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September 2, 2022

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. 20220001-EI

Dear Mr. Teitzman:

Attached for filing in the above docket is Tampa Electric Company's Projection Testimony and Exhibits for the period January 2023 through December 2023, including:

1. Petition of Tampa Electric Company;
2. Prepared Direct Testimony of M. Ashley Sizemore and Exhibit MAS-3;
3. Prepared Direct Testimony and Patrick A. Bokor and Exhibit PAB-2;
4. Prepared Direct Testimony of John C. Heisey;
5. Prepared Direct Testimony of Benjamin F. Smith II;
6. Prepared Direct Testimony of Penelope A. Rusk.

Thank you for your assistance in connection with this matter.

Sincerely,

A handwritten signature in blue ink that reads 'Malcolm N. Means'.

Malcolm N. Means

MNM/ne
Attachment

cc: All Parties of Record (w/encl.)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Fuel and Purchased Power Cost Recovery)
Clause with Generating Performance Incentive) DOCKET NO. 20220001-EI
Factor.) FILED: September 2, 2022
_____)

PETITION OF TAMPA ELECTRIC COMPANY

Tampa Electric Company (“Tampa Electric” or “company”), hereby petitions the Commission for approval of the company’s proposals concerning fuel and purchased power factors, capacity cost factors, Optimization Mechanism results, and generating performance incentive factors set forth herein, and in support thereof, says:

Fuel and Purchased Power Factors

1. Due to the current volatility in the natural gas commodity market Tampa Electric proposes to monitor the natural gas prices and 2022 under-recovery until the amount of the under-recovery can be estimated with greater certainty. The company will not include the 2022 under-recovery in its proposed 2023 cost recovery factors at this time and plans to make a request to recover the 2022 under-recovery at a later time. Therefore, the company has not included a projected fuel and purchased power net true-up amount for the period January 1, 2022 through December 31, 2022 in the calculation of the 2023 factors as shown on the attached schedules. This is shown in Exhibit No. MAS-3, Document No. 2, Schedule E1-C.

2. The company’s projected expenditures for the period January 1, 2023 through December 31, 2023, when adjusted for the proposed GPIF reward, Optimization Mechanism sharing, spread over projected kilowatt-hour sales for the period January 1, 2023 through December 31, 2023, produce a fuel and purchased power factor for the new period of 4.832 cents

per kWh before the application of time of use multipliers for on-peak or off-peak usage. (See Exhibit No. MAS-3, Document No. 2, Schedule E1-E).

Capacity Cost Factor

3. Tampa Electric estimates that its net true-up amount applicable for the period January 1, 2022 through December 31, 2022 will be an over-recovery of \$3,123,211, as shown in Exhibit No. MAS-3, Document No. 1, page 2 of 4.

4. The company's projected expenditures for the period January 1, 2023 through December 31, 2023, when adjusted for the true-up under-recovery amount and spread over projected kilowatt-hour sales for the period, produce a capacity cost recovery factor for the period of (0.016) cents per kWh. For demand-measured customers, the factor Tampa Electric proposes to recover is (\$0.06), (\$0.05), and (\$0.04) per billed kW for GSD/RSD, GSLDPR/GSLDTPR, and GSLDSU/GSLDTSU rate classes, respectively, as set forth in Exhibit No. MAS-3, Document No. 1, page 3 of 4.

GPIF

5. Tampa Electric has calculated that it has earned a GPIF reward of \$546,170 for performance during the period January 1, 2021 through December 31, 2021, included in Exhibit No. MAS-3, Document No. 2, Schedule E1-C.

6. The company is also proposing GPIF targets and ranges for the period January 1, 2023 through December 31, 2023 with such proposed targets and ranges being detailed in the testimony and exhibits of Tampa Electric witness Patrick A. Bokor filed herewith.

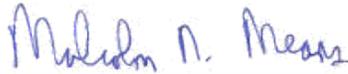
Optimization Mechanism

7. Tampa Electric has calculated that it is subject to an Optimization Mechanism sharing amount of \$4,819,866, included in Exhibit No. MAS-3, Document No. 2, Schedule E1-C.

WHEREFORE, Tampa Electric Company requests that its proposals relative to fuel and purchased power cost recovery, capacity cost recovery, Optimization Mechanism sharing, and GPIF be approved as they relate to prior period true-up calculations and projected cost recovery charges.

