A.** Liquidated damages were first applied to the revenue impact
22 of performance delays by the developers. The developers'
23 construction delays caused revenue losses - for which the
24 developers were contractually responsible. Any liquidated
25 damages over and above the revenue impacts were applied to

1 capital cost - which lowered the total installed cost of
2 the seven projects. In total, the company received about
3 \$9.2 million of liquidated damages from the developers. Of
4 that total, about \$4.5 million was applied to revenue
5 losses, and about \$4.7 million was credited against project
6 costs.

7
8 **Q.** How did the company apportion liquidated damages for the
9 Seven Projects to the individual projects?

10
11 **A.** Liquidated damages for revenue losses were applied
12 according to the revenue losses associated with each
13 project. The remaining liquidated damages were applied
14 using consideration of developer performance and contract
15 terms, amounts paid to each developer and factors
16 associated with the delays.

17
18 **Q.** Have you prepared a schedule showing the amount of
19 liquidated damages apportioned to each project?

20
21 **A.** Yes. Document No. 2 of my exhibits shows how liquidated
22 damages were apportioned between lost revenues and capital
23 costs and how amounts were apportioned to each of the
24 individual projects. This data was presented to and
25 discussed with the company's external auditors in their

1 review of the application of the liquidated damages.

2
3 **Q.** Is it possible for the company to receive liquidated damages
4 for a project which was placed in service on its estimated
5 in-service date?

6
7 **A.** Yes. Liquidated damages could be paid if a developer did
8 not meet the conditions established in the contract that
9 equated to substantial completion. A project could be
10 properly placed in service if the facility were putting
11 power to the grid according to regulatory guidance in FERC
12 and FPSC regulatory plant accounting rules. However, the
13 developer still could have several requirements to satisfy
14 after the in-service date to be considered substantially
15 complete and released from contractual obligations.

16
17 **IV. Summary**

18
19 **Q.** Please summarize your direct testimony.

20
21 **A.** In my testimony I have explained the true-ups associated
22 with Tranche 1 and Tranche 2 of SoBRA solar. I explained
23 that there is both a timing true-up and a cost true-up.
24 I discussed the regulatory support for the true-ups as
25 well as the way in which each true-up was calculated. I

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also explained liquidated damages and how SoBRA solar liquidated damages were apportioned to the Seven Projects.

