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March 2, 2020

**VIA: ELECTRONIC FILING**

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

Re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor; FPSC Docket No. 20200001-EI

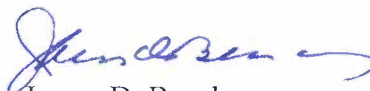
Dear Mr. Teitzman:

Attached for filing in the above docket on behalf of Tampa Electric Company are the following:

1. Tampa Electric Company's Petition for Approval of Fuel Cost Recovery and Capacity Cost Recovery Net True-Ups for the Twelve Month Period Ending December 2019.
2. Tampa Electric Company's Prepared Direct Testimony and Exhibit (PAR-1) of Penelope A. Rusk regarding Fuel and Purchased Power Cost Recovery and Capacity Cost Recovery Final True-Up for the period January 2019 through December 2019.
3. Tampa Electric Company's Prepared Direct Testimony and Exhibit (JCH-1) of John C. Heisey regarding the 2019 results of Tampa Electric's activities under the company's Commission approved Asset Optimization Mechanism.

Thank you for your assistance in connection with this matter.

Sincerely,

  
James D. Beasley

JDB/bmp  
Attachments

cc: All Parties of Record (w/attachments)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Fuel and Purchased Power )  
Cost Recovery Clause and Generating )  
Performance Incentive Factor. )  
\_\_\_\_\_ )

DOCKET NO. 20200001-EI  
FILED: March 2, 2020

**TAMPA ELECTRIC COMPANY'S PETITION FOR APPROVAL OF FUEL AND CAPACITY COST RECOVERY NET TRUE-UPS AND OPTIMIZATION MECHANISM RESULTS FOR THE TWELVE-MONTH PERIOD ENDING DECEMBER 2019**

Tampa Electric Company ("Tampa Electric" or "the company") hereby petitions this Commission for approval of the company's net fuel and purchased power cost recovery true-up amount of \$35,821,098 over-recovery, net capacity cost recovery true-up amount of \$111,228 over-recovery, and Tampa Electric's Optimization Mechanism incentive in the amount of \$1,180,820, for the twelve-month period ending December 2019. In support of this Petition, Tampa Electric states as follows:

1. The \$35,821,098 net fuel and purchased power true-up over-recovery for the period January 2019 through December 2019 was calculated in accordance with the methodology set forth in Schedule 1, page 2 of 2, attached to Order No. 10093, dated June 19, 1981. This calculation and the supporting documentation are contained in the prepared testimony and exhibit of Tampa Electric witness Penelope A. Rusk, which are being filed together with this Petition and are incorporated herein by reference.

2. By Order No. PSC-2019-0484-FOF-EI, the Commission approved fuel factors for the period commencing January 2020. These factors reflected an actual/estimated true-up under-recovery, including interest, for the period January 2019 through December 2019 of \$30,742,026 which was also approved in Order No. PSC-2019-0484-FOF-EI. The actual over-recovery,

including interest, for the period January 2019 through December 2019 is \$5,079,072. The \$5,079,072 actual over-recovery, plus the estimated under-recovery of \$30,742,026 which is currently reflected in charges for the period beginning January 2020, results in a net fuel true-up over-recovery of \$35,821,098 that is to be included in the calculation of the fuel factors for the period beginning January 2021.

3. The \$111,228 net capacity true-up over-recovery amount for the period January 2019 through December 2019 was calculated in accordance with the methodology set forth in Order No. 25773, dated February 24, 1992. This calculation and the supporting documentation are contained in the prepared direct testimony and exhibit of Tampa Electric witness Penelope A. Rusk.

4. By Order No. PSC-2017-0456-S-EI, issued November 27, 2017, in Docket Nos. 20170210-EI and 20160160-EI, the Commission approved the company's Optimization Mechanism for a four year term beginning January 1, 2018 with the following sharing thresholds: (a) up to \$4.5 million per year, 100% of the gain is allocated to customers; (b) greater than \$4.5 million per year and less than \$8 million per year, 60% is allocated to shareholders and 40% is allocated to customers; and (c) greater than \$8.0 million per year, 50% allocated to shareholders and 50% allocated to customers. The calculation and supporting documentation for the Optimization Mechanism results are contained in the prepared testimony and exhibit of Tampa Electric witness John C. Heisey, which are being filed together with this Petition and are incorporated herein by reference. Tampa Electric's share of the incremental gains is \$1,180,820, which is to be included in the calculation of the Fuel Cost Recovery Factors for the period beginning January 2021.

WHEREFORE, Tampa Electric Company respectfully requests the Commission to approve the company's net fuel true-up amount of \$35,821,098 over-recovery and Optimization Mechanism incentive sharing amount of \$1,180,820 and authorize the inclusion of these amounts in the calculation of the fuel factors for the period beginning January 2021; and to approve Tampa Electric's net capacity true-up amount of \$111,228 over-recovery and authorize the inclusion of this amount in the calculation of the capacity factors for the period beginning January 2021.

DATED this 2<sup>nd</sup> day of March 2020.

Respectfully submitted,



---

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ATTORNEYS FOR TAMPA ELECTRIC COMPANY

## CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Petition for Approval of Fuel and Capacity Cost Recovery Net True-Ups and Optimization Mechanism Results for the Twelve-Month Period Ending December 2019 has been furnished by electronic mail on this 2nd day of March 2020 to the following:

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\_\_\_\_\_  
ATTORNEY



**BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION**

**DOCKET NO. 20200001-EI  
FUEL & PURCHASED POWER COST RECOVERY  
AND  
CAPACITY COST RECOVERY**

**2019 FINAL TRUE-UP  
TESTIMONY AND EXHIBITS**

**PENELOPE A. RUSK**

**FILED: MARCH 2, 2020**

1                                   **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2                                   **PREPARED DIRECT TESTIMONY**

3                                   **OF**

4                                   **PENELOPE A. RUSK**

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

7  
8   **A.**   My name is Penelope A. Rusk. My business address is 702  
9           North Franklin Street, Tampa, Florida 33602. I am employed  
10          by Tampa Electric Company ("Tampa Electric" or "company")  
11          in the position of Director, Regulatory Affairs in the  
12          Regulatory Affairs Department.

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

16  
17   **A.**   I received a Bachelor of Arts degree in Economics from  
18          the University of New Orleans in 1995, and I received a  
19          Master of Arts degree in Economics from the University of  
20          South Florida in Tampa in 1997. I joined Tampa Electric  
21          in 1997, as an Economist in the Load Forecasting  
22          Department. In 2000, I joined the Regulatory Affairs  
23          Department, where I assumed positions of increasing  
24          responsibility over time. My current position is Director  
25          of Regulatory Affairs. At Tampa Electric, I have



1 accumulated over 20 years of electric utility experience  
2 in the areas of load forecasting; management of the fuel  
3 and purchased power, capacity, and environmental cost  
4 recovery clauses; rate setting and rate filings; and  
5 regulatory project management activities. I also oversee  
6 the coordination and filing of all Tampa Electric and  
7 Peoples Gas filings with federal and state regulatory  
8 agencies. I am a member of the Southeastern Electric  
9 Exchange Rates and Regulation Committee.

10  
11 **Q.** What is the purpose of your testimony?  
12

13 **A.** The purpose of my testimony is to present, for the  
14 Commission's review and approval, the final true-up  
15 amounts for the period January 2019 through December 2019  
16 for the Fuel and Purchased Power Cost Recovery Clause  
17 ("Fuel Clause") and the Capacity Cost Recovery Clause  
18 ("Capacity Clause"), as well as the Optimization  
19 Mechanism gain sharing allocation for the period.  
20

21 **Q.** What is the source of the data which you will present by  
22 way of testimony or exhibit in this process?  
23

24 **A.** Unless otherwise indicated, the actual data is taken from  
25 the books and records of Tampa Electric. The books and

1 records are kept in the regular course of business in  
2 accordance with generally accepted accounting principles  
3 and practices and provisions of the Uniform System of  
4 Accounts as prescribed by the Florida Public Service  
5 Commission ("Commission").  
6

7 **Q.** Have you prepared an exhibit in this proceeding?  
8

9 **A.** Yes. Exhibit No. PAR-1, consisting of five documents which  
10 are described later in my testimony, was prepared under  
11 my direction and supervision.  
12

13 **Capacity Cost Recovery Clause**

14 **Q.** What is the final true-up amount for the Capacity Clause  
15 for the period January 2019 through December 2019?  
16

17 **A.** The final true-up amount for the Capacity Clause for the  
18 period January 2019 through December 2019 is an over-  
19 recovery of \$111,228.  
20

21 **Q.** Please describe Document No. 1 of your exhibit.  
22

23 **A.** Document No. 1, page 1 of 4, entitled "Tampa Electric  
24 Company Capacity Cost Recovery Clause Calculation of  
25 Final True-up Variances for the Period January 2019

1 Through December 2019", provides the calculation for the  
2 final over-recovery of \$111,228. The actual capacity cost  
3 under-recovery, including interest, was \$2,067,989 for  
4 the period January 2019 through December 2019 as  
5 identified in Document No. 1, pages 1 and 2 of 4. This  
6 amount, less the \$2,179,217 actual/estimated under-  
7 recovery approved in Order No. PSC-2019-0484-FOF-EI  
8 issued November 18, 2019 in Docket No. 20190001-EI,  
9 results in a final over-recovery of \$111,228 for the  
10 period, as identified in Document No. 1, page 4 of 4. This  
11 amount will be applied to the calculation of the capacity  
12 cost recovery factors for the period January 2021 through  
13 December 2021.

14  
15 **Q.** What is the estimated effect of this \$111,228 over-  
16 recovery for the January 2019 through December 2019 period  
17 on residential bills during the January 2021 through  
18 December 2021 period?

19  
20 **A.** The \$111,228 over-recovery will decrease a 1,000 kWh  
21 residential bill by approximately \$0.01.

22  
23 **Fuel and Purchased Power Cost Recovery Clause**

24 **Q.** What is the final true-up amount for the Fuel Clause for  
25 the period January 2019 through December 2019?

1     **A.**    The final Fuel Clause true-up for the period January 2019  
2            through December 2019 is an over-recovery of \$35,821,098.  
3            The actual fuel cost over-recovery, including interest,  
4            was \$5,079,072 for the period January 2019 through  
5            December 2019. This \$5,079,072 amount, plus the  
6            \$30,742,026 projected under-recovery amount approved in  
7            Order No. PSC-2019-0484-FOF-EI, issued November 18, 2019  
8            in Docket No. 20190001-EI, results in a net over-recovery  
9            amount for the period of \$35,821,098.

10  
11    **Q.**    What is the estimated effect of the \$35,821,098 over-  
12            recovery for the January 2019 through December 2019 period  
13            on residential bills during the January 2021 through  
14            December 2021 period?

15  
16    **A.**    The \$35,821,098 over-recovery will decrease a 1,000 kWh  
17            residential bill by approximately \$1.84.

18  
19    **Q.**    Please describe Document No. 2 of your exhibit.

20  
21    **A.**    Document No. 2 is entitled "Tampa Electric Company Final  
22            Fuel and Purchased Power Over/(Under) Recovery for the  
23            Period January 2019 Through December 2019." It shows the  
24            calculation of the final fuel over-recovery of  
25            \$35,821,098.

1 Line 1 shows the total company fuel costs of \$574,069,880  
2 for the period January 2019 through December 2019. The  
3 jurisdictional amount of total fuel costs is  
4 \$574,069,880, as shown on line 2. This amount is compared  
5 to the jurisdictional fuel revenues applicable to the  
6 period on line 3 to obtain the actual over-recovered fuel  
7 costs for the period, shown on line 4. The resulting  
8 \$9,140,612 over-recovered fuel costs for the period,  
9 adjustments, interest, true-up collected, and the prior  
10 period true-up shown on lines 5 through 8 respectively,  
11 constitute the actual over-recovery amount of \$5,079,072  
12 shown on line 9. The \$5,079,072 actual over-recovery  
13 amount plus the \$30,742,026 projected under-recovery  
14 amount shown on line 10, results in a final over-recovery  
15 amount of \$35,821,098 for the period January 2019 through  
16 December 2019, as shown on line 11.

17  
18 **Q.** Please describe Document No. 3 of your exhibit.

19  
20 **A.** Document No. 3 is entitled "Tampa Electric Company  
21 Calculation of True-up Amount Actual vs. Original  
22 Estimates for the Period January 2019 Through December  
23 2019." It shows the calculation of the actual over-  
24 recovery compared to the estimated under-recovery for the  
25 same period.

1 **Q.** What was the total fuel and net power transaction cost  
2 variance for the period January 2019 through December  
3 2019?  
4

5 **A.** As shown on line A7 of Document No. 3, the fuel and net  
6 power transaction cost is \$39,316,715 less than the amount  
7 originally estimated.  
8

9 **Q.** What was the variance in jurisdictional fuel revenues for  
10 the period January 2019 through December 2019?  
11

12 **A.** As shown on line C3 of Document No. 3, the company  
13 collected \$9,052,449, or 1.6 percent greater  
14 jurisdictional fuel revenues than originally estimated.  
15

16 **Q.** Please describe Document No. 4 of your exhibit.  
17

18 **A.** Document No. 4 contains Commission Schedules A1 and A2  
19 for the month of December and the year-end period-to-date  
20 summary of transactions for each of Commission Schedules  
21 A6, A7, A8, A9, as well as capacity information on  
22 Schedule A12.  
23

24 **Q.** Please describe Document No. 5 of your exhibit.  
25

1     **A.**     Document No. 5 provides the capital costs and fuel savings  
2             for the Big Bend Units 1-4 ignition conversion projects  
3             for the period January 2019 through December 2019. This  
4             document also contains the capital structure components  
5             and cost rates relied upon to calculate the revenue  
6             requirements rate of return on capital projects recovered  
7             through the fuel clause.