DATED this 2nd day of September 2022.

Respectfully submitted,



J. JEFFRY WAHLEN
MALCOLM N. MEANS
VIRGINIA PONDER
Ausley McMullen
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(850) 224-9115

ATTORNEYS FOR TAMPA ELECTRIC COMPANY

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Projection Testimony and Exhibits, filed on behalf of Tampa Electric Company, has been furnished by electronic mail on this 2nd day of September 2022 to the following:

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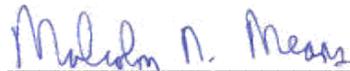
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ATTORNEY



BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20220001-EI
FUEL & PURCHASED POWER COST RECOVERY
AND
CAPACITY COST RECOVERY

PROJECTIONS
JANUARY 2023 THROUGH DECEMBER 2023

TESTIMONY AND EXHIBIT
OF
M. ASHLEY SIZEMORE

FILED: SEPTEMBER 2, 2022

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **PREPARED DIRECT TESTIMONY**

3 **OF**

4 **M. ASHLEY SIZEMORE**

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

8
9 **A.** My name is M. Ashley Sizemore. My business address is 702
10 N. Franklin Street, Tampa, Florida 33602. I am employed
11 by Tampa Electric Company ("Tampa Electric" or "company")
12 in the position of Manager, Rates in the Regulatory
13 Affairs department.

14
15 **Q.** Have you previously filed testimony in Docket
16 No. 20220001-EI?

17
18 **A.** Yes, I submitted direct testimony on April 1, 2022 and
19 July 27, 2022.

20
21 **Q.** Has your job description, education, or professional
22 experience changed since you last filed testimony in this
23 docket?

24
25 **A.** No, they have not.

1 Q. What is the purpose of your testimony?

2

3 A. The purpose of my testimony is to present, for Commission
4 review and approval, the proposed annual capacity cost
5 recovery factors, and the proposed annual levelized fuel
6 and purchased power cost recovery factors for January 2023
7 through December 2023. I also describe significant events
8 that affect the factors and provide an overview of the
9 composite effect on the residential bill of changes in
10 the various cost recovery factors for 2023.

11

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

14

15 A. Yes. Exhibit No. MAS-3, consisting of three documents,
16 was prepared under my direction and supervision. Document
17 No. 1, consisting of four pages, is furnished as support
18 for the projected capacity cost recovery factors.
19 Document No. 2, which is furnished as support for the
20 proposed levelized fuel and purchased power cost recovery
21 factors, includes Schedules E1 through E10 for January
22 2023 through December 2023 as well as Schedule H1 for
23 2020 through 2023. Document No. 3 provides a comparison
24 of retail residential fuel revenues under the inverted or
25 tiered fuel rate, which demonstrates that the tiered rate

1 is revenue neutral.

2

3 **Q.** Are you requesting Commission approval of the projected
4 fuel and capacity cost recovery factors for the company's
5 various rate schedules?

6

7 **A.** Yes.

8

9 **Q.** How were the fuel and capacity cost recovery clause
10 factors calculated?

11

12 **A.** The fuel and capacity cost recovery factors were
13 calculated as shown on Document Nos. 1 and 2. These
14 factors were calculated based on the current approved rate
15 design and schedules as set out in the 2021 Stipulation
16 and Settlement Agreement approved by the Commission in
17 Order No. PSC-2021-0423-S-EI on November 10, 2021 in
18 Docket No. 20210034-EI.

19

20 **Capacity Cost Recovery**

21 **Q.** Are you requesting Commission approval of the projected
22 capacity cost recovery factors for the company's various
23 rate schedules?

24

25 **A.** Yes. The capacity cost recovery factors, prepared under

1 my direction and supervision, are provided in Exhibit No.
2 MAS-3, Document No. 1, page 3 of 4.

3
4 **Q.** What payments are included in Tampa Electric's capacity
5 cost recovery factors?

6
7 **A.** Tampa Electric is requesting recovery of capacity
8 payments for power purchased for retail customers,
9 excluding optional provision purchases for interruptible
10 customers, through the capacity cost recovery factors. As
11 shown in Exhibit No. MAS-3, Document No. 1, page 2 of 4,
12 Tampa Electric is refunding \$3,123,211 after
13 jurisdictional separation, prior year true-up, and
14 application of the revenue tax factor for estimated
15 expenses in 2023.