Q. Does this conclude your direct testimony?

A. Yes.

EXHIBIT

OF

JEFFREY S. CHRONISTER

TAMPA ELECTRIC COMPANY
DOCKET NO. 2020_____-EI
EXHIBIT NO. _____ (JSC-1)
DOCUMENT NO. 1
FILED: 04/30/2020

CALCULATION OF TRUE-UP AMOUNTS

Tampa Electric
First and Second SOBRA True-Up Calculation

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)	(Q)	(R)	
	2018	2018	2018	2018	2018	2019	2019	2019	2019	2019	2019	2020	2020	2020	2020	2020	2020	2020	Total
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	2019	2020	2020	Total
	8,083	8,083	8,083	8,083	4,387	232	861	6,417	6,417	6,417	6,417	6,417	6,417	6,417	6,417	6,417	6,417	6,417	(16,176)
(1) Total Installed Cost True-up	7,148	8,083	8,083	8,083	5	4,387	232	861	6,417	6,417	6,417	6,417	6,417	6,417	6,417	6,417	6,417	6,417	(16,176)
(2) In-Service Date Timing True-up	(1,100,102)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(4,490,688)
(3) Total Installed Cost and Timing True-Up	(1,092,954)	(1,094,871)	(1,076,788)	(1,068,705)	(4,459,286)	(4,454,889)	(4,454,687)	(4,455,528)	(4,461,945)	(4,468,362)	(4,474,779)	(4,481,196)	(4,487,613)	(4,494,030)	(4,500,447)	(4,506,864)	(4,513,281)	(4,519,698)	(4,506,864)
(4) Annual Interest Rate	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%
(5) Monthly Interest Rate ¹	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%
(6) Interest Adjustment	(5,884)	(5,915)	(5,904)	(5,892)	(5,880)	(24,164)	(24,271)	(24,400)	(24,536)	(24,703)	(24,871)	(25,039)	(25,208)	(25,379)	(25,550)	(25,722)	(25,893)	(26,064)	(303,318)
(7) Total Installed Cost and Timing True-Up with Interest	(1,098,838)	(1,096,671)	(1,094,451)	(1,092,300)	(4,488,761)	(4,508,539)	(4,532,578)	(4,557,839)	(4,583,200)	(4,608,661)	(4,634,122)	(4,659,583)	(4,685,044)	(4,710,505)	(4,735,966)	(4,761,427)	(4,786,888)	(4,812,349)	(4,810,182)
(8) Total Installed Cost True-up	(16,176)	(16,176)	(16,176)	(16,176)	(16,176)	(16,176)	(16,176)	(16,176)	(16,176)	(16,176)	(16,176)	(16,176)	(16,176)	(16,176)	(16,176)	(16,176)	(16,176)	(16,176)	(16,176)
(9) In-Service Date Timing True-up	(4,490,688)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(4,490,688)
(10) Total Installed Cost and Timing True-Up	(4,506,864)	(4,513,281)	(4,519,698)	(4,526,115)	(4,532,532)	(4,538,949)	(4,545,366)	(4,551,783)	(4,558,200)	(4,564,617)	(4,571,034)	(4,577,451)	(4,583,868)	(4,590,285)	(4,596,702)	(4,603,119)	(4,609,536)	(4,615,953)	(4,583,864)
(11) Total Installed Cost and Timing True-Up	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%
(12) Estimated True-Up Included in Mid-Course Factors ²	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(13) Annual Interest Rate	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%	6.460000%
(14) Monthly Interest Rate ¹	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%	0.538333%
(15) Interest Adjustment	(303,318)	(303,318)	(303,318)	(303,318)	(303,318)	(303,318)	(303,318)	(303,318)	(303,318)	(303,318)	(303,318)	(303,318)	(303,318)	(303,318)	(303,318)	(303,318)	(303,318)	(303,318)	(303,318)
(16) Total Installed Cost and Timing True-Up for Interest Calculation ³	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)
(17) Total Installed Cost and Timing True-Up with Interest	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)	(4,810,182)
(18) Less Estimated True-Up Included in Mid-Course Factors ²	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(19) Final Net True-Up Amount to Be Collected in the Capacity Clause in 2021	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761
(20) Total	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761	693,761

(21) ¹ Calculated at the AFUDC rate for the projects, 6.46%.
(22) ² Estimated true-up amount of \$4,856,329 included in the capacity clause in February 2020 and in June through December 2020 mid-course capacity factors.
(23) ³ Amount for interest calculation reflects return of estimated true-up through the 2020 mid-course capacity factors.

**Tampa Electric
Installed Cost Revenue Requirement True-up**
(A)

	(B) Annual (\$)	(C) Monthly (\$)
	<u> </u>	<u> </u>
(1) First SoBRA ¹	97,000	8,083
(2) Second SoBRA ²	<u>(174,000)</u>	<u>(14,500)</u>
(3) Net First and Second SoBRA ²	<u><u>(77,000)</u></u>	<u><u>(6,417)</u></u>

¹ Effective September 2018
² Effective January 2019

**Tampa Electric
In-Service Date (Timing) True-Up**

	<u>(\$)</u>
(4) First SoBRA ¹	(1,100,102)
(5) Second SoBRA ²	<u>(3,390,586)</u>
(6) Net First and Second SoBRA ²	<u><u>(4,490,688)</u></u>

¹ Effective September 2018
² Effective January 2019

Tampa Electric
In-Service Date (Timing) True-Up Calculation

(A) (B) (C) (D) (E) (F) (G) (H) (I) (J) (K) (L) (M) (N) (O)

First SoBRA

Project	Estimated Annual Revenue Requirements (\$MM)	Portion of SoBRA Revenue Requirements	Estimated In-Service Date	Actual In-Service Date	# Days Delayed	September 2018 Estimated Revenue True-Up (\$)	
						Revenue	Requirement
(1) Balm Solar	12.937	53.4%	9/1/2018	9/27/2018	26	1,269,349	1,100,102
(2) Payne Creek Solar	11.308	46.6%	9/1/2018	9/1/2018	0	1,109,515	-
(3)							
(4) Total	24.245	100%				2,378,864	1,100,102
(5)							
(6)							