8  
9             The Big Bend Units 1-4 ignition conversion project capital  
10            costs, including depreciation and return, for the period  
11            are less than the fuel savings resulting from the project,  
12            and provide a net benefit to customers, as shown on  
13            Document No. 5, page 1, line 33. Therefore, the Big Bend  
14            Units 1-4 ignition conversion project capital costs  
15            should be recovered through the fuel clause in accordance  
16            with FPSC Order No. PSC-2014-0309-PAA-EI, issued in  
17            Docket No. 20140032-EI on June 12, 2014.

18  
19     **Q.**     Have you incorporated the Florida Corporate Income Tax  
20             Reduction, effective January 1, 2019, into the company's  
21             calculated revenue requirement?

22  
23     **A.**     Yes. The change in the corporate income tax rate, announced  
24             in September 2019 and retroactive to January 1, 2019,  
25             resulted in an adjustment to the capital cost recovery for

1 the Big Bend Units 1-4 ignition conversion project.  
2 Document No. 5 of my exhibit shows the adjustment on Page  
3 1, Line 26, and the original and post-state tax reform  
4 revenue requirement rate of return calculations are shown  
5 on Pages 2 through 5.

6  
7 **Optimization Mechanism**

8 **Q.** Was Tampa Electric's sharing of Optimization Mechanism  
9 gains allocated in accordance with FPSC Order No.  
10 PSC-2017-0456-S-EI, issued in Docket Nos. 20170210-EI and  
11 20160160-EI, on November 27, 2017?

12  
13 **A.** Yes. As shown in the testimony and exhibit of Tampa  
14 Electric witness John C. Heisey filed contemporaneously  
15 in this docket, the sharing of Optimization Mechanism  
16 gains was allocated in accordance with FPSC Order No.  
17 PSC-2017-0456-S-EI. Total gains were \$6,468,033. Under  
18 the sharing mechanism, Tampa Electric customers receive  
19 \$5,287,213, and the company earned an incentive of  
20 \$1,180,820 as a result of the company's Optimization  
21 Mechanism activities during 2019. Customers received the  
22 gains from these transactions during 2019, and Tampa  
23 Electric requests Commission approval to collect the  
24 company's \$1,180,820 incentive in its 2021 fuel factors.

25



1     **Q.**    Does this conclude your testimony?

2

3     **A.**    Yes.

4

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TAMPA ELECTRIC COMPANY

FUEL AND PURCHASED POWER COST RECOVERY

AND

CAPACITY COST RECOVERY

FUEL AND PURCHASED POWER COST RECOVERY  
AND  
CAPACITY COST RECOVERY  
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EXHIBIT TO THE TESTIMONY OF  
PENELOPE A. RUSK

DOCUMENT NO. 1

FINAL CAPACITY OVER/(UNDER)RECOVERY FOR  
JANUARY 2019 - DECEMBER 2019

TAMPA ELECTRIC COMPANY  
CAPACITY COST RECOVERY CLAUSE  
CALCULATION OF FINAL TRUE-UP VARIANCES  
FOR THE PERIOD JANUARY 2019 THROUGH DECEMBER 2019

1. Actual End-of-Period True-up: Over/(Under) Recovery	(\$2,067,989)
2. Less: Actual/Estimated Over/(Under) Recovery Per Order No. PSC-2019-0484-FOF-EI For the January 2019 Through December 2019 Period	<u>(2,179,217)</u>
3. Final True-up: Over/(Under) Recovery to Be Carried Forward to the January 2021 Through December 2021 Period	<u><b>\$111,228</b></u>

TAMPA ELECTRIC COMPANY  
CAPACITY COST RECOVERY CLAUSE  
CALCULATION OF FINAL TRUE-UP AMOUNT  
FOR THE PERIOD JANUARY 2019 THROUGH DECEMBER 2019

	Actual Jan-19	Actual Feb-19	Actual Mar-19	Actual Apr-19	Actual May-19	Actual Jun-19	Actual Jul-19	Actual Aug-19	Actual Sep-19	Actual Oct-19	Actual Nov-19	Actual Dec-19	Total
1 UNIT POWER CAPACITY CHARGES	20,134	6,889	69,936	43,759	24,484	84,447	43,140	22,065	79,173	53,246	34,456	4,679	486,408
2 CAPACITY PAYMENTS TO COGENERATORS	0	0	0	0	0	0	0	0	0	0	0	0	0
3 SCHEDULE J.D. & EMERG CAPACITY CHARGES	0	0	0	0	0	0	0	0	0	0	0	0	0
4 INCREMENTAL SECURITY O&M COSTS	0	0	0	0	0	0	0	0	0	0	0	0	0
5 (CAPACITY REVENUES)	(75,831)	(86,888)	(75,240)	(78,650)	(130,227)	(118,353)	(76,654)	(84,821)	(122,323)	(429,073)	(101,041)	(89,847)	(1,488,948)
6 TOTAL CAPACITY DOLLARS	(55,697)	(79,999)	(5,304)	(34,891)	(105,743)	(33,906)	(33,514)	(72,756)	(43,150)	(375,827)	(66,585)	(95,168)	(1,002,540)
7 JURISDICTIONAL PERCENTAGE	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000
8 JURISDICTIONAL CAPACITY DOLLARS	(55,697)	(79,999)	(5,304)	(34,891)	(105,743)	(33,906)	(33,514)	(72,756)	(43,150)	(375,827)	(66,585)	(95,168)	(1,002,540)
9 CAPACITY COST RECOVERY REVENUES (Net of Revenue Taxes)	1,240,565	1,244,911	1,212,875	(85,626)	(102,382)	(164,985)	(163,975)	(152,332)	(178,316)	(154,165)	(139,644)	(117,798)	2,439,128
10 PRIOR PERIOD TRUE-UP PROVISION	(232,082)	(232,082)	(232,082)	(128,947)	(128,947)	(128,947)	(128,947)	(128,947)	(128,947)	(128,947)	(128,947)	(128,951)	(1,856,773)
11 CAPACITY COST RECOVERY REVENUES APPLICABLE TO CURRENT PERIOD (Net of Revenue Taxes)	1,008,483	1,012,829	980,793	(214,573)	(231,329)	(293,932)	(292,922)	(281,279)	(307,263)	(283,112)	(268,591)	(246,749)	582,355
12 TRUE-UP PROVISION FOR PERIOD OVER/(UNDER) RECOVERY (Line 11 - Line 8)	1,064,180	1,092,828	986,097	(179,682)	(125,586)	(260,026)	(259,408)	(208,523)	(264,113)	92,715	(202,006)	(151,581)	1,584,895
13 INTEREST PROVISION FOR PERIOD	(9,670)	(7,055)	(4,581)	(3,416)	(3,404)	(3,451)	(3,486)	(3,486)	(3,552)	(3,132)	(2,724)	(2,834)	(50,771)
14 OTHER ADJUSTMENT	0	0	0	0	0	0	0	0	0	0	0	0	0
15 TRUE-UP AND INT. PROVISION BEGINNING OF PERIOD - OVER/(UNDER) RECOVERY	(5,458,886)	(4,172,294)	(2,854,439)	(1,640,841)	(1,694,992)	(1,695,035)	(1,829,565)	(1,963,512)	(2,046,554)	(2,185,272)	(1,966,742)	(2,042,525)	(5,458,886)
16 PRIOR PERIOD TRUE-UP PROVISION COLLECTED/(REFUNDED) THIS PERIOD	232,082	232,082	232,082	128,947	128,947	128,947	128,947	128,947	128,947	128,947	128,947	128,951	1,856,773
17 END OF PERIOD TRUE-UP - OVER/(UNDER) RECOVERY ( SUM OF LINES 12 - 16)	(4,172,294)	(2,854,439)	(1,640,841)	(1,694,992)	(1,695,035)	(1,829,565)	(1,963,512)	(2,046,554)	(2,185,272)	(1,966,742)	(2,042,525)	(2,067,989)	(2,067,989)

TAMPA ELECTRIC COMPANY  
CAPACITY COST RECOVERY CLAUSE  
CALCULATION OF FINAL TRUE-UP AMOUNT  
FOR THE PERIOD JANUARY 2019 THROUGH DECEMBER 2019

	Actual Jan-19	Actual Feb-19	Actual Mar-19	Actual Apr-19	Actual May-19	Actual Jun-19	Actual Jul-19	Actual Aug-19	Actual Sep-19	Actual Oct-19	Actual Nov-19	Actual Dec-19	Total
1 BEGINNING TRUE-UP AMOUNT	(5,458,886)	(4,172,294)	(2,854,439)	(1,640,841)	(1,694,992)	(1,695,035)	(1,829,565)	(1,963,512)	(2,046,554)	(2,185,272)	(1,966,742)	(2,042,525)	(5,458,886)
2 ENDING TRUE-UP AMOUNT BEFORE INTEREST ( LINE 1 + LINE 2 )	(4,162,624)	(2,847,384)	(1,636,260)	(1,691,576)	(1,691,631)	(1,826,114)	(1,960,026)	(2,043,088)	(2,181,720)	(1,963,610)	(2,039,801)	(2,065,155)	(2,017,218)
3 TOTAL BEGINNING & ENDING TRUE-UP AMT. ( LINE 1 + LINE 2 )	(9,621,510)	(7,019,678)	(4,490,699)	(3,332,417)	(3,386,623)	(3,521,149)	(3,789,591)	(4,006,600)	(4,228,274)	(4,148,882)	(4,006,543)	(4,107,680)	(7,476,104)
4 AVERAGE TRUE-UP AMOUNT ( 50% OF LINE 3 )	(4,810,755)	(3,509,839)	(2,245,350)	(1,666,209)	(1,693,312)	(1,760,575)	(1,894,796)	(2,003,300)	(2,114,137)	(2,074,441)	(2,003,272)	(2,053,840)	(3,738,052)
5 INTEREST RATE % - 1ST DAY OF MONTH	2.420	2.410	2.410	2.480	2.430	2.390	2.320	2.100	2.050	1.970	1.660	1.600	NA
6 INTEREST RATE % - 1ST DAY OF NEXT MONTH	2.410	2.410	2.480	2.430	2.390	2.320	2.100	2.050	1.970	1.660	1.600	1.710	NA
7 TOTAL ( LINE 5 + LINE 6 )	4.830	4.820	4.890	4.910	4.820	4.710	4.420	4.150	4.020	3.630	3.260	3.310	NA
8 AVERAGE INTEREST RATE % ( 50% OF LINE 7 )	2.415	2.410	2.445	2.455	2.410	2.355	2.210	2.075	2.010	1.815	1.630	1.655	NA
9 MONTHLY AVERAGE INTEREST RATE % ( LINE 8/12 )	0.201	0.201	0.204	0.205	0.201	0.196	0.184	0.173	0.168	0.151	0.136	0.138	NA
10 INTEREST PROVISION ( LINE 4 X LINE 9 )	(9,670)	(7,055)	(4,581)	(3,416)	(3,404)	(3,451)	(3,486)	(3,466)	(3,552)	(3,132)	(2,724)	(2,834)	(50,771)

TAMPA ELECTRIC COMPANY  
CAPACITY COST RECOVERY CLAUSE  
CALCULATION OF FINAL TRUE-UP VARIANCES  
FOR THE PERIOD JANUARY 2019 THROUGH DECEMBER 2019

	(1)	(2)	(3)	(4)
	ACTUAL	ACTUAL/ ESTIMATED	VARIANCE (1) - (2)	% CHANGE (3)/(2)
1 UNIT POWER CAPACITY CHARGES	\$486,408	\$249,648	\$236,760	94.84%
2 CAPACITY PAYMENTS TO COGENERATORS	0	0	0	0.00%
3 SCHEDULE J & D CAPACITY CHARGES	0	0	0	0.00%
4 INCREMENTAL SECURITY O&M COSTS	0	0	0	0.00%
5 (CAPACITY REVENUES)	(1,488,948)	(1,130,376)	(358,572)	31.72%
6 TOTAL CAPACITY DOLLARS	(\$1,002,540)	(\$880,728)	(\$121,812)	13.83%
7 JURISDICTIONAL PERCENTAGE	100.00%	100.00%	0	0.00%
8 JURISDICTIONAL CAPACITY DOLLARS	(\$1,002,540)	(880,728)	(\$121,812)	13.83%
9 CAPACITY COST RECOVERY REVENUES (Net of Revenue Taxes)	2,439,128	2,456,085	(16,957)	-0.69%
10 PRIOR PERIOD TRUE-UP PROVISION	(1,856,773)	(1,856,773)	0	0.00%
11 CAPACITY COST RECOVERY REVENUES APPLICABLE TO CURRENT PERIOD (Net of Revenue Taxes)	\$582,355	\$599,312	(\$16,957)	-2.83%
12 TRUE-UP PROVISION FOR PERIOD OVER/(UNDER) RECOVERY (Line 11 - Line 8)	\$1,584,895	\$1,480,040	\$104,855	7.08%
13 INTEREST PROVISION FOR PERIOD	(50,771)	(57,144)	6,373	-11.15%
14 OTHER ADJUSTMENT	0	0	0	0.00%
15 TRUE-UP AND INT. PROVISION BEGINNING OF PERIOD - OVER/(UNDER) RECOVERY	(5,458,886)	(5,458,886)	0	0.00%
16 PRIOR PERIOD TRUE-UP PROVISION COLLECTED/(REFUNDED) THIS PERIOD	1,856,773	1,856,773	0	0.00%
17 END OF PERIOD TRUE-UP - OVER/(UNDER) RECOVERY ( SUM OF LINES 12 - 16)	(\$2,067,989)	(\$2,179,217)	\$111,228	-5.10%