16
17 **Q.** Please summarize the proposed capacity cost recovery
18 factors by metering voltage level effective beginning in
19 January 2023 for which Tampa Electric is seeking approval.

20
21 **A.**

Rate Class and	Capacity Cost	Recovery Factor
<u>Metering Voltage</u>	<u>Cents per kWh</u>	<u>\$ per kW</u>
23 RS Secondary	-0.018	
24 GS and CS Secondary	-0.017	
25 GSD, SBD Standard		

1	Secondary	-0.06
2	Primary	-0.06
3	Transmission	-0.06
4	GSD Optional	
5	Secondary	-0.014
6	Primary	-0.014
7	Transmission	-0.014
8	GSLDPR/GSLDTPR/SBLDPR/SBLDTSU	-0.05
9	GSLDSU/GSLDTSU/SBLDSU/SBLDTSU	-0.04
10	LS1 Secondary	-0.003

11

12 These factors are shown in Exhibit No. MAS-3, Document

13 No. 1, page 3 of 4.

14

15 **Q.** How does Tampa Electric's proposed average capacity cost

16 recovery factor of (0.016) cents per kWh compare to the

17 factor for April 2022 through December 2022?

18

19 **A.** The proposed capacity cost recovery factor of (0.016)

20 cents per kWh beginning in January 2023 is 0.061 cents

21 per kWh (or \$.61 per 1,000 kWh) less than the average

22 capacity cost recovery factor of 0.045 cents per kWh for

23 the April 2022 through December 2022 period.

24

25 **Fuel and Purchased Power Cost Recovery Factor**

1 **Q.** What is the appropriate amount of the levelized fuel and
2 purchased power cost recovery factor for the period
3 beginning in January 2023?
4

5 **A.** The appropriate amount for the period beginning in January
6 2023 is 4.832 cents per kWh before the application of the
7 time of use multipliers for on-peak or off-peak usage.
8 Schedule E1-E of Exhibit No. MAS-3, Document No. 2, shows
9 the appropriate value for the total fuel and purchased
10 power cost recovery factor for each metering voltage level
11 as projected for the period January 2023 through December
12 2023.
13

14 **Q.** Please describe the information provided on Schedule
15 E1-C.
16

17 **A.** The Generating Performance Incentive Factor ("GPIF"),
18 true-up factors, and Optimization Mechanism factor are
19 provided on Schedule E1-C. Tampa Electric has calculated
20 a GPIF reward of \$546,170 and an Optimization Mechanism
21 gain of \$4,819,866, which is included in the calculation
22 of the total fuel and purchased power cost recovery
23 factors. In addition, Schedule E1-C indicates the net
24 true-up for 2022 to be \$0.
25

1 **Q.** Do your 2023 factors include the projected under-recovery
2 for 2022?

3

4 **A.** No. Natural gas prices remain highly volatile, and the
5 2022 under-recovery could change materially over the
6 remainder of the calendar year. Consequently, the company
7 did not include the currently projected under-recovery
8 for 2022 in the factors for 2023.

9

10 **Q.** Please describe the information provided on Schedule
11 E1-D.

12

13 **A.** Schedule E1-D presents Tampa Electric's on-peak and off-
14 peak fuel adjustment factors for January 2023 through
15 December 2023. The schedule also presents Tampa
16 Electric's levelized fuel cost factors at each metering
17 level.

18

19 **Q.** Please describe the information presented on Schedule
20 E1-E.

21

22 **A.** Schedule E1-E presents the standard, tiered, on-peak, and
23 off-peak fuel adjustment factors at each metering voltage
24 to be applied to customer bills.

25

1 Q. Please describe the information provided in Document
2 No. 3.

3

4 A. Exhibit No. MAS-3, Document No. 3 demonstrates that the
5 tiered rate structure is designed to be revenue neutral
6 so that the company will recover the same fuel costs as
7 it would under the levelized fuel approach.

8

9 Q. Please summarize the proposed fuel and purchased power
10 cost recovery factors by metering voltage level for the
11 period beginning in January 2023.