Second SoBRA

Project	Estimated Annual Revenue Requirements (\$MM)	Portion of SoBRA Revenue Requirements	Estimated In-Service Date	Actual In-Service Date	# Days Delayed	2019 Estimated Revenue					Total	
						January	February	March	April	Revenue Requirement True-Up		
(10) Lithia Solar	13.291	28.9%	1/1/2019	1/1/2019	0	1,013,548	920,576	902,450	953,932	-	-	-
(11) Grange Hill Solar	10.611	23.0%	1/1/2019	1/2/2019	1	809,150	734,928	720,457	761,557	-	-	26,102
(12) Peace Creek Solar	9.868	21.4%	1/1/2019	3/1/2019	59	752,461	683,439	689,981	708,202	-	-	1,435,900
(13) Bonnie Mine Solar	6.601	14.3%	1/1/2019	1/23/2019	22	503,356	457,184	448,181	473,749	-	-	357,220
(14) Lake Hancock Solar	5.674	12.3%	1/1/2019	4/25/2019	114	432,645	392,959	385,222	407,198	-	-	1,571,364
(15)												
(16)												
(17) Total	46.045	100%				3,511,161	3,189,085	3,126,291	3,304,638	1,568,429	1,076,398	3,390,586
(18)												

TAMPA ELECTRIC COMPANY
DOCKET NO. 2020_____-EI
EXHIBIT NO. _____ (JSC-1)
DOCUMENT NO. 2
FILED: 04/30/2020

**LIQUIDATED DAMAGES APPORTIONED
TO
FIRST AND SECOND SOBRA PROJECTS**

Tampa Electric
 SoBRA Projects Liquidated Damages Summary

(A) Project Timing Summary:	(B)	(C) MW	(D) Planned In-Service Date	(E) Actual In-Service Date	(F) Planned Substantial Completion	(G) Actual Substantial Completion	(H) Planned Commercial Operation	(I) Actual Commercial Operation
--------------------------------	-----	-----------	--------------------------------	-------------------------------	---------------------------------------	--------------------------------------	-------------------------------------	------------------------------------

(1) First SoBRA								
(2) Payne Creek		70.3	9/1/2018	9/1/2018				
(3) Balim		74.4	9/1/2018	9/27/2018				
(4)								
(5) Second SoBRA								
(6) Lithia		74.5	1/1/2019	1/1/2019				
(7) Grange Hall		61.1	1/1/2019	1/2/2019				
(8) Bonnie Mine ¹		37.5	1/1/2019	1/23/2019				
(9) Peace Creek		55.4	1/1/2019	3/1/2019				
(10) Lake Hancock ²		31.8	1/1/2019	4/25/2019				

(11) 1 - Bonnie Mine contractual liquidated damages start past commercial operation date.
 (12) 2 - Total Lake Hancock is 49.6 MW. The SoBRA portion is 31.8 MW. The Community Solar portion is 17.8 MW.

Liquidated Damages Received:

(17) Date	(18) Counterparty	(19) Assignment Location	(20) Amount
(17) 12/10/2018			
(18) 3/4/2019			
(19) 3/4/2019			
(20) 3/28/2019			
(21) 4/12/2019			
(22) 3/26/2019			
(23) 5/14/2019			
(24) Total			\$ 9,170,565

Liquidated Damages Assigned:

(28) Tranche 1	(29) Liquidated Damages Assigned	(30) Offset Lost Revenue	(31) Sub-Assignment	(32) Reduce Capital
(28) Payne Creek				
(29) Balim				
(30)				
(31) Tranche 2				
(32) Lithia				
(33) Grange Hall				
(34) Bonnie Mine ¹				
(35) Peace Creek				
(36) Lake Hancock ²				
(37)				
(38)				
(39)				
(40)				
(41)				
(42)				
(43) Total	9,170,565	4,450,245		4,720,320



BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 2020_____ -EI
IN RE: PETITION BY TAMPA ELECTRIC COMPANY
FOR A LIMITED PROCEEDING TO TRUE-UP FIRST
AND SECOND SOBRAS

PREPARED DIRECT TESTIMONY AND EXHIBIT
OF
WILLIAM R. ASHBURN

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **PREPARED DIRECT TESTIMONY**

3 **OF**

4 **WILLIAM R. ASHBURN**

5
6 **Q.** Please state your name, address, occupation and employer.