EXHIBIT TO THE TESTIMONY OF  
PENELOPE A. RUSK

DOCUMENT NO. 2

FINAL FUEL AND PURCHASED POWER OVER/(UNDER)RECOVERY  
FOR  
JANUARY 2019 - DECEMBER 2019

TAMPA ELECTRIC COMPANY  
 FINAL FUEL AND PURCHASED POWER OVER/(UNDER) RECOVERY  
 FOR THE PERIOD  
 JANUARY 2019 THROUGH DECEMBER 2019

1 TOTAL FUEL COSTS FOR THE PERIOD	\$ 574,069,880
2 JURISDICTIONAL FUEL COSTS (INCL. ALL ADJUSTMENTS)	574,069,880
3 JURISDICTIONAL FUEL REVENUES APPLICABLE TO THE PERIOD	<u>583,210,492</u>
4 ACTUAL OVER/(UNDER) RECOVERED FUEL COSTS FOR THE PERIOD (LINE 3 - LINE 2)	\$ 9,140,612
5 ADJUSTMENTS	0
6 INTEREST	(882,221)
7 TRUE-UP COLLECTED	33,791,590
8 PRIOR PERIOD TRUE-UP (ACTUAL ENDING 12/18)	<u>(36,970,912)</u>
9 ACTUAL OVER/(UNDER) RECOVERY FOR THE PERIOD (LINE 4 + LINE 5 + LINE 6 + LINE 7 + LINE 8 )	\$ 5,079,072
10 PROJECTED OVER/(UNDER) RECOVERY PER PROJECTION FILED 9/3/19 (SCHEDULE E1-A LINE 6)	<u>(30,742,026)</u>
<b>11 FINAL FUEL OVER/(UNDER) RECOVERY (LINE 9 - LINE 10)</b>	<b><u>\$ 35,821,098</u></b>

EXHIBIT TO THE TESTIMONY OF  
PENELOPE A. RUSK

DOCUMENT NO. 3

ACTUAL FUEL AND PURCHASED POWER TRUE-UP

VS.

ORIGINAL ESTIMATES

JANUARY 2019 - DECEMBER 2019

TAMPA ELECTRIC COMPANY  
CALCULATION OF TRUE-UP AMOUNT  
ACTUAL vs. ORIGINAL ESTIMATES  
FOR THE PERIOD  
JANUARY 2019 THROUGH DECEMBER 2019

	ACTUAL	per Mid-Course ESTIMATED	VARIANCE AMOUNT	%
A 1. FUEL COST OF SYSTEM NET GENERATION	\$525,783,664	\$574,179,130	(\$48,395,466)	(8.4)
2. FUEL COST OF POWER SOLD	3,427,702	724,525	2,703,177	373.1
2a. GAINS FROM SALES	1,539,956	58,965	1,480,991	2,511.6
3. FUEL COST OF PURCHASED POWER	347,608	0	347,608	0.0
3a. DEMAND & NONFUEL COST OF PUR. PWR.	0	0	0	0.0
3b. PAYMENT TO QUALIFIED FACILITIES	4,685,865	2,641,870	2,043,995	77.4
4. ENERGY COST OF ECONOMY PURCHASES	43,757,439	32,887,040	10,870,399	33.1
6a. ADJ. - BIG BEND UNITS 1-4 IGNITERS CONVERSION PROJECT	4,462,962	4,462,045	917	0.0
6b. ADJ.	0	0	0	0.0
6c. ADJ.	0	0	0	0.0
7. ADJUSTED TOTAL FUEL & NET PWR. TRANS. (SUM OF LINES A1 THRU 6c)	\$574,069,880	\$613,386,595	(\$39,316,715)	(6.4)
C 1. JURISDICTIONAL FUEL REVENUE	\$614,741,063	\$605,688,614	\$9,052,449	1.5
2. FUEL ADJUSTMENT NOT APPLICABLE	0	0	0	0.0
2a. TRUE-UP PROVISION	(33,791,590)	(33,791,590)	0	0.0
2b. INCENTIVE PROVISION	2,261,019	2,261,019	0	0.0
2c. ADJUSTMENT	0	0	0	0.0
3. JURIS. FUEL REVENUE APPL. TO PERIOD (Sum of Lines C1 through C2c)	\$583,210,492	\$574,158,043	\$9,052,449	1.6
6d. JURISD. TOTAL FUEL & NET PWR. TRANS.	574,069,880	613,386,595	(39,316,715)	(6.4)
7. TRUE-UP PROV.- THIS PER. (LINE C3-C6d)	\$9,140,612	(\$39,228,552)	\$48,369,164	(123.3)
7a. ADJUSTMENTS	0	0	0	0.0
8. INTEREST PROVISION - THIS PERIOD	(882,221)	(653,962)	(228,259)	34.9
TOTAL TRUE-UP AMOUNT FOR PERIOD (LINE 7 through 8)	\$8,258,391	(\$39,882,514)	\$48,140,905	(120.7)
9. TRUE-UP & INT. PROV. BEG. OF PERIOD (Beginning January 2019)	(36,970,912)	7,015,485	(43,986,397)	(627.0)
10. TRUE-UP COLLECTED (REFUNDED)	33,791,590	33,791,590	0	0.0
11. END OF PERIOD TOTAL NET TRUE-UP (LINE C8 through C10)	\$5,079,072	\$924,561	\$4,154,511	449.3

EXHIBIT TO THE TESTIMONY OF  
PENELOPE A. RUSK

DOCUMENT NO. 4

FUEL AND PURCHASED POWER COST RECOVERY  
YTD DECEMBER 2019

SCHEDULES A1 AND A2

AND

SCHEDULES A6 THROUGH A9

AND

SCHEDULE A12

FUEL AND PURCHASED POWER COST RECOVERY  
SCHEDULES A1 AND A2

DECEMBER 2019

COMPARISON OF ESTIMATED AND ACTUAL  
FUEL AND PURCHASED POWER COST RECOVERY FACTOR  
TAMPA ELECTRIC COMPANY  
MONTH OF: December 2019

	\$		DIFFERENCE		MW		CENTS/KWH		DIFFERENCE			
	ACTUAL	ESTIMATED	AMOUNT	%	ACTUAL	ESTIMATED	ACTUAL	ESTIMATED	AMOUNT	%		
1. Fuel Cost of System Net Generation (A3)	38,838,646	44,322,631	(5,383,985)	-12.1%	1,441,903	1,528,930	(86,927)	-5.7%	2,70050	2,89912	(0.19862)	-6.9%
2. Spent Nuclear Fuel Disposal Cost	0	0	0	0.0%	0	0	0	0.0%	0.00000	0.00000	0.00000	0.0%
3. Coal Car Investment	0	0	0	0.0%	0	0	0	0.0%	0.00000	0.00000	0.00000	0.0%
4a. Adjustments - Big Bend Units 1-4 Igniters Conversion Project	360,100	359,827	273	0.1%	0	0	0	0.0%	0.00000	0.00000	0.00000	0.0%
4b. Adjustments - Polk 1 Conversion Depreciation & ROI	0	0	0	0.0%	0	0	0	0.0%	0.00000	0.00000	0.00000	0.0%
4c. Adjustments	0	0	0	0.0%	0	0	0	0.0%	0.00000	0.00000	0.00000	0.0%
<b>5. TOTAL COST OF GENERATED POWER (Lines 1 through 4c)</b>	<b>39,298,746</b>	<b>44,682,458</b>	<b>(5,383,712)</b>	<b>-12.0%</b>	<b>1,441,903</b>	<b>1,528,930</b>	<b>(86,927)</b>	<b>-5.7%</b>	<b>2,72548</b>	<b>2,92266</b>	<b>(0.19718)</b>	<b>-6.7%</b>
6. Fuel Cost of Purchased Power - Firm (A7)	3,051	0	3,051	0.0%	140	0	140	0.0%	2,17929	0.00000	2,17929	0.0%
7. Energy Cost of Sch C,X Econ. Purch. (Broker) (A8)	386,875	1,008,830	(621,955)	-61.7%	4,653	25,490	(20,837)	-81.7%	8,31453	3,95775	4,35678	110.1%
8. Energy Cost of Other Econ. Purch. (Non-Broker) (A9)	0	0	0	0.0%	0	0	0	0.0%	0.00000	0.00000	0.00000	0.0%
9. Energy Cost of Sch. E Economy Purchases (A9)	0	0	0	0.0%	0	0	0	0.0%	0.00000	0.00000	0.00000	0.0%
10. Capacity Cost of Sch. E Economy Purchases	0	0	0	0.0%	0	0	0	0.0%	0.00000	0.00000	0.00000	0.0%
11. Payments to Qualifying Facilities & Net Metering (A8)	245,117	194,890	50,227	25.8%	11,349	7,590	3,759	49.5%	2,15981	2,56772	(0.40791)	-15.9%
<b>12. TOTAL COST OF PURCHASED POWER (Lines 6 through 11)</b>	<b>635,043</b>	<b>1,203,720</b>	<b>(568,677)</b>	<b>-47.2%</b>	<b>16,142</b>	<b>33,080</b>	<b>(16,938)</b>	<b>-51.2%</b>	<b>3,93410</b>	<b>3,63881</b>	<b>0.29529</b>	<b>8.1%</b>
<b>13. TOTAL AVAILABLE KWH (LINE 5 + LINE 12)</b>												
14. Fuel Cost of Sch. D Jurisd. Sales (A6)	70,402	16,130	54,272	336.5%	3,248	590	2,658	450.5%	2,16755	2,73390	(0.56635)	-20.7%
15. Fuel Cost of Sch. C/CB Sales (A6)	0	0	0	0.0%	0	0	0	0.0%	0.00000	0.00000	0.00000	0.0%
16. Fuel Cost of OATT Sales (A6)	0	0	0	0.0%	0	0	0	0.0%	0.00000	0.00000	0.00000	0.0%
17. Fuel Cost of Market Base Sales (A6)	45,926	42,850	3,076	7.2%	2,141	1,200	941	78.4%	2,14507	3,57083	(1,42576)	-39.9%
18. Gains on Sales	16,319	5,099	11,220	220.0%								
<b>19. TOTAL FUEL COST AND GAINS OF POWER SALES</b> (LINE 14 + 15 + 16 + 17 + 18)	<b>132,647</b>	<b>64,079</b>	<b>68,568</b>	<b>107.0%</b>	<b>5,389</b>	<b>1,790</b>	<b>3,599</b>	<b>201.1%</b>	<b>2,46144</b>	<b>3,57983</b>	<b>(1,11839)</b>	<b>-31.2%</b>
20. Net Inadvertent Interchange												
21. Wheeling Rec'd. less Wheeling Deliv'd.												
22. Interchange and Wheeling Losses												
<b>23. TOTAL FUEL AND NET POWER TRANSACTIONS</b> (LINE 5 + 12 - 19 + 20 + 21 - 22)	<b>39,801,142</b>	<b>45,822,099</b>	<b>(6,020,957)</b>	<b>-13.1%</b>	<b>1,452,871</b>	<b>1,560,082</b>	<b>(107,211)</b>	<b>-6.9%</b>	<b>2,73948</b>	<b>2,93716</b>	<b>(0.19768)</b>	<b>-6.7%</b>
24. Net Unbilled	(396,157) (e)	1,497,540 (e)	(1,893,697)	-126.5%	(14,461)	50,986	(65,447)	-128.4%	2,73949	2,93716	(0.19767)	-6.7%
25. Company Use	86,075 (e)	91,052 (e)	(4,977)	-5.5%	3,142	3,100	42	1.4%	2,73950	2,93716	(0.19766)	-6.7%
26. T & D Losses	2,352,119 (e)	1,601,627 (e)	750,492	46.9%	85,860	54,530	31,330	57.5%	2,73948	2,93716	(0.19768)	-6.7%
27. System KWH Sales	39,801,142	45,822,099	(6,020,957)	-13.1%	1,378,330	1,451,466	(73,136)	-5.0%	2,88764	3,15695	(0.26932)	-8.5%
28. Wholesale KWH Sales	0	0	0	0.0%	0	0	0	0.0%	0.00000	0.00000	0.00000	0.0%
29. Jurisdictional KWH Sales	39,801,142	45,822,099	(6,020,957)	-13.1%	1,378,330	1,451,466	(73,136)	-5.0%	2,88764	3,15695	(0.26932)	-8.5%
30. Jurisdictional Loss Multiplier												
31. Jurisdictional KWH Sales Adjusted for Line Losses	39,801,142	45,822,099	(6,020,957)	-13.1%	1,378,330	1,451,466	(73,136)	-5.0%	1,00000	1,00000	0.00000	0.0%
32. Adjustment-BB Unit 2 Outage Replacement Power Cost T-up	0	0	0	0.0%	1,378,330	1,451,466	(73,136)	-5.0%	0.00000	0.00000	0.00000	0.0%
33. True-up *	3,949,494	3,949,494	0	0.0%	1,378,330	1,451,466	(73,136)	-5.0%	0.28654	0.27210	0.01444	5.3%
34. Total Jurisdictional Fuel Cost (Excl. GPFI)	43,750,636	49,771,593	(6,020,957)	-12.1%	1,378,330	1,451,466	(73,136)	-5.0%	3,17418	3,42906	(0.25488)	-7.4%
35. Revenue Tax Factor												
36. Fuel Cost Adjusted for Taxes (Excl. GPFI)	43,782,136	49,807,429	(6,025,293)	-12.1%	1,378,330	1,451,466	(73,136)	-5.0%	1,00072	1,00072	0.00000	0.0%
37. GPFI * (Already Adjusted for Taxes)	(188,421)	(188,421)	0	0.0%	1,378,330	1,451,466	(73,136)	-5.0%	3,17646	3,43153	(0.25507)	-7.4%
<b>38. Fuel Cost Adjusted for Taxes (Incl. GPFI)</b>	<b>43,593,715</b>	<b>49,619,008</b>	<b>(6,025,293)</b>	<b>-12.1%</b>	<b>1,278,330</b>	<b>1,451,466</b>	<b>(173,136)</b>	<b>-5.0%</b>	<b>3,16279</b>	<b>3,41855</b>	<b>(0.25576)</b>	<b>-7.5%</b>
<b>39. Fuel FAC Rounded to the Nearest .001 cents per KWH</b>									<b>3.163</b>	<b>3.419</b>	<b>(0.256)</b>	<b>-7.5%</b>