12

13 A. Metering Voltage Level	Fuel Charge Factor
	(Cents per kWh)
15 Secondary	4.832
16 Tier I (Up to 1,000 kWh)	4.525
17 Tier II (Over 1,000 kWh)	5.525
18 Distribution Primary	4.784
19 Transmission	4.735
20 Lighting Service	4.767
21 Distribution Secondary	5.179(on-peak)
22	4.683(off-peak)
23 Distribution Primary	5.127(on-peak)
24	4.636(off-peak)
25 Transmission	5.075(on-peak)

1 4.589(off-peak)

2
3 **Q.** How does Tampa Electric's proposed levelized fuel
4 adjustment factor of 4.832 cents per kWh compare to the
5 levelized fuel adjustment factor for the April 2022
6 through December 2022 period?

7
8 **A.** The proposed fuel charge factor of 4.832 cents per kWh is
9 0.706 cents per kWh (or \$7.06 per 1,000 kWh) higher than
10 the average fuel charge factor of 4.126 cents per kWh for
11 the April 2022 through December 2022 period.

12
13 **Wholesale Incentive Benchmark and Optimization Mechanism**

14 **Q.** Will Tampa Electric project a 2023 wholesale incentive
15 benchmark that is derived in accordance with Order No.
16 PSC-2001-2371-FOF-EI issued in Docket No. 20010283-EI?

17
18 **A.** No. Effective January 1, 2018, as authorized by FPSC Order
19 No. PSC-2017-0456-S-EI, issued in Docket No. 20160160-EI
20 on November 27, 2017, the company's Optimization
21 Mechanism replaced the short-term wholesale sales
22 incentive mechanism, and as a result no wholesale
23 incentive benchmark is required for the 2023 projection.

24
25 **Cost Recovery Factors**

1 Q. What is the composite effect of Tampa Electric's proposed
2 changes in its base, capacity, fuel and purchased power,
3 environmental, and energy conservation cost recovery
4 factors on a 1,000 kWh residential customer's bill?

5
6 A. The composite effect on a residential bill for 1,000 kWh
7 is an increase of \$14.20 in the period beginning January
8 2023, when compared to the April 2022 through December
9 2022 charges. These amounts are shown in Exhibit No. MAS-
10 3, Document No. 2, on Schedule E10.

11
12 Q. When should the new rates take effect?

13
14 A. The new rates should take effect concurrent with meter
15 readings for the first billing cycle for January 2023.

16
17 Q. Does this conclude your direct testimony?

18
19 A. Yes.
20
21
22
23
24
25

**EXHIBIT TO THE TESTIMONY OF
M. ASHLEY SIZEMORE**

DOCUMENT NO. 1

PROJECTED CAPACITY COST RECOVERY

JANUARY 2023 - DECEMBER 2023

AND

SCHEDULE E12

**TAMPA ELECTRIC COMPANY
CAPACITY COST RECOVERY CLAUSE
CALCULATION OF ENERGY & DEMAND ALLOCATION BY RATE CLASS
JANUARY 2023 THROUGH DECEMBER 2023
PROJECTED**

RATE CLASS	(1) AVG 12 CP LOAD FACTOR AT METER (%)	(2) PROJECTED SALES AT METER (MWH)	(3) PROJECTED AVG 12 CP AT METER (MW)	(4) DEMAND LOSS EXPANSION FACTOR	(5) ENERGY LOSS EXPANSION FACTOR	(6) PROJECTED SALES AT GENERATION (MWH)	(7) PROJECTED AVG 12 CP AT GENERATION (MW)	(8) PERCENTAGE OF SALES AT GENERATION (%)	(9) PERCENTAGE OF DEMAND AT GENERATION (%)	(10) 12 CP & 1/13 AVG DEMAND FACTOR (%)
RS,RSVP	53.95%	9,986,591	2,113	1.07443	1.05243	10,510,207	2,271	50.16%	59.19%	58.49%
GS, CS	57.87%	912,160	180	1.07443	1.05241	959,970	193	4.58%	5.03%	5.00%
GSD Optional	3.96%	370,822	57	1.07347	1.05132	389,854	61	1.86%	1.59%	1.61%
GSD, SBD, RSD	70.93%	6,640,888	1,012	1.07347	1.05132	6,981,713	1,087	33.32%	28.33%	28.71%
GSLDPR/SBLDTPR	104.98%	1,256,480	137	1.04490	1.02631	1,289,536	143	6.15%	3.73%	3.92%
GSLDSU/SBLDTSU	102.86%	700,733	78	1.02670	1.01426	710,728	80	3.39%	2.08%	2.18%
LS1, LS2	879.82%	107,962	1	1.07443	1.05243	113,622	2	0.54%	0.05%	0.09%
TOTAL		19,975,636	3,578			20,955,630	3,837	100.00%	100.00%	100.00%