7
8 **A.** My name is William R. Ashburn. My business address is 702
9 N. Franklin Street, Tampa, Florida 33602. I am employed
10 by Tampa Electric Company ("Tampa Electric" or "company")
11 as Director, Pricing and Financial Analysis.

12
13 **Q.** Please provide a brief outline of your educational
14 background and business experience.

15
16 **A.** I graduated from Creighton University with a Bachelor
17 of Science degree in Business Administration. Upon
18 graduation, I joined Ebasco Business Consulting Company
19 where my consulting assignments included the areas of cost
20 allocation, computer software development, electric
21 system inventory and mapping, cost of service filings
22 and property record development. I joined Tampa Electric
23 in 1983 as a Senior Cost Consultant in the Rates and
24 Customer Accounting Department. At Tampa Electric I have
25 held a series of positions with responsibility for cost

1 of service studies, rate filings, rate design,
2 implementation of new conservation and marketing
3 programs, customer surveys and various state and federal
4 regulatory filings. In March 2001, I was promoted to my
5 current position of Director, Pricing and Financial
6 Analysis in Tampa Electric's Regulatory Affairs
7 Department. I am a member of the Rate and Regulatory
8 Affairs Committee of the Edison Electric Institute
9 ("EEI").

10
11 **Q.** Have you previously testified before the Commission?

12
13 **A.** Yes. I have testified or filed testimony before this
14 Commission in several dockets. Most recently I testified
15 for Tampa Electric in Docket No. 20170260-EI during the
16 hearing on the company's First Solar Base Rate Adjustment
17 ("SoBRA"). I testified in Docket No. 20170210-EI as a
18 member of a panel of witnesses during the November 6, 2017
19 hearing on the 2017 Amended and Restated Stipulation and
20 Settlement Agreement ("2017 Agreement"). I submitted
21 direct testimony in Docket No. 20180133-EI, petition for
22 limited proceeding to approve Second Solar Base Rate
23 Adjustment, effective January 1, 2019, by Tampa Electric
24 Company ("Second SoBRA"). I also submitted testimony in
25 Docket No. 20190136-EI, petition for limited proceeding

1 to approve Third Solar Base Rate Adjustment, effective
2 January 1, 2020, by Tampa Electric Company.

3
4 I testified on behalf of Tampa Electric in Docket No.
5 20130040-EI regarding the company's Petition for an
6 Increase in Base Rates and Miscellaneous Service Charges
7 and in Docket No. 20080317-EI which was Tampa Electric's
8 previous base rate proceeding. I testified in Docket No.
9 20020898-EI regarding a self-service wheeling experiment
10 and in Docket No. 20000061-EI regarding the company's
11 Commercial/Industrial Service Rider. In Docket Nos.
12 20000824-EI, 20001148-EI, 20010577-EI and 20020898-EI, I
13 testified at different times for Tampa Electric and as a
14 joint witness representing Tampa Electric, Florida Power
15 & Light Company ("FP&L") and Progress Energy Florida, Inc.
16 ("PEF") regarding rate and cost support matters related
17 to the GridFlorida proposals. In addition, I represented
18 Tampa Electric numerous times at workshops and in other
19 proceedings regarding rate, cost of service and related
20 matters. I have also provided testimony and represented
21 Tampa Electric before the Federal Energy Regulatory
22 Commission ("FERC") in rate and cost of service matters.

23
24 **Q.** What is the purpose of your prepared direct testimony?
25

1 **A.** The purpose of my prepared direct testimony is to sponsor
2 and explain the proposed rate treatment for the company's
3 First and Second SoBRA Revenue Requirement True-Up, which
4 the company proposes to be effective with the first
5 billing cycle in January 2021.