\* Based on Jurisdictional Sales (e) included for informational purposes only

COMPARISON OF ESTIMATED AND ACTUAL  
FUEL AND PURCHASED POWER COST RECOVERY FACTOR  
TAMPA ELECTRIC COMPANY  
PERIOD TO DATE THROUGH: December 2019

	\$		DIFFERENCE		MWH		CENTS/KWH		DIFFERENCE	
	ACTUAL	ESTIMATED	AMOUNT	%	ACTUAL	ESTIMATED	ACTUAL	ESTIMATED	AMOUNT	%
1. Fuel Cost of System Net Generation (A3)	525,783,664	574,179,130	(48,395,466)	-8.4%	19,464,414	19,485,150	0	0	(20,736)	-0.1%
2. Spent Nuclear Fuel Disposal Cost	0	0	0	0.0%	0	0	0	0	0	0.0%
3. Coal Car Investment	0	0	0	0.0%	0	0	0	0	0	0.0%
4a. Adjustments - Big Bend Units 1-4 Igniters Conversion Project	4,462,962	4,462,045	917	0.0%	0	0	0	0	0	0.0%
4b. Adjustments - Polk 1 Conversion Depreciation & ROI	0	0	0	0.0%	0	0	0	0	0	0.0%
4c. Adjustments	0	0	0	0.0%	0	0	0	0	0	0.0%
<b>5. TOTAL COST OF GENERATED POWER (Lines 1 through 4c)</b>	<b>530,246,626</b>	<b>578,641,175</b>	<b>(48,394,549)</b>	<b>-8.4%</b>	<b>19,464,414</b>	<b>19,485,150</b>	<b>0</b>	<b>0</b>	<b>(20,736)</b>	<b>-0.1%</b>
6. Fuel Cost of Purchased Power - Firm (A7)	347,608	0	347,608	0.0%	10,270	0	0	0	10,270	0.0%
7. Energy Cost of Sch C,X Econ. Purch. (Broker) (A8)	43,757,439	32,887,040	10,870,399	33.1%	1,234,844	894,370	340,474	38.1%	3,453,566	38.1%
8. Energy Cost of Other Econ. Purch. (Non-Broker) (A9)	0	0	0	0.0%	0	0	0	0.0%	0	0.0%
9. Energy Cost of Sch. E Economy Purchases (A9)	0	0	0	0.0%	0	0	0	0.0%	0	0.0%
10. Capacity Cost of Sch. E Economy Purchases	0	0	0	0.0%	0	0	0	0.0%	0	0.0%
11. Payments to Qualifying Facilities & Net Metering (A8)	4,685,865	2,641,870	2,043,995	77.4%	221,747	90,120	131,627	146.1%	2,931,50	221.7%
<b>12. TOTAL COST OF PURCHASED POWER (Lines 6 through 11)</b>	<b>48,790,912</b>	<b>35,528,910</b>	<b>13,262,002</b>	<b>37.3%</b>	<b>1,465,861</b>	<b>984,490</b>	<b>481,371</b>	<b>49.0%</b>	<b>4,947,110</b>	<b>49.0%</b>
<b>13. TOTAL AVAILABLE KWH (LINE 5 + LINE 12)</b>	<b>646,314</b>	<b>271,470</b>	<b>374,844</b>	<b>138.1%</b>	<b>32,666</b>	<b>10,330</b>	<b>22,336</b>	<b>216.2%</b>	<b>22,336</b>	<b>216.2%</b>
14. Fuel Cost of Sch. D Jurisd. Sales (A6)	0	0	0	0.0%	0	0	0	0.0%	0	0.0%
15. Fuel Cost of Sch. C/CB Sales (A6)	0	0	0	0.0%	0	0	0	0.0%	0	0.0%
16. Fuel Cost of OATT Sales (A6)	2,781,388	453,055	2,328,333	513.9%	122,535	11,990	110,545	922.0%	110,545	922.0%
17. Fuel Cost of Market Base Sales (A6)	1,539,956	58,965	1,480,991	2511.6%	0	0	0	0.0%	0	0.0%
18. Gains on Sales	4,967,668	783,490	4,184,168	534.0%	155,201	22,320	132,881	595.3%	132,881	595.3%
<b>19. TOTAL FUEL COST AND GAINS OF POWER SALES</b> (LINE 14 + 15 + 16 + 17 + 18)	<b>9,272,716</b>	<b>1,376,500</b>	<b>7,896,216</b>	<b>573.7%</b>	<b>278,392</b>	<b>33,320</b>	<b>245,072</b>	<b>720.3%</b>	<b>245,072</b>	<b>720.3%</b>
20. Net Inadvertent Interchange	0	0	0	0.0%	0	0	0	0.0%	0	0.0%
21. Wheeling Rec'd. less Wheeling Deliv'd.	32,391	0	32,391	0.0%	0	0	32,391	0.0%	32,391	0.0%
22. Interchange and Wheeling Losses	0	36,067	(36,067)	-100.0%	524	524	(35,543)	-67.8%	(35,543)	-67.8%
<b>23. TOTAL FUEL AND NET POWER TRANSACTIONS</b> (LINE 5 + 12 - 19 + 20 + 21 - 22)	<b>574,069,880</b>	<b>613,386,595</b>	<b>(39,316,715)</b>	<b>-6.4%</b>	<b>20,772,535</b>	<b>20,446,796</b>	<b>325,739</b>	<b>1.6%</b>	<b>325,739</b>	<b>1.6%</b>
24. Net Unbilled	(2,754,691) (a)	(583,069) (a)	(2,171,622)	372.4%	(73,907)	14,441	(88,348)	-611.8%	(88,348)	-611.8%
25. Company Use	1,050,461 (a)	1,127,927 (a)	(77,466)	-6.9%	37,790	37,200	590	1.6%	2,779,73	30.2%
26. T & D Losses	28,267,619 (a)	27,654,738 (a)	612,881	2.2%	1,025,086	912,723	112,363	12.3%	2,757,59	3.0%
27. System KWH Sales	574,069,880	613,386,595	(39,316,715)	-6.4%	19,783,566	19,482,432	301,134	1.5%	2,901,75	3.1%
28. Wholesale KWH Sales	0	0	0	0.0%	0	0	0	0.0%	0	0.0%
29. Jurisdictional KWH Sales	574,069,880	613,386,595	(39,316,715)	-6.4%	19,783,566	19,482,432	301,134	1.5%	2,901,75	3.1%
30. Jurisdictional Loss Multiplier	0	0	0	0.0%	0	0	0	0.0%	0	0.0%
31. Jurisdictional KWH Sales Adjusted for Line Losses	574,069,880	613,386,595	(39,316,715)	-6.4%	19,783,566	19,482,432	301,134	1.5%	2,901,75	3.1%
32. Adjustments - Schedule A2, page 2, lines 6c and 7a	0	0	0	0.0%	0	0	0	0.0%	0	0.0%
33. True-up *	33,791,590	33,791,590	0	0.0%	19,783,566	19,482,432	301,134	1.5%	0,170,81	0.9%
34. Total Jurisdictional Fuel Cost (Excl. GPFI)	607,861,470	647,178,185	(39,316,715)	-6.1%	19,783,566	19,482,432	301,134	1.5%	3,072,56	3.2%
35. Revenue Tax Factor	0	0	0	0.0%	0	0	0	0.0%	0	0.0%
36. Fuel Cost Adjusted for Taxes (Excl. GPFI)	608,299,130	647,644,153	(39,345,023)	-6.1%	19,783,566	19,482,432	301,134	1.5%	3,074,77	3.2%
37. GPFI * (Already Adjusted for Taxes)	(2,261,019)	(2,261,019)	0	0.0%	19,783,566	19,482,432	301,134	1.5%	(0,011,43)	-0.1%
<b>38. Fuel Cost Adjusted for Taxes (Incl. GPFI)</b>	<b>606,038,111</b>	<b>645,383,134</b>	<b>(39,345,023)</b>	<b>-6.1%</b>	<b>19,783,566</b>	<b>19,482,432</b>	<b>301,134</b>	<b>1.5%</b>	<b>3,063,34</b>	<b>3.2%</b>
<b>39. Fuel FAC Rounded to the Nearest .001 Cents per KWH</b>									<b>3.063</b>	<b>3.313</b>
									<b>(0.2450)</b>	<b>(0.250)</b>

\* Based on Jurisdictional Sales (a) included for informational purposes only



CALCULATION OF TRUE-UP AND INTEREST PROVISION  
TAMPA ELECTRIC COMPANY  
MONTH OF: December 2019

	CURRENT MONTH		PERIOD TO DATE			
	ACTUAL	ESTIMATED	ACTUAL	ESTIMATED		
			DIFFERENCE	DIFFERENCE		
			AMOUNT	AMOUNT		
			%	%		
<b>A. FUEL COST &amp; NET POWER TRANSACTION</b>						
1. FUEL COST OF SYSTEM NET GENERATION	38,938,646	44,322,631	(5,383,985)	574,179,130	(48,395,466)	-8.4%
1a. FUEL REL. R & D AND DEMO. COST	0	0	0	0	0	0.0%
2. FUEL COST OF POWER SOLD	116,328	58,980	57,348	724,525	2,703,177	373.1%
2a. GAINS FROM SALES	16,319	5,099	11,220	58,965	1,480,991	2511.6%
3. FUEL COST OF PURCHASED POWER	3,051	0	3,051	0	347,608	0.0%
3a. DEMAND & NONFUEL COST OF PUR. PWR.	0	0	0	0	0	0.0%
3b. PAYMENT TO QUALIFIED FACILITIES	245,117	194,890	50,227	2,641,870	2,043,995	77.4%
4. ENERGY COST OF ECONOMY PURCHASES	386,875	1,008,830	(621,955)	32,887,040	10,870,399	33.1%
5. TOTAL FUEL & NET POWER TRANSACTION	39,441,042	45,462,272	(6,021,230)	608,924,550	(39,317,632)	-6.5%
6a. ADJ. - BIG BEND UNITS 1-4 IGNITERS CONVERSION PROJECT	360,100	359,827	273	4,462,045	917	0.0%
6b. ADJUSTMENT	0	0	0	0	0	0.0%
6c. ADJUSTMENT	0	0	0	0	0	0.0%
7. ADJUSTED TOTAL FUEL & NET PWR. TRANS.	39,801,142	45,822,099	(6,020,957)	613,386,595	(39,316,715)	-6.4%
<b>B. MWH SALES</b>						
1. JURISDICTIONAL SALES	1,378,330	1,451,466	(73,136)	19,482,432	301,134	1.5%
2. NONJURISDICTIONAL SALES	0	0	0	0	0	0.0%
3. TOTAL SALES	1,378,330	1,451,466	(73,136)	19,482,432	301,134	1.5%
4. JURISDIC. SALES-% TOTAL MWH SALES	1.0000000	1.0000000	0.0000000	1.0000000	0.0000000	0.0%