- (1) AVG 12 CP load factor based on 2022 projected calendar data.
(2) Projected MWH sales for the period January 2023 thru December 2023.
(3) Based on 12 months average CP at meter.
(4) Based on 2022 projected demand losses.
(5) Based on 2022 projected energy losses.
(6) Col (2) * Col (5).
(7) Col (3) * Col (4).
(8) Based on 12 months average percentage of sales at generation.
(9) Based on 12 months average percentage of demand at generation.
(10) Col (8) * 0.0769 + Col (9) * 0.9231

**TAMPA ELECTRIC COMPANY
CAPACITY COST RECOVERY CLAUSE
CALCULATION OF ENERGY & DEMAND ALLOCATION BY RATE CLASS
JANUARY 2023 THROUGH DECEMBER 2023
PROJECTED**

	January	February	March	April	May	June	July	August	September	October	November	December	Total
1 UNIT POWER CAPACITY CHARGES	0	0	0	0	283,354	283,354	283,354	283,354	283,354	283,354	0	0	1,700,124
2 CAPACITY PAYMENTS TO COGENERATORS	0	0	0	0	0	0	0	0	0	0	0	0	0
3 (UNIT POWER CAPACITY REVENUES)	(71,105)	(71,105)	(71,105)	(71,105)	(71,105)	(71,105)	(71,105)	(71,105)	(71,105)	(71,105)	(71,105)	(71,107)	(853,262)
4 TOTAL CAPACITY DOLLARS	(\$71,105)	(\$71,105)	(\$71,105)	(\$71,105)	\$212,249	\$212,249	\$212,249	\$212,249	\$212,249	\$212,249	(\$71,105)	(\$71,107)	\$846,862
5 SEPARATION FACTOR	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	
6 JURISDICTIONAL CAPACITY DOLLARS	(\$71,105)	(\$71,105)	(\$71,105)	(\$71,105)	\$212,249	\$212,249	\$212,249	\$212,249	\$212,249	\$212,249	(\$71,105)	(\$71,107)	\$846,862
7 ESTIMATED TRUE-UP FOR THE PERIOD ENDING DECEMBER 2022													(3,967,826)
8 TOTAL													(\$3,120,964)
9 REVENUE TAX FACTOR													1.00072
10 TOTAL RECOVERABLE CAPACITY DOLLARS													(\$3,123,211)

13

**TAMPA ELECTRIC COMPANY
CAPACITY COST RECOVERY CLAUSE
CALCULATION OF ENERGY & DEMAND ALLOCATION BY RATE CLASS
JANUARY 2023 THROUGH DECEMBER 2023
PROJECTED**

RATE CLASS	(1) PERCENTAGE OF SALES AT GENERATION (%)	(2) PERCENTAGE OF DEMAND AT GENERATION (%)	(3) ENERGY RELATED COSTS (\$)	(4) DEMAND RELATED COSTS (\$)	(5) TOTAL CAPACITY COSTS (\$)	(6) PROJECTED SALES AT METER (MWH)	(7) EFFECTIVE AT SECONDARY LEVEL (MWH)	(8) BILLING KW LOAD FACTOR (%)	(9) PROJECTED BILLED KW AT METER (kw)	(10) CAPACITY RECOVERY FACTOR (\$/kw)	(11) CAPACITY RECOVERY FACTOR (\$/kwh)
RS	50.16%	59.19%	(120,472)	(1,706,469)	(1,826,941)	9,986,591	9,986,591				-0.00018
GS, CS	4.58%	5.03%	(11,000)	(145,017)	(156,017)	912,160	912,160				-0.00017
GSD, RSD											
Secondary						6,338,665	6,338,665			-0.06	
Primary						300,573	297,567			-0.06	
Transmission						1,651	1,618			-0.06	
GSD, RSD - Standard	33.32%	28.33%	(80,026)	(816,764)	(896,790)	6,640,888	6,637,850	57.50%	15,814,264		
GSD - Optional											
Secondary	1.86%	1.59%	(4,467)	(45,840)	(50,307)	364,077	364,077				-0.00014
Primary						6,746	6,678				-0.00014
Transmission						0	0				-0.00014
GSLDPR/GSLDTPR											
SBLDPR/SBLDTPR	6.15%	3.73%	(14,771)	(107,537)	(122,308)	1,256,480	1,256,480	68.51%	2,512,434	-0.05	
GSLDSU/GSLDTSU											
SBLDSU/SBLDTSU	3.39%	2.08%	(8,142)	(59,967)	(68,109)	700,733	700,733	60.41%	1,588,948	-0.04	
LS1	0.54%	0.05%	(1,297)	(1,442)	(2,739)	107,962	107,962				-0.00003
TOTAL	100.00%	100.00%	(240,175)	(2,883,036)	(3,123,211)	19,975,636	19,972,529				-0.00016