6
7 **Q.** Have you prepared an exhibit to support your direct
8 testimony?

9
10 **A.** Yes, Exhibit No. ____ (WRA-1) was prepared under my
11 direction and supervision. It demonstrates how the
12 revenue requirement of the First and Second SoBRA Revenue
13 Requirement True-Up would be allocated to rate classes.

14
15 **Q.** How does your prepared direct testimony relate to the
16 prepared direct testimony of the company's other three
17 witnesses?

18
19 **A.** Tampa Electric witness Mark D. Ward's direct testimony
20 describes the actual in-service dates and installed cost
21 for the Seven Projects in the company's First and Second
22 SoBRAs. Tampa Electric witness Jose A. Aponte uses the
23 actual installed project costs to calculate the revised
24 annual revenue requirement for the First and Second
25 SoBRAs. In my direct testimony, I explain how the revised

1 revenue requirement is allocated to customer rate classes
2 and discuss the impact of that allocation to permanent
3 customer rates. Tampa Electric witness Jeffrey S.
4 Chronister describes the True-up Credit related to: (1)
5 timing differences between the estimated and actual in-
6 service dates for the projects and (2) estimated and
7 actual installed costs. The final True-Up Amount will be
8 flowed through the capacity clause in 2021 pursuant to
9 the 2017 Agreement.

10
11 **2017 Agreement Guidance for SoBRA**

12 **Q.** Did you allocate the actual First and Second SoBRA revenue
13 requirements to rate classes as you did when calculating
14 the estimated First and Second SoBRA rates?

15
16 **A.** No. While in Docket Nos. 20170260-EI and 20180133-EI I
17 allocated the estimated First and Second SoBRA total
18 revenue requirements to rate classes using a method that
19 complies with the 2017 Agreement, as described in detail
20 in my direct testimony submitted in Docket Nos. 20170260-
21 EI, 20180133-EI and 20190136-EI, in the case of the true-
22 up a slight difference from that method was employed.

23
24 **Q.** What was that difference?
25

1 **A.** While the methodology employed was the same, I applied
2 the net revenue requirement difference between the
3 estimated and actual true-up revenue requirements, summed
4 together, to the method.

5
6 **Q.** Do you provide an exhibit that shows the results of
7 applying the allocation methodology called for in the 2017
8 Agreement?

9
10 **A.** Yes. My exhibit is provided for that purpose. That
11 document, titled "Development of First and Second SoBRA
12 Base Revenue Increases by Rate Class," shows how the
13 revenue requirements associated with the annual revenue
14 requirement true ups described in witness Aponte's direct
15 testimony were allocated to the rate classes. The document
16 shows how the net \$(77,000) difference from the
17 combination of SoBRA Tranche 1 and 2 true ups are
18 allocated across rate classes.

19
20 **Proposed Rates and Tariffs for SoBRA**

21 **Q.** Having completed the allocation of the First and Second
22 SoBRA true-up revenue requirement to rate classes, what
23 is the next step to derive the proposed impact to base
24 rates?

25

1 **A.** As shown in my Document No. 1, the \$77,000 reduction is
2 spread over all the rate classes as required by the 2017
3 Settlement Agreement. The \$(77,000) true-up difference
4 represents a *de minimis* amount. The true-up amount is so
5 small that there is not enough increase in any rate class
6 to result in a change to any of the least digits of the
7 rate levels from the original filed rates. For example,
8 the residential class allocation is \$(43,000). The
9 residential energy rate utilizes five significant digits
10 and the \$(43,000) divided by the applicable residential
11 billing determinants would only change that energy rate
12 beyond the fifth significant digit. This same effect
13 occurs for all the other rate classes.

14
15 Given this result, and because Tampa Electric expects to
16 file its Fourth SoBRA petition in July 2020 to take effect
17 with customer bills beginning in January 2021 (the same
18 time as this First and Second SoBRA true-up is planned to
19 go into effect) the company proposes that the \$(77,000)
20 revenue requirement difference for the First and Second
21 SoBRA revenue requirement change be deducted from the
22 revenue requirement calculated for the Fourth SoBRA and
23 thus be reflected in the Fourth SoBRA base rates according
24 to the class revenue allocations shown in my exhibit.