CALCULATION OF TRUE-UP AND INTEREST PROVISION  
TAMPA ELECTRIC COMPANY  
MONTH OF: December 2019

	CURRENT MONTH			PERIOD TO DATE		
	ACTUAL	ESTIMATED	DIFFERENCE AMOUNT %	ACTUAL	ESTIMATED	DIFFERENCE AMOUNT %
<b>C. TRUE-UP CALCULATION</b>						
1. JURISDICTIONAL FUEL REVENUE	43,513,445	45,990,470	(2,477,025) -5.4%	614,741,063	605,688,614	9,052,449 1.5%
2. FUEL ADJUSTMENT NOT APPLICABLE	0	0	0 0.0%	0	0	0 0.0%
2a. TRUE-UP PROVISION	(3,949,494)	(3,949,494)	0 0.0%	(33,791,590)	(33,791,590)	0 0.0%
2b. GPIF PROVISION	188,421	188,421	0 0.0%	2,261,019	2,261,019	0 0.0%
2c. ADJUSTMENT	0	0	0 0.0%	0	0	0 0.0%
3. JURIS. FUEL REVENUE APPL. TO PERIOD	39,752,372	42,229,397	(2,477,025) -5.9%	583,210,492	574,158,043	9,052,449 1.6%
4. ADJ. TOTAL FUEL & NET PWR. TRANS. (LINE A7)	39,801,142	45,822,099	(6,020,957) -13.1%	574,069,880	613,386,595	(39,316,715) -6.4%
5. JURISDIC. SALES- % TOTAL MWH SALES (LINE B4)	1,000,000	1,000,000	0 0.0%	-	-	-
6. JURISDIC. TOTAL FUEL & NET PWR. TRANS.	39,801,142	45,822,099	(6,020,957) -13.1%	574,069,880	613,386,595	(39,316,715) -6.4%
6a. JURISDIC. LOSS MULTIPLIER	1,00000	1,00000	0 0.0%	-	-	-
6b. (LINE C6 x LINE C6a)	39,801,142	45,822,099	(6,020,957) -13.1%	574,069,880	613,386,595	(39,316,715) -6.4%
6c. ADJUSTMENT	0	0	0 0.0%	0	0	0 0.0%
6d. JURISDIC. TOTAL FUEL & NET PWR INCL. ALL ADJ (LNS. C6b+C6c)	39,801,142	45,822,099	(6,020,957) -13.1%	574,069,880	613,386,595	(39,316,715) -6.4%
7. TRUE-UP PROV. FOR MO. +/- COLLECTED (LINE C3 - LINE C6d)	(48,770)	(3,592,702)	3,543,932 -98.6%	9,140,612	(39,228,552)	48,369,164 -123.3%
8. INTEREST PROVISION FOR THE MONTH	4,312	1,987	2,325 117.0%	(882,221)	(653,962)	(228,259) 34.9%
9. TRUE-UP & INT. PROV. BEG. OF MONTH	1,174,036	565,782	608,254 107.5%	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE
10. TRUE-UP COLLECTED (REFUNDED)	3,949,494	3,949,494	0 0.0%	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE
11. END OF PERIOD TOTAL NET TRUE-UP (LINE C7 through C10)	5,079,072	924,561	4,154,511 449.3%	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE

CALCULATION OF TRUE-UP AND INTEREST PROVISION  
TAMPA ELECTRIC COMPANY  
MONTH OF: December 2019

	CURRENT MONTH			PERIOD TO DATE		
	ACTUAL	ESTIMATED	DIFFERENCE AMOUNT %	ACTUAL	ESTIMATED	DIFFERENCE AMOUNT %
<b>D. INTEREST PROVISION</b>						
1. BEGINNING TRUE-UP AMOUNT (LINE C9)	1,174,036	565,782	608,254 107.5%			NOT APPLICABLE
2. ENDING TRUE-UP AMOUNT BEFORE INT. (LINES C7 + C9 + C10)	5,074,760	922,574	4,152,186 450.1%			NOT APPLICABLE
3. TOTAL BEG. & END. TRUE-UP AMOUNT	<u>6,248,796</u>	<u>1,488,356</u>	<u>4,760,440</u> 319.8%			NOT APPLICABLE
4. AVG. TRUE-UP AMOUNT - (50% OF LINE D3)	3,124,398	744,178	2,380,220 319.8%			NOT APPLICABLE
5. INT. RATE-FIRST DAY REP. BUS. MONTH	1,600	3,200	(1,600) -50.0%			NOT APPLICABLE
6. INT. RATE-FIRST DAY SUBSEQUENT MONTH	1,710	3,200	(1,490) -46.6%			NOT APPLICABLE
7. TOTAL (LINE D5 + LINE D6)	<u>3,310</u>	<u>6,400</u>	<u>(3,090)</u> -48.3%			NOT APPLICABLE
8. AVERAGE INT. RATE (50% OF LINE D7)	1,655	3,200	(1,545) -48.3%			NOT APPLICABLE
9. MONTHLY AVG. INT. RATE (LINE D8/12)	0.138	0.267	(0.129) -48.3%			NOT APPLICABLE
10. INT. PROVISION (LINE D4 x LINE D9)	<u>4,312</u>	<u>1,987</u>	<u>2,325</u> 117.0%			NOT APPLICABLE

FUEL AND PURCHASED POWER COST RECOVERY  
SCHEDULE A6

JANUARY 2019 - DECEMBER 2019

POWER SOLD  
TAMPA ELECTRIC COMPANY  
FOR THE PERIOD JANUARY 2019 THROUGH DECEMBER 2019

(1) SOLD TO	(2) TYPE & SCHEDULE	(3) TOTAL MWH SOLD	(4) MWH WHEELED OTHER SYSTEM	(5) MWH FROM OWN GENERATION	(6) CENTS/KWH		(7) TOTAL \$ FOR FUEL ADJUSTMENT (5)X(6A)	(8) TOTAL \$ FOR TOTAL COST (5)X(6B)	(9) GAINS ON MARKET BASED SALES
					(A) FUEL COST	(B) TOTAL COST			
<b>ESTIMATED:</b>									
SEMINOLE	JURISD. SCH. - D	10,330.0	0.0	10,330.0	2.628	2.760	271,470.00	285,080.00	13,610.00
VARIOUS	JURISD. MKT.BASE	11,990.0	0.0	11,990.0	3.779	4.157	453,054.69	498,410.00	45,355.31
<b>TOTAL</b>		<b>22,320.0</b>	<b>0.0</b>	<b>22,320.0</b>	<b>3.246</b>	<b>3.510</b>	<b>724,524.69</b>	<b>783,490.00</b>	<b>58,965.31</b>
<b>ACTUAL:</b>									
SEMINOLE ELEC. PRECO-1	JURISD. SCH. - D	32,667.2	1.2	32,666.0	1.979	2.176	646,313.90	710,945.31	39,305.47
CITY OF LAKELAND	SCH. - MA	21,885.0	0.0	21,885.0	2.113	3.090	462,436.10	676,228.41	170,760.31
CITY OF LAKELAND	SCH. - MB	4,089.0	0.0	4,089.0	3.187	4.416	130,316.43	180,553.70	50,237.27
DUKE ENERGY FLORIDA	SCH. - MA	11,545.0	0.0	11,545.0	2.266	3.383	261,586.13	390,605.20	118,521.77
EDF TRADING	SCH. - MA	158.0	0.0	158.0	1.910	3.465	3,018.50	5,474.23	2,153.95
EXGEN	SCH. - MA	3,534.0	0.0	3,534.0	1.754	2.766	61,988.23	97,760.98	29,291.49
FLORIDA POWER & LIGHT	SCH. - MA	14,913.0	0.0	14,913.0	2.636	4.561	393,063.36	680,209.38	263,529.67
FMPA	SCH. - MA	3,220.0	0.0	3,220.0	2.649	4.975	85,285.00	160,181.61	72,544.61
MACQUARIE ENERGY LLC	SCH. - MA	8,134.0	0.0	8,134.0	2.065	3.263	167,981.65	265,425.15	88,449.82
MORGAN STANLEY	SCH. - MA	60.0	0.0	60.0	2.152	3.647	1,291.20	2,188.01	784.61
NEW SMYRNA BEACH	SCH. - MA	305.0	0.0	305.0	1.952	3.589	5,952.76	10,946.30	4,536.15
ORLANDO UTILITIES	SCH. - MA	27,556.0	0.0	27,556.0	2.185	3.535	601,962.02	974,109.09	320,535.16
REEDY CREEK	SCH. - MA	1.0	0.0	1.0	1.962	2.140	19.62	21.40	1.13
SEMINOLE ELECTRIC	SCH. - MA	7,200.0	0.0	7,200.0	1.933	3.406	139,200.00	245,263.25	93,031.25
SOUTHERN COMPANY	SCH. - MA	275.0	0.0	275.0	1.826	4.999	5,022.00	13,747.43	7,811.93
THE ENERGY AUTHORITY	SCH. - MA	19,660.0	0.0	19,660.0	2.351	3.853	462,263.65	757,500.59	278,464.81
LESS 20% - THRESHOLD EXCESS	SCH. - D								0.00
LESS 20% - THRESHOLD EXCESS	SCH. - C								0.00
LESS 20% - THRESHOLD EXCESS	SCH. - CB								0.00
LESS 20% - THRESHOLD EXCESS	SCH. - MA								0.00
<b>SUB-TOTAL</b>		<b>155,202.2</b>	<b>1.2</b>	<b>155,201.0</b>	<b>2.209</b>	<b>3.332</b>	<b>3,427,700.55</b>	<b>5,171,160.04</b>	<b>1,539,959.40</b>
SUB-TOTAL SCHEDULE D POWER SALES-JURISD.		32,667.2	1.2	32,666.0	1.979	2.176	646,313.90	710,945.31	39,305.47
SUB-TOTAL SCHEDULE C POWER SALES		0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
SUB-TOTAL SCHEDULE CB POWER SALES		0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
SUB-TOTAL SCHEDULE MA/MB POWER SALES-JURISD.		122,535.0	0.0	122,535.0	2.270	3.640	2,781,386.65	4,460,214.73	1,500,653.93
<b>TOTAL</b>		<b>155,202.2</b>	<b>1.2</b>	<b>155,201.0</b>	<b>2.209</b>	<b>3.332</b>	<b>3,427,700.55</b>	<b>5,171,160.04</b>	<b>1,539,959.40</b>
DIFFERENCE		132,882.2	1.2	132,881.0	(1.037)	(0.178)	2,703,175.86	4,387,670.04	1,480,994.09
DIFFERENCE %		595.4%	0.0%	595.3%	-31.9%	-5.1%	373.1%	560.0%	2511.6%

FUEL AND PURCHASED POWER COST RECOVERY  
SCHEDULE A7

JANUARY 2019 - DECEMBER 2019

PURCHASED POWER  
(EXCLUSIVE OF ECONOMY & COGENERATION)  
TAMPA ELECTRIC COMPANY  
FOR THE PERIOD JANUARY 2019 THROUGH DECEMBER 2019

(1)	(2)	(3)	(4)	(5)	(6)	(7) CENTS/KWH		(8)
PURCHASED FROM	TYPE & SCHEDULE	TOTAL MWH PURCHASED	MWH FROM OTHER UTILITIES	MWH FOR INTER- RUPTIBLE	MWH FOR FIRM	(A) FUEL COST	(B) TOTAL COST	TOTAL \$ FOR FUEL ADJUSTMENT (6)X(7A)
<b>ESTIMATED:</b>								
VARIOUS		0.0	0.0	0.0	0.0	0.000	0.000	0.00
<b>TOTAL</b>		<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.000</b>	<b>0.000</b>	<b>0.00</b>
<b>ACTUAL:</b>								
PASCO COGEN	SCH. - D *	0.0	0.0	0.0	0.0	0.000	0.000	103,799.73
DUKE ENERGY FLORIDA	EMERG A	124.0	0.0	0.0	124.0	19.671	19.671	24,392.04
ORLANDO UTIL. COMM.	EMERG A	100.0	0.0	0.0	100.0	5.635	5.635	5,635.00
DUKE ENERGY FLORIDA	OATT	10,046.0	0.0	0.0	10,046.0	2.128	2.128	213,781.69
<b>SUB-TOTAL</b>		<b>10,270.0</b>	<b>0.0</b>	<b>0.0</b>	<b>10,270.0</b>	<b>3.385</b>	<b>3.385</b>	<b>347,608.46</b>
SUB-TOTAL SCHEDULE D PURCHASED POWER		0.0	0.0	0.0	0.0	0.000	0.000	103,799.73
SUB-TOTAL SCHEDULE EMERG A PURCHASED POWER		224.0	0.0	0.0	224.0	13.405	13.405	30,027.04
SUB-TOTAL SCHEDULE OATT PURCHASED POWER		10,046.0	0.0	0.0	10,046.0	2.128	2.128	213,781.69
<b>TOTAL</b>		<b>10,270.0</b>	<b>0.0</b>	<b>0.0</b>	<b>10,270.0</b>	<b>3.385</b>	<b>3.385</b>	<b>347,608.46</b>
DIFFERENCE		10,270.0	0.0	0.0	10,270.0	3.385	3.385	347,608.46
DIFFERENCE %		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

\* Includes adjustments to December 2018 and for the sale of back-up oil for Pasco Cogen

FUEL AND PURCHASED POWER COST RECOVERY  
SCHEDULE A8

JANUARY 2019 - DECEMBER 2019



ENERGY PAYMENT TO QUALIFYING FACILITIES  
TAMPA ELECTRIC COMPANY  
FOR THE PERIOD JANUARY 2019 THROUGH DECEMBER 2019

(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)
						CENTS/KWH		
	TYPE	TOTAL	MWH FROM	MWH FOR	MWH	(A)	(B)	TOTAL \$ FOR FUEL
<b>ESTIMATED:</b>								
<b>VARIOUS</b>								
	COGEN.							
	AS AVAIL.	90,120.0	0.0	0.0	90,120.0	2.932	2.932	2,641,870.00
<b>TOTAL</b>		<u>90,120.0</u>	<u>0.0</u>	<u>0.0</u>	<u>90,120.0</u>	<u>2.932</u>	<u>2.932</u>	<u>2,641,870.00</u>
<b>ACTUAL:</b>								
<b>AS AVAILABLE</b>								
McKAY BAY REFUSE	COGEN.	9.0	0.0	0.0	9.0	2.504	2.504	225.32
CARGILL RIDGEWOOD	COGEN.	11,196.0	0.0	0.0	11,196.0	2.184	2.184	244,513.76
CARGILL MILLPOINT	COGEN.	35,428.0	0.0	0.0	35,428.0	2.141	2.141	758,604.34
IMC-AGRICO-NEW WALES	COGEN.	2,743.0	0.0	0.0	2,743.0	2.525	2.525	69,259.22
IMC-AGRICO-S. PIERCE	COGEN.	170,709.0	0.0	0.0	170,709.0	2.092	2.092	3,571,294.72
<b>SUB-TOTAL COGEN</b>		<b>220,085.0</b>	<b>0.0</b>	<b>0.0</b>	<b>220,085.0</b>	<b>2.110</b>	<b>2.110</b>	<b>4,643,897.36</b>
<b>NET METERING</b>		<b>1,659.5</b>	<b>0.0</b>	<b>0.0</b>	<b>1,659.5</b>	<b>2.529</b>	<b>2.529</b>	<b>41,969.26</b>
<b>TOTAL INCL NET METERING</b>		<u><b>221,744.5</b></u>	<u><b>0.0</b></u>	<u><b>0.0</b></u>	<u><b>221,744.5</b></u>	<u><b>2.113</b></u>	<u><b>2.113</b></u>	<u><b>4,685,866.62</b></u>
DIFFERENCE		131,624.5	0.0	0.0	131,624.5	(0.818)	(0.818)	2,043,996.62
DIFFERENCE %		146.1%	0.0%	0.0%	146.1%	-27.9%	-27.9%	77.4%