- (1) Obtained from page 1.
- (2) Obtained from page 1.
- (3) Total capacity costs * 0.0769 * Col (1).
- (4) Total capacity costs * 0.9231 * Col (2).
- (5) Col (3) + Col (4).
- (6) Projected kWh sales for the period January 2023 through December 2023.
- (7) Projected kWh sales at secondary for the period January 2023 through December 2023.
- (8) Col 7 / (Col 9 * 730)*1000
- (9) Projected kw demand for the period January 2023 through December 2023.
- (10) Total Col (5) / Total Col (9).
- (11) {Col (5) / Total Col (7)} / 1000.

TAMPA ELECTRIC COMPANY
CAPACITY COSTS
ESTIMATED FOR THE PERIOD: JANUARY 2023 THROUGH DECEMBER 2023

CONTRACT	TERM		CONTRACT TYPE
	START	END	
SEMINOLE ELECTRIC **	6/1/1992	-----	LT

QF = QUALIFYING FACILITY
 LT = LONG TERM
 ST = SHORT-TERM
 ** THREE YEAR NOTICE REQUIRED FOR TERMINATION.

CONTRACT	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW	MW
SEMINOLE ELECTRIC	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0

CAPACITY	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)

FLORIDA MUNICIPAL POWER AGENCY ORLANDO UTILITIES COMMISSION VARIOUS SUBTOTAL CAPACITY PURCHASES													
SEMINOLE ELECTRIC - D VARIOUS MARKET BASED SUBTOTAL CAPACITY SALES													
TOTAL PURCHASES AND (SALES)	(71,105)	(71,105)	(71,105)	(71,105)	212,249	212,249	212,249	212,249	212,249	212,249	(71,105)	(71,107)	846,862
TOTAL CAPACITY	(\$71,105)	(\$71,105)	(\$71,105)	(\$71,105)	\$212,249	\$212,249	\$212,249	\$212,249	\$212,249	\$212,249	(\$71,105)	(\$71,107)	\$846,862

EXHIBIT TO THE TESTIMONY OF

M. ASHLEY SIZEMORE

DOCUMENT NO. 2

PROJECTED FUEL AND PURCHASED POWER COST RECOVERY

JANUARY 2023 - DECEMBER 2023

**SCHEDULES E1 THROUGH E10
SCHEDULE H1**

TAMPA ELECTRIC COMPANY

TABLE OF CONTENTS

PAGE NO.	DESCRIPTION	PERIOD
2	Schedule E1 Cost Recovery Clause Calculation	(JAN. 2023 - DEC. 2023)
3	Schedule E1-A Calculation of Total True-Up	(")
4	Schedule E1-C GPIF & True-Up Adj. Factors	(")
5	Schedule E1-D Fuel Adjustment Factor for TOD	(")
6	Schedule E1-E Fuel Recovery Factor-with Line Losses	(")
7	Schedule E2 Cost Recovery Clause Calculation (By Month)	(")
8-9	Schedule E3 Generating System Comparative Data	(")
10-33	Schedule E4 System Net Generation & Fuel Cost	(")
34-35	Schedule E5 Inventory Analysis	(")
36-37	Schedule E6 Power Sold	(")
38	Schedule E7 Purchased Power	(")
39	Schedule E8 Energy Payment to Qualifying Facilities	(")
40	Schedule E9 Economy Energy Purchases	(")
41	Schedule E10 Residential Bill Comparison	(")
42	Schedule H1 Generating System Comparative Data	(JAN. - DEC. 2020-2023)