25

1 **Summary**

2 **Q.** Please summarize your direct testimony.

3

4 **A.** I have performed the cost of service components of the
5 First and Second SoBRA base rate true-up adjustment in
6 accordance with the provisions of the 2017 Agreement. I
7 allocated the revised revenue requirements to rate
8 classes and proposed no base rate changes by rate class
9 in this docket. The company proposes that the \$(77,000)
10 revenue requirement change for the First and Second SoBRA
11 true-up be included in the revenue requirement recovery
12 and rate design for the Fourth SoBRA.

13

14 **Q.** Does this conclude your direct testimony?

15

16 **A.** Yes, it does.

17

18

19

20

21

22

23

24

25

EXHIBIT

OF

WILLIAM R. ASHBURN

Development of First and Second SoBRA True-Up

Base Revenue Increase

by Rate Class

TAMPA ELECTRIC COMPANY
DEVELOPMENT OF COST ALLOCATION FOR TRUE-UP OF SOBRA TRANCHE 1 AND 2 BY CLASS

		(\$'000)						
TRUE-UP TRANCHE 1 AND 2		(A)	(B)	(C)	(D)	(E)	(F)	(G)
12CP & 1/13 - All Demand		Adjusted Revenue Requirement(1)	Present Base Revenue(2)	Base Revenue Deficiency \$ (A) - (B)	Base Revenue Deficiency % (C) / (B)	Proposed Base Rev. Increase \$	Proposed Base Rev. Increase % (E) / (B)	2020 Targeted Base Revenue (B) + (E)
1	I. Residential (RS,RSVP)	\$ 646,653	\$ 646,696	\$ (43)	-0.01%			
2								
3	II. General Service							
4	Non-Demand (GS,CS)	68,471	68,475	(4)	-0.01%			
5								
6								
7	Sub-Total: I. + II.	\$ 715,124	\$ 715,171	\$ (47)	-0.01%	\$ (47)	-0.01%	\$ 715,124
8								
9								
10	III. General Service							
11	Demand (GSD, SBF)	343,281	343,308	(27)	-0.01%	\$ (27)	-0.01%	\$ 343,281
12								
13	IV. Interruptible Service (IS/SBI)	24,270	24,272	(2)	-0.01%	\$ (2)	-0.01%	\$ 24,270
14								
15								
16								
17	V. Lighting (LS-1)							
18								
19	A. - Energy	\$ 3,882	3,882	(0)	0.00%	\$ (0)	0.00%	\$ 3,882
20								
21	B. - Facilities	43,545	43,545	-	0.00%	\$ -	0.00%	\$ 43,545
22								
23								
24	Total	\$ 1,130,101	\$ 1,130,178	\$ (77)	-0.01%	\$ (77)	-0.01%	\$ 1,130,101
25								
26								
27			\$ (77)					

(1) The Adjusted Revenue Requirement column reflects a decrease of \$77,000 net true-up for SoBRA 1 and 2 revenues based on each class's percentage of 12 CP & 1/13th allocator and a 40% allocation to lighting service.

2020
12 CP & 1/13 Allocation

(77)

		Lighting allocation spread over other classes			
\$000	%	Lighting Share Reallocation FINAL RR \$000	%	Lighting Share Reallocation FINAL RR \$000	%
(43)	56.411%	(0)	56.53%	(43)	56.53%
(4)	5.157%	(0)	5.17%	(4)	5.17%
	61.568%				
(27)	35.640%	(0)	35.71%	(27)	35.71%
(2)	2.590%	(0)	2.60%	(2)	2.60%
(0)	0.201%			0	
(77)	100.00%	(0)	100%	(77)	100%

TAMPA ELECTRIC COMPANY
DOCKET NO. 2020_____-EI
EXHIBIT NO. ____ (WRA-1)
WITNESS: ASHBURN
DOCUMENT NO. 1
PAGE 2 OF 2
FILED: 04/30/2020