FUEL AND PURCHASED POWER COST RECOVERY  
SCHEDULE A9

JANUARY 2019 - DECEMBER 2019

ECONOMY ENERGY PURCHASES  
TAMPA ELECTRIC COMPANY  
FOR THE PERIOD JANUARY 2019 THROUGH DECEMBER 2019

(1) PURCHASED FROM	(2) TYPE & SCHEDULE	(3) TOTAL MWH PURCHASED	(4) MWH FOR INTERRUPTIBLE	(5) MWH FOR FIRM	(6) TRANSACTION COSTS	(7) TOTAL \$ FOR FUEL ADJUSTMENT (5) X (6)	(8) COST IF GENERATED		(9) FUEL SAVINGS (8B)-7
							(A) CENTS PER KWH	(B) TOTAL COST	
<b>ESTIMATED:</b>									
VARIOUS	Economy	894,370.0	0.0	894,370.0	3.677	32,887,040.00	4.358	38,976,438.00	6,089,398.00
<b>TOTAL</b>		<b>894,370.0</b>	<b>0.0</b>	<b>894,370.0</b>	<b>3.677</b>	<b>32,887,040.00</b>	<b>4.358</b>	<b>38,976,438.00</b>	<b>6,089,398.00</b>
<b>ACTUAL:</b>									
CITY OF LAKELAND	SCH. - J	330.0	0.0	330.0	3.900	12,870.00	3.900	12,870.00	0.00
CITY OF TALLAHASSEE	SCH. - J	2,740.0	0.0	2,740.0	1.264	34,630.00	2.174	59,557.50	24,927.50
DUKE ENERGY FLORIDA	SCH. - J	862,265.0	0.0	862,265.0	3.456	29,802,243.71	4.400	37,941,085.12	8,138,841.41
EDF TRADING	SCH. - J	1,825.0	0.0	1,825.0	5.574	101,730.00	6.422	117,199.50	15,469.50
EXGEN	SCH. - J	31,544.0	96.4	31,447.6	3.896	1,225,154.84	5.102	1,604,332.63	379,177.79
FLORIDA POWER & LIGHT	SCH. - J	88,433.0	47.4	88,385.6	4.281	3,783,721.15	4.857	4,293,136.70	509,415.55
FMPA	SCH. - J	185,070.0	0.0	185,070.0	2.994	5,541,618.05	3.427	6,342,462.85	800,844.80
MACQUARIE ENERGY LLC	SCH. - J	3,529.0	0.0	3,529.0	6.412	226,294.00	6.911	243,898.00	17,604.00
MORGAN STANLEY	SCH. - J	6,179.0	0.0	6,179.0	4.734	292,497.00	4.832	298,555.30	6,058.30
ORLANDO UTIL. COMM.	SCH. - J	17,152.0	0.0	17,152.0	4.918	843,525.00	5.833	1,000,487.15	156,962.15
RAINBOW ENERGY MARKETERS	SCH. - J	4,587.0	0.0	4,587.0	5.848	268,260.00	5.848	268,260.00	0.00
SOUTHERN COMPANY	SCH. - J	9,162.0	0.0	9,162.0	4.956	454,041.00	4.956	454,041.00	0.00
THE ENERGY AUTHORITY	SCH. - J	22,172.0	0.0	22,172.0	5.281	1,170,855.00	6.089	1,349,960.57	179,105.57
<b>SUB-TOTAL</b>		<b>1,234,988.0</b>	<b>143.8</b>	<b>1,234,844.2</b>	<b>3.544</b>	<b>43,757,439.75</b>	<b>4.372</b>	<b>53,985,846.32</b>	<b>10,228,406.57</b>
SUB-TOTAL SCHEDULE J ECONOMY PURCHASES		1,234,988.0	143.8	1,234,844.2	3.544	43,757,439.75	4.372	53,985,846.32	10,228,406.57
<b>TOTAL</b>		<b>1,234,988.0</b>	<b>143.8</b>	<b>1,234,844.2</b>	<b>3.544</b>	<b>43,757,439.75</b>	<b>4.372</b>	<b>53,985,846.32</b>	<b>10,228,406.57</b>
DIFFERENCE		340,618.0	143.8	340,474.2	(0.134)	10,870,399.75	0.014	15,009,408.32	4,139,008.57
DIFFERENCE %		38.1%	0.0%	38.1%	-3.6%	33.1%	0.3%	38.5%	68.0%

**FUEL AND PURCHASED POWER COST RECOVERY**

**SCHEDULE A12**

**JANUARY 2019 - DECEMBER 2019**

**REDACTED**

**CAPACITY COSTS  
ACTUAL PURCHASES AND SALES  
TAMPA ELECTRIC COMPANY  
FOR THE PERIOD JANUARY 2019 THROUGH DECEMBER 2019**

CONTRACT	TERM	START	END	CONTRACT TYPE		CAPACITY (MW)												TOTAL (\$)
						JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	
SEMINOLE ELECTRIC **		6/1/1992		LT	QF = QUALIFYING FACILITY LT = LONG TERM ST = SHORT-TERM ** THREE YEAR NOTICE REQUIRED FOR TERMINATION.	8.1	10.8	9.1	9.3	11.5	18.4	8.4	6.3	7.3	9.3	10.1	11.5	
<b>CAPACITY</b>																		
		JANUARY (\$)	FEBRUARY (\$)	MARCH (\$)	APRIL (\$)	MAY (\$)	JUNE (\$)	JULY (\$)	AUGUST (\$)	SEPTEMBER (\$)	OCTOBER (\$)	NOVEMBER (\$)	DECEMBER (\$)	TOTAL (\$)				

CONTRACT	START	END	CONTRACT TYPE		JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL (\$)
FLORIDA POWER & LIGHT																	
DUKE ENERGY FLORIDA																	
JACKSONVILLE ELECTRIC AUTHORITY																	
<b>SUBTOTAL CAPACITY PURCHASES</b>																	
SEMINOLE ELECTRIC - D																	
DUKE ENERGY FLORIDA - MA																	
FLORIDA POWER & LIGHT - MA																	
CITY OF LAKELAND - MA																	
ORLANDO UTILITIES - MA																	
EXGEN - MA																	
REEDY CREEK - MA																	
SEMINOLE ELECTRIC - MA																	
THE ENERGY AUTHORITY - MA																	
MACQUARIE ENERGY LLC - MA																	
MORGAN STANLEY - MA																	
SOUTHERN CO - MA																	
FNPPA - MA																	
NEW SMYRNA BEACH - MA																	
EDF TRADING - MA																	
<b>SUBTOTAL CAPACITY SALES</b>																	
<b>TOTAL PURCHASES AND (SALES)</b>					\$ (85,697)	\$ (79,999)	\$ (5,304)	\$ (34,891)	\$ (105,743)	\$ (33,906)	\$ (33,514)	\$ (72,766)	\$ (43,150)	\$ (375,827)	\$ (66,585)	\$ (95,168)	\$ (1,002,540)
<b>TOTAL CAPACITY</b>					\$ (85,697)	\$ (79,999)	\$ (5,304)	\$ (34,891)	\$ (105,743)	\$ (33,906)	\$ (33,514)	\$ (72,766)	\$ (43,150)	\$ (375,827)	\$ (66,585)	\$ (95,168)	\$ (1,002,540)

EXHIBIT TO THE TESTIMONY OF  
PENELOPE A. RUSK

DOCUMENT NO. 5

CAPITAL PROJECTS APPROVED FOR FUEL CLAUSE RECOVERY

JANUARY 2019 - DECEMBER 2019

**BIG BEND UNITS 1-4 IGNITERS CONVERSION TO NATURAL GAS  
 SCHEDULE OF DEPRECIATION AND RETURN  
 FOR THE PERIOD JANUARY 2019 THROUGH DECEMBER 2019**

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
1 BEGINNING BALANCE	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348
2 ADD INVESTMENT: Big Bend Unit 3 (Jan 2015)	-	-	-	-	-	-	-	-	-	-	-	-	-
2a ADD INVESTMENT: Big Bend Unit 4 (May 2015)	-	-	-	-	-	-	-	-	-	-	-	-	-
2b ADD INVESTMENT: Big Bend Unit 2 (June 2015)	-	-	-	-	-	-	-	-	-	-	-	-	-
2c ADD INVESTMENT: Big Bend Unit 1 (November 2015)	-	-	-	-	-	-	-	-	-	-	-	-	-
3 LESS RETIREMENTS	-	-	-	-	-	-	-	-	-	-	-	-	-
4 ENDING BALANCE	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348
5													
6 AVERAGE BALANCE	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348	\$20,910,348
7 DEPRECIATION RATE	1.666667%	1.666667%	1.666667%	1.666667%	1.666667%	1.666667%	1.666667%	1.666667%	1.666667%	1.666667%	1.666667%	1.666667%	1.666667%
8 DEPRECIATION EXPENSE	348,506	348,506	348,506	348,506	348,506	348,506	348,506	348,506	348,506	348,506	348,506	348,506	4,182,070
9 LESS RETIREMENTS	-	-	-	-	-	-	-	-	-	-	-	-	-
10 BEGINNING BALANCE DEPRECIATION	15,095,780	15,444,286	15,792,792	16,141,297	16,489,803	16,838,309	17,186,815	17,535,321	17,883,826	18,232,332	18,580,838	18,929,344	15,095,780
11 ENDING BALANCE DEPRECIATION	\$15,444,286	\$15,792,792	\$16,141,297	\$16,489,803	\$16,838,309	\$17,186,815	\$17,535,321	\$17,883,826	\$18,232,332	\$18,580,838	\$18,929,344	\$19,277,850	\$19,277,850
12													
13													
14													
15 ENDING NET INVESTMENT	\$5,466,062	\$5,117,557	\$4,769,051	\$4,420,545	\$4,072,039	\$3,723,533	\$3,375,028	\$3,026,522	\$2,678,016	\$2,329,510	\$1,981,004	\$1,632,499	\$1,632,499
16													
17													
18 AVERAGE INVESTMENT	\$5,640,315	\$5,291,809	\$4,943,304	\$4,594,798	\$4,246,292	\$3,897,786	\$3,549,280	\$3,200,775	\$2,852,269	\$2,503,763	\$2,155,257	\$1,806,751	\$1,806,751
19 ALLOWED EQUITY RETURN	36019%	36019%	36019%	36019%	36019%	36019%	36019%	36019%	36019%	36019%	36019%	36019%	36019%
20 EQUITY COMPONENT AFTER-TAX	20,316	19,061	17,805	16,550	15,295	14,040	13,279	11,975	10,671	9,367	8,064	6,760	163,183
21 CONVERSION TO PRE-TAX	1,34295	1,34295	1,34295	1,34295	1,34295	1,34295	1,34295	1,34295	1,34295	1,34295	1,34295	1,34295	1,34295
22 EQUITY COMPONENT PRE-TAX	\$27,283	\$25,598	\$23,911	\$22,226	\$20,540	\$18,855	\$17,633	\$16,082	\$14,331	\$12,442	\$10,711	\$8,979	\$218,791
23													
24 ALLOWED DEBT RETURN	-14287%	-14287%	-14287%	-14287%	-14287%	-14287%	-14287%	-14287%	-14287%	-14287%	-14287%	-14287%	-14287%
25 DEBT COMPONENT	\$5,058	\$7,560	\$7,062	\$6,564	\$6,067	\$5,569	\$5,071	\$4,573	\$4,075	\$3,577	\$3,079	\$2,581	\$64,137
26 TAX REPAIR TRUE-UP													
27 REQUIREMENTS													
28 PRIOR MONTH TRUE-UP													
29 TOTAL DEPRECIATION & RETURN	\$383,847	\$381,664	\$379,479	\$377,296	\$375,113	\$372,930	\$371,476	\$369,221	\$366,965	\$362,534	\$362,337	\$360,100	\$4,462,962
30													
31 ESTIMATED FUEL SAVINGS	\$556,528	\$515,586	\$413,422	\$695,832	\$685,374	\$495,625	\$860,514	\$473,271	\$196,904	\$394,880	\$552,612	\$426,533	\$6,257,182
32 TOTAL DEPRECIATION & RETURN	\$383,847	\$381,664	\$379,479	\$377,296	\$375,113	\$372,930	\$371,476	\$369,221	\$366,965	\$362,534	\$362,337	\$360,100	\$4,462,962
33 NET BENEFIT (COST) TO RATEPAYER	\$172,661	\$133,923	\$33,943	\$318,536	\$310,261	\$122,695	\$489,039	\$104,050	(\$170,061)	\$22,446	\$190,275	\$66,433	\$1,794,221

34 DEPRECIATION EXPENSE IS CALCULATED BASED UPON A FIVE YEAR PERIOD.  
 35 RETURN ON AVERAGE INVESTMENT IS CALCULATED FOR JANUARY - JUNE USING AN ANNUAL RATE OF 7.5190% (EQUITY 5.8046%, DEBT 1.7144%), RATES ARE BASED ON THE MAY 2018 SURVEILLANCE REPORT PER THE WACC STIPULATION & SETTLEMENT AGREEMENT (JULY 17, 2012).  
 36 RETURN ON AVERAGE INVESTMENT IS CALCULATED FOR JULY - SEPTEMBER USING AN ANNUAL RATE OF 7.7662% (EQUITY 6.0293%, DEBT 1.7369%), RATES ARE BASED ON THE MAY 2019 SURVEILLANCE REPORT PER THE WACC STIPULATION & SETTLEMENT AGREEMENT (JULY 17, 2012).  
 37 RETURN ON AVERAGE INVESTMENT IS CALCULATED FOR OCTOBER - DECEMBER AND THE YEAR-TO-DATE TRUE UP FOR JULY - SEPTEMBER USING AN ANNUAL RATE OF 7.7004% (EQUITY 5.9655%, DEBT 1.7369%), RATES ARE BASED ON THE MAY 2019 SURVEILLANCE REPORT AND UPDATED TAX RATE PER THE WACC STIPULATION & SETTLEMENT AGREEMENT (JULY 17, 2012).  
 38 A RETROACTIVE CHANGE TO THE STATE TAX RATE LED TO A DECREASE IN THE TAX MULTPLIER FROM 1.34295 TO 1.32830 AND A RESULTING YEAR-TO-DATE ROI TRUE-UP OF (62,058) IN OCTOBER 2019.  
 39 THE RETURN REQUIREMENT FOR JANUARY - SEPTEMBER IS CALCULATED BASED UPON A COMBINED STATUTORY RATE OF 25.345%.  
 40 THE RETURN REQUIREMENT FOR OCTOBER - DECEMBER AND THE YEAR-TO-DATE TRUE-UP IN OCTOBER IS CALCULATED BASED ON A COMBINED STATUTORY RATE OF 24.522%.  
 41 ZERO PROJECTED GENERATION RESULTS IN ZERO ESTIMATED FUEL SAVINGS FOR THAT MONTH.

**Tampa Electric Company**  
**Calculation of Revenue Requirement Rate of Return**  
**For Cost Recovery Clauses**  
**JANUARY 2019 to JUNE 2019**  
**Prior to State Tax Reform**

	(1)	(2)	(3)	(4)
	<b>Jurisdictional Rate Base Actual May 2018 Capital Structure (\$000)</b>	<b>Ratio %</b>	<b>Cost Rate %</b>	<b>Weighted Cost Rate %</b>
Long Term Debt	\$ 1,719,219	30.51%	5.13%	1.5652%
Short Term Debt	244,333	4.34%	2.18%	0.0945%
Preferred Stock	0	0.00%	0.00%	0.0000%
Customer Deposits	96,005	1.70%	2.43%	0.0414%
Common Equity	2,367,502	42.02%	10.25%	4.3067%
Accum. Deferred Inc. Taxes & Zero Cost ITC's	1,187,473	21.07%	0.00%	0.0000%
Deferred ITC - Weighted Cost	<u>20,116</u>	<u>0.36%</u>	8.10%	<u>0.0289%</u>
<b>Total</b>	<b>\$ <u>5,634,648</u></b>	<b><u>100.00%</u></b>		<b><u>6.04%</u></b>

**ITC split between Debt and Equity:**

Long Term Debt	\$ 1,719,219	Long Term Debt	46.00%
Equity - Preferred	0	Equity - Preferred	0.00%
Equity - Common	<u>2,367,502</u>	Equity - Common	<u>54.00%</u>
<b>Total</b>	<b>\$ <u>4,086,721</u></b>	<b>Total</b>	<b><u>100.00%</u></b>

**Deferred ITC - Weighted Cost:**

Debt = .0289% * 46.00%	0.0133%
Equity = .0289% * 54.00%	<u>0.0156%</u>
Weighted Cost	<u>0.0289%</u>

**Total Equity Cost Rate:**

Preferred Stock	0.0000%
Common Equity	4.3067%
Deferred ITC - Weighted Cost	<u>0.0156%</u>
	4.3223%
Times Tax Multiplier	1.34295
Total Equity Component	<u>5.8046%</u>

**Total Debt Cost Rate:**

Long Term Debt	1.5652%
Short Term Debt	0.0945%
Customer Deposits	0.0414%
Deferred ITC - Weighted Cost	<u>0.0133%</u>
Total Debt Component	<u>1.7144%</u>
	<u>7.5190%</u>

**Notes:**

Column (1) - Per WACC Stipulation & Settlement Agreement Dated July 17, 2012, and 2017 Base Rates Settlement Agreement Dated September 27, 2017.  
 Column (2) - Column (1) / Total Column (1)  
 Column (3) - Per WACC Stipulation & Settlement Agreement Dated July 17, 2012, and 2017 Base Rates Settlement Agreement Dated September 27, 2017.  
 Column (4) - Column (2) x Column (3)



**Tampa Electric Company**  
**Calculation of Revenue Requirement Rate of Return**  
**For Cost Recovery Clauses**  
**July 2019 to December 2019**  
**Prior to State Tax Reform**

	(1)	(2)	(3)	(4)
	Jurisdictional Rate Base Actual May 2019 Capital Structure (\$000)	Ratio %	Cost Rate %	Weighted Cost Rate %
Long Term Debt	\$ 1,897,597	31.57%	4.89%	1.5435%
Short Term Debt	211,895	3.52%	2.97%	0.1047%
Preferred Stock	0	0.00%	0.00%	0.0000%
Customer Deposits	94,966	1.58%	2.38%	0.0376%
Common Equity	2,598,065	43.22%	10.25%	4.4297%
Accum. Deferred Inc. Taxes & Zero Cost ITC's	1,125,550	18.72%	0.00%	0.0000%
Deferred ITC - Weighted Cost	<u>83,633</u>	<u>1.39%</u>	7.98%	<u>0.1110%</u>
<b>Total</b>	<b><u>\$ 6,011,707</u></b>	<b><u>100.00%</u></b>		<b><u>6.23%</u></b>

**ITC split between Debt and Equity:**

Long Term Debt	\$ 1,897,597	Long Term Debt	46.00%
Equity - Preferred	0	Equity - Preferred	0.00%
Equity - Common	<u>2,598,065</u>	Equity - Common	<u>54.00%</u>
<b>Total</b>	<b><u>\$ 4,495,662</u></b>	<b>Total</b>	<b><u>100.00%</u></b>

**Deferred ITC - Weighted Cost:**

Debt = 0.1110% * 46.00%	0.0511%
Equity = 0.1110% * 54.00%	<u>0.0599%</u>
Weighted Cost	<u>0.1110%</u>

**Total Equity Cost Rate:**

Preferred Stock	0.0000%
Common Equity	4.4297%
Deferred ITC - Weighted Cost	<u>0.0599%</u>
	4.4896%
Times Tax Multiplier	1.34295
Total Equity Component	<u>6.0293%</u>

**Total Debt Cost Rate:**

Long Term Debt	1.5435%
Short Term Debt	0.1047%
Customer Deposits	0.0376%
Deferred ITC - Weighted Cost	<u>0.0511%</u>
Total Debt Component	<u>1.7369%</u>
	<u>7.7662%</u>

**Notes:**

Column (1) - Per WACC Stipulation & Settlement Agreement Dated July 17, 2012, and 2017 Base Rates Settlement Agreement Dated September 27, 2017.  
 Column (2) - Column (1) / Total Column (1)  
 Column (3) - Per WACC Stipulation & Settlement Agreement Dated July 17, 2012, and 2017 Base Rates Settlement Agreement Dated September 27, 2017.  
 Column (4) - Column (2) x Column (3)

**Tampa Electric Company**  
**Calculation of Revenue Requirement Rate of Return**  
**For Cost Recovery Clauses**  
**JANUARY 2019 to JUNE 2019**  
**Updated for State Tax Reform**

	(1)	(2)	(3)	(4)
	Jurisdictional Rate Base Actual May 2018 Capital Structure (\$000)	Ratio %	Cost Rate %	Weighted Cost Rate %
Long Term Debt	\$ 1,719,219	30.51%	5.13%	1.5652%
Short Term Debt	244,333	4.34%	2.18%	0.0945%
Preferred Stock	0	0.00%	0.00%	0.0000%
Customer Deposits	96,005	1.70%	2.43%	0.0414%
Common Equity	2,367,502	42.02%	10.25%	4.3067%
Accum. Deferred Inc. Taxes & Zero Cost ITC's	1,187,473	21.07%	0.00%	0.0000%
Deferred ITC - Weighted Cost	<u>20,116</u>	<u>0.36%</u>	8.10%	<u>0.0289%</u>
<b>Total</b>	<b><u>\$ 5,634,648</u></b>	<b><u>100.00%</u></b>		<b><u>6.04%</u></b>

**ITC split between Debt and Equity:**

Long Term Debt	\$ 1,719,219	Long Term Debt	46.00%
Equity - Preferred	0	Equity - Preferred	0.00%
Equity - Common	<u>2,367,502</u>	Equity - Common	<u>54.00%</u>
<b>Total</b>	<b><u>\$ 4,086,721</u></b>	<b>Total</b>	<b><u>100.00%</u></b>

**Deferred ITC - Weighted Cost:**

Debt = .0289% * 46.00%	0.0133%
Equity = .0289% * 54.00%	<u>0.0156%</u>
Weighted Cost	<u>0.0289%</u>

**Total Equity Cost Rate:**

Preferred Stock	0.0000%
Common Equity	4.3067%
Deferred ITC - Weighted Cost	<u>0.0156%</u>
	4.3223%
Times Tax Multiplier	1.32830
Total Equity Component	<u>5.7413%</u>

**Total Debt Cost Rate:**

Long Term Debt	1.5652%
Short Term Debt	0.0945%
Customer Deposits	0.0414%
Deferred ITC - Weighted Cost	<u>0.0133%</u>
Total Debt Component	<u>1.7144%</u>
	<u>7.4557%</u>

**Notes:**

Column (1) - Per WACC Stipulation & Settlement Agreement Dated July 17, 2012, and 2017 Base Rates Settlement Agreement Dated September 27, 2017.  
 Column (2) - Column (1) / Total Column (1)  
 Column (3) - Per WACC Stipulation & Settlement Agreement Dated July 17, 2012, and 2017 Base Rates Settlement Agreement Dated September 27, 2017.  
 Column (4) - Column (2) x Column (3)

**Tampa Electric Company**  
**Calculation of Revenue Requirement Rate of Return**  
**For Cost Recovery Clauses**  
**July 2019 to December 2019**  
**Updated for State Tax Reform**

	(1)	(2)	(3)	(4)
	Jurisdictional Rate Base Actual May 2019 Capital Structure (\$000)	Ratio %	Cost Rate %	Weighted Cost Rate %
Long Term Debt	\$ 1,897,597	31.57%	4.89%	1.5435%
Short Term Debt	211,895	3.52%	2.97%	0.1047%
Preferred Stock	0	0.00%	0.00%	0.0000%
Customer Deposits	94,966	1.58%	2.38%	0.0376%
Common Equity	2,598,065	43.22%	10.25%	4.4297%
Accum. Deferred Inc. Taxes & Zero Cost ITC's	1,125,550	18.72%	0.00%	0.0000%
Deferred ITC - Weighted Cost	<u>83,633</u>	<u>1.39%</u>	7.98%	<u>0.1110%</u>
<b>Total</b>	<b><u>\$ 6,011,707</u></b>	<b><u>100.00%</u></b>		<b><u>6.23%</u></b>

**ITC split between Debt and Equity:**

Long Term Debt	\$ 1,897,597	Long Term Debt	46.00%
Equity - Preferred	0	Equity - Preferred	0.00%
Equity - Common	<u>2,598,065</u>	Equity - Common	<u>54.00%</u>
<b>Total</b>	<b><u>\$ 4,495,662</u></b>	<b>Total</b>	<b><u>100.00%</u></b>

**Deferred ITC - Weighted Cost:**

Debt = 0.1110% * 46.00%	0.0511%
Equity = 0.1110% * 54.00%	<u>0.0599%</u>
Weighted Cost	<u>0.1110%</u>

**Total Equity Cost Rate:**

Preferred Stock	0.0000%
Common Equity	4.4297%
Deferred ITC - Weighted Cost	<u>0.0599%</u>
	4.4896%
Times Tax Multiplier	1.32830
Total Equity Component	<u>5.9635%</u>

**Total Debt Cost Rate:**

Long Term Debt	1.5435%
Short Term Debt	0.1047%
Customer Deposits	0.0376%
Deferred ITC - Weighted Cost	<u>0.0511%</u>
Total Debt Component	<u>1.7369%</u>
	<u>7.7004%</u>

**Notes:**

Column (1) - Per WACC Stipulation & Settlement Agreement Dated July 17, 2012, and 2017 Base Rates Settlement Agreement Dated September 27, 2017.  
 Column (2) - Column (1) / Total Column (1)  
 Column (3) - Per WACC Stipulation & Settlement Agreement Dated July 17, 2012, and 2017 Base Rates Settlement Agreement Dated September 27, 2017.  
 Column (4) - Column (2) x Column (3)



**BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION**

**DOCKET NO. 20200001-EI  
IN RE: FUEL & PURCHASED POWER COST RECOVERY  
AND  
CAPACITY COST RECOVERY**

**2019 OPTIMIZATION MECHANISM**

**TESTIMONY AND EXHIBIT**

**JOHN C. HEISEY**

**FILED: MARCH 2, 2020**

1                   **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2                                   **PREPARED DIRECT TESTIMONY**

3   **OF**

4   **JOHN C. HEISEY**

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

7  
8   **A.**   My name is John C. Heisey. 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, Gas and Power Trading.

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

15  
16   **A.**   I graduated from Pennsylvania State University with a  
17          Bachelor of Science in Business Logistics. I have over 25  
18          years of power and natural gas trading experience,  
19          including employment at TECO Energy Source, FPL Energy  
20          Services, El Paso Energy, and International Paper. Prior  
21          to joining Tampa Electric, I was Vice President of Asset  
22          Trading for the Entegra Power Group LLC ("Entegra") where  
23          I was responsible for Entegra's energy trading  
24          activities. Entegra managed a large quantity of merchant  
25          capacity in bilateral and organized markets. I joined

1 Tampa Electric in September 2016 as the Manager of Gas  
2 and Power Trading and currently hold that position. I am  
3 responsible for all natural gas and power trading  
4 activities and work closely with the company's unit  
5 commitment to provide low cost, reliable power to our  
6 customers. In addition, I am responsible for portfolio  
7 optimization and all aspects of the Optimization  
8 Mechanism.

9  
10 **Q.** Please state the purpose of your testimony.

11  
12 **A.** The purpose of my testimony is to present, for the  
13 Commission's review, the 2019 results of Tampa Electric's  
14 activities under the Optimization Mechanism, as  
15 authorized by FPSC Order No. PSC-2017-0456-S-EI, issued  
16 in Docket No. 20160160-EI on November 27, 2017.

17  
18 **Q.** Do you wish to sponsor an exhibit in support of your  
19 testimony?

20  
21 **A.** Yes. Exhibit No. JCH-1, entitled Optimization Mechanism  
22 Results, was prepared under my direction and supervision.  
23 My exhibit shows the gains for each type of activity  
24 included in the Optimization Mechanism and the sharing of  
25 gains between customers and the company.

1 **Q.** Please provide an overview of the Optimization Mechanism.

2

3 **A.** The Optimization Mechanism is designed to create  
4 additional value for Tampa Electric's customers while  
5 also providing an incentive to the company if certain  
6 customer-value thresholds are achieved. The Optimization  
7 Mechanism includes gains from wholesale power sales and  
8 savings from wholesale power purchases, as well as gains  
9 from other forms of asset optimization.

10

11 **Q.** Please describe Tampa Electric's Optimization Mechanism  
12 submitted in Docket No. 20160160-EI and approved by Order  
13 No. PSC-2017-0456-S-EI.

14

15 **A.** Effective January 1, 2018, for the four-year period from  
16 2018 through 2021, gains on all optimization mechanism  
17 activities, including short-term wholesale sales, short-  
18 term wholesale purchases, and all forms of asset  
19 optimization undertaken each year will be shared between  
20 shareholders and customers. The sharing thresholds are  
21 (a) for the first \$4.5 million per year, 100 percent of  
22 gains to customers; (b) for gains greater than \$4.5  
23 million per year and less than \$8.0 million per year,  
24 split 60 percent to shareholders and 40 percent to  
25 customers; and (c) for gains greater than \$8.0 million

1 per year, 50-50 sharing between shareholders and  
2 customers.

3  
4 **Optimization Mechanism Transactions**

5 **Q.** Please provide the details of Tampa Electric's short-term  
6 wholesale sales under the Optimization Mechanism for  
7 2019.

8  
9 **A.** Optimization Mechanism gains from wholesale sales were  
10 \$1,498,686 or 23 percent of optimization gains for 2019.  
11 The monthly detail is shown in my exhibit in the schedule  
12 "Wholesale Sales-Table 3."

13  
14 **Q.** Please provide the details of Tampa Electric's short-term  
15 wholesale purchases under the Optimization Mechanism for  
16 2019.

17  
18 **A.** Optimization Mechanism gains from wholesale purchases  
19 were \$4,428,298 or 68 percent of optimization gains for  
20 2019. The monthly detail can be found in my exhibit on  
21 the schedule labeled "Wholesale Purchases-Table 4."

22  
23 **Q.** Please describe Tampa Electric's asset optimization  
24 activities and the gains from those transactions under  
25 the Optimization Mechanism for 2019.



1 **A.** Optimization Mechanism gains from asset optimization  
2 activities were \$541,049 or 9 percent of optimization  
3 gains for 2019. The gains from asset optimization  
4 activities are shown in my exhibit at "Asset Optimization  
5 Detail-Table 5."

6  
7 A description of Tampa Electric's 2019 asset optimization  
8 activities is provided below.

- 9 • Gas storage utilization - release contracted storage  
10 space or sell stored gas during non-critical demand  
11 seasons;
- 12 • Delivered solid fuel and or transportation capacity  
13 sales using existing transport - sell coal and coal  
14 transportation, using Tampa Electric's existing coal  
15 and transportation capacity during periods when it  
16 is not needed to serve Tampa Electric's native  
17 electric load;
- 18 • Asset Management Agreement ("AMA") - outsource  
19 optimization functions to a third party through  
20 assignment of power, transportation and/or storage  
21 rights in exchange for a premium to be paid to Tampa  
22 Electric.

23  
24 **Q.** Please summarize the activities and results of the  
25 Optimization Mechanism for 2019.

1 **A.** Tampa Electric participated in the following Optimization  
2 Mechanism activities in 2019: wholesale power purchases  
3 and sales, gas storage utilization, delivered solid fuel  
4 sales, and natural gas storage AMAs. The optimization  
5 gains for 2019 were \$6,468,033 which exceeded the  
6 \$4,500,000 threshold by \$1,968,033 as shown in my exhibit  
7 on schedule "Total Gains Threshold Schedule-Table 1."  
8 Customer benefits were \$5,287,213, and company benefits  
9 were \$1,180,820 in 2019.

10

11 **Q.** Did Tampa Electric incur incremental Optimization  
12 Mechanism costs during 2019?

13

14 **A.** Tampa Electric incurred incremental Optimization  
15 Mechanism personnel costs to establish processes and  
16 manage these new activities. However, the company agreed  
17 that it would not seek recovery of these costs through  
18 the Optimization Mechanism if it was approved and  
19 therefore has not separately tracked the costs.

20

21 **Q.** Overall, were Tampa Electric's activities under the  
22 Optimization Mechanism successful in 2019?

23

24 **A.** Yes, Tampa Electric produced customer gains of \$5,287,213  
25 in the second year of Optimization Mechanism activity.

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The company continues to focus on improvements in processes, reporting, and optimization strategies.

The southeast United States experienced mild winter weather. Thus, most of the Optimization Mechanism gains in 2019 were generated in the spring, summer, and fall. Economic wholesale power purchases were the largest contributor of gains in the summer. Additional gains resulted from wholesale power purchases made in the spring during company planned maintenance. Wholesale power sales gains were driven by above normal temperatures in May, June, and October. Natural gas storage AMA gains were consistent throughout the year. Lastly, coal sales contributed solid fuel gains in the first half of the year.

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

**A.** Yes, it does.

EXHIBIT TO THE TESTIMONY OF  
JOHN C. HEISEY

OPTIMIZATION MECHANISM RESULTS  
JANUARY 2019 - DECEMBER 2019

**TAMPA ELECTRIC  
 OPTIMIZATION MECHANISM  
 Actual for the Period: January 2019 through December 2019**

(1) Month	TOTAL GAINS THRESHOLD SCHEDULE-Table 1					(8) Threshold 3 Gains > \$8.0 M (\$)
	(2) Wholesale Sales Total Gains (\$)	(3) Wholesale Purchases Total Savings (\$)	(4) Asset Optimization Gains (\$)	(5) Total Monthly Gains (\$)	(6) Threshold 1 Gains ≤ \$4.5 M (\$)	
				(2) + (3) + (4)		
January	30,782	182,546	29,915	243,243	243,243	-
February	12,277	14,988	38,741	66,006	66,006	-
March	13,038	714,487	68,565	796,090	796,090	-
April	27,731	249,015	42,679	319,425	319,425	-
May	194,775	478,506	48,011	721,292	721,292	-
June	158,620	411,318	33,812	603,750	603,750	-
July	80,113	893,762	106,200	1,080,075	1,080,075	-
August	92,347	718,660	62,762	873,769	670,119	203,650
September	165,191	750,225	20,790	936,206	-	936,206
October	669,603	(8,439)	21,662	682,826	-	682,826
November	42,627	21,573	47,123	111,323	-	111,323
December	11,582	1,657	20,789	34,028	-	34,028
<b>Total</b>	<b>1,498,686</b>	<b>4,428,298</b>	<b>541,049</b>	<b>6,468,033</b>	<b>4,500,000</b>	<b>1,968,033</b>

(1) Month	TOTAL GAINS SHARING SCHEDULE-Table 2					(8) Total TEC Benefits (\$)
	(2) Threshold 1 Gains ≤ \$4.5 M 100% Customer Benefit (\$)	(3) Threshold 2 \$4.5M < Gains ≤ \$8.0M 40% Customer Benefit (\$)	(4) Threshold 2 \$4.5M < Gains ≤ \$8.0M 60% TEC Benefit (\$)	(5) Threshold 3 Gains > \$8.0 M 50% Customer Benefit (\$)	(6) Threshold 3 Gains > \$8.0 M 50% TEC Benefit (\$)	
January	243,243	-	-	-	-	243,243
February	66,006	-	-	-	-	66,006
March	796,090	-	-	-	-	796,090
April	319,425	-	-	-	-	319,425
May	721,292	-	-	-	-	721,292
June	603,750	-	-	-	-	603,750
July	1,080,075	-	-	-	-	1,080,075
August	670,119	81,460	122,190	-	-	751,579
September	-	374,482	561,724	-	-	374,482
October	-	273,130	409,696	-	-	273,130
November	-	44,529	66,794	-	-	44,529
December	-	13,611	20,417	-	-	13,611
<b>Total</b>	<b>4,500,000</b>	<b>787,213</b>	<b>1,180,820</b>	<b>-</b>	<b>-</b>	<b>5,287,213</b>

**TAMPA ELECTRIC**  
**WHOLESALE POWER DETAIL**  
 Actual for the Period: January 2019 through December 2019

**Wholesale Sales-Table 3**

(1)	(2)	(3)	(4)	(5)
Month	Wholesale Sales (MWh)	Wholesale Gross Gains (\$)	Third Party Transmission Costs (\$)	Total Net Wholesale Sales Gains (\$) (3) + (4)
January	3,109	44,672	(13,890)	30,782
February	1,584	20,586	(8,309)	12,277
March	1,259	18,993	(5,955)	13,038
April	1,699	35,682	(7,951)	27,731
May	12,516	248,698	(53,923)	194,775
June	8,763	185,420	(26,800)	158,620
July	4,241	100,143	(20,030)	80,113
August	9,642	139,656	(47,309)	92,347
September	14,918	232,019	(66,828)	165,191
October	57,544	1,027,978	(358,375)	669,603
November	5,119	68,691	(26,064)	42,627
December	2,141	24,386	(12,804)	11,582
<b>Total</b>	<b>122,535</b>	<b>2,146,924</b>	<b>(648,238)</b>	<b>1,498,686</b>

**Wholesale Purchases-Table 4**

(1)	(2)	(3)	(4)	(5)
Month	Wholesale Purchases (MWh)	Wholesale Savings (\$)	Capacity Purchases (\$)	Total Net Wholesale Purchase Gains (\$) (3) + (4)
January	1,850	182,546	-	182,546
February	3,585	14,988	-	14,988
March	28,257	714,487	-	714,487
April	9,040	249,015	-	249,015
May	31,740	478,506	-	478,506
June	181,001	411,318	-	411,318
July	187,687	893,762	-	893,762
August	183,457	718,660	-	718,660
September	178,395	750,225	-	750,225
October	180,130	(8,439)	-	(8,439)
November	8,789	21,573	-	21,573
December	595	1,657	-	1,657
<b>Total</b>	<b>994,526</b>	<b>4,428,298</b>	<b>-</b>	<b>4,428,298</b>

**TAMPA ELECTRIC**  
**ASSET OPTIMIZATION DETAIL-Table 5**  
**Actual for the Period: January 2019 through December 2019**

(1) Month	(2) Natural Gas Storage Optimization (\$)	(3) Natural Gas AMA Gains (\$)	(4) Resale of Solid Fuel (\$)	(5) Total Asset Optimization Gains (\$)
January				29,915
February				38,741
March				68,565
April				42,679
May				48,011
June				33,812
July				106,200
August				62,762
September				20,790
October				21,662
November				47,123
December				20,789
<b>Total</b>	<b>9,784</b>	<b>276,678</b>	<b>254,587</b>	<b>541,049</b>