**TAMPA ELECTRIC COMPANY
FUEL AND PURCHASED POWER
COST RECOVERY CLAUSE CALCULATION
ESTIMATED FOR THE PERIOD: JANUARY 2023 THROUGH DECEMBER 2023**

SCHEDULE E1

	DOLLARS	MWH	CENTS/KWH
1. Fuel Cost of System Net Generation (E3)	953,714,571	20,958,980	4.55039
2. Nuclear Fuel Disposal Cost	0	0	0.00000
3. Coal Car Investment	0	0	0.00000
4a. Adjustment	0	20,958,980 ⁽¹⁾	0.00000
4b. Adjustment	0	0	0.00000
5. TOTAL COST OF GENERATED POWER (LINES 1 THROUGH 4b)	953,714,571	20,958,980	4.55039
6. Fuel Cost of Purchased Power - System (Exclusive of Economy)(E7)	18,870	190	9.93158
7. Energy Cost of Economy Purchases (E9)	3,329,070	36,660	9.08093
8. Demand and Non-Fuel Cost of Purchased Power	0	0	0.00000
9. Energy Payments to Qualifying Facilities (E8)	1,787,820	64,970	2.75176
10. TOTAL COST OF PURCHASED POWER (LINES 6 THROUGH 9)	5,135,760	101,820	5.04396
11. TOTAL AVAILABLE MWH (LINE 5 + LINE 10)		21,060,800	
12. Fuel Cost of Schedule D Sales - Jurisd. (E6)	1,937,530	40,120	4.82934
13. Fuel Cost of Market Based Sales - Jurisd. (E6)	0	0	0.00000
14. Gains on Sales	179,997	NA	NA
15. TOTAL FUEL COST AND GAINS OF POWER SALES	2,117,527	40,120	5.27798
16. Net Inadvertant Interchange		0	
17. Wheeling Received Less Wheeling Delivered		0	
18. Interchange and Wheeling Losses		1,372	
19. TOTAL FUEL AND NET POWER TRANSACTIONS (LINE 5+10-15+16+17-18)	956,732,804	21,019,308	4.55169
20. Net Unbilled	NA ^{(1)(a)}	NA ^(a)	NA
21. Company Use	1,747,849 ⁽¹⁾	38,400	0.00876
22. T & D Losses	46,765,269 ⁽¹⁾	1,027,426	0.23437
23. System MWH Sales	956,732,804	19,953,481	4.79482
24. Wholesale MWH Sales	0	0	0.00000
25. Jurisdictional MWH Sales	956,732,804	19,953,481	4.79482
26. Jurisdictional Loss Multiplier			1.00000
27. Jurisdictional MWH Sales Adjusted for Line Loss	956,732,804	19,953,481	4.79482
28. Optimization Mechanism ⁽²⁾	4,819,866	19,953,481	0.02416
29. True-up ⁽²⁾	0	19,953,481	0.00000
30. Total Jurisdictional Fuel Cost (Excl. GPIF)	961,552,670	19,953,481	4.81897
31. Revenue Tax Factor			1.00072
32. Fuel Factor (Excl. GPIF) Adjusted for Taxes	962,244,988	19,953,481	4.82244
33. GPIF Adjusted for Taxes ⁽²⁾	546,170	19,953,481	0.00274
34. Fuel Factor Adjusted for Taxes Including GPIF	962,791,158	19,953,481	4.82518
35 Fuel Factor Rounded to Nearest .001 cents per KWH			4.825

(a) Data not available at this time.

(1) Included For Informational Purposes Only

(2) Calculation Based on Jurisdictional MWH Sales

**TAMPA ELECTRIC COMPANY
CALCULATION OF PROJECTED PERIOD TOTAL TRUE-UP
FOR THE PERIOD: JANUARY 2023 THROUGH DECEMBER 2023**

SCHEDULE E1-A

1. ESTIMATED OVER/(UNDER) RECOVERY (SCH. E1-B) January 2022 - December 2022 (6 months actual, 6 months estimated)	(\$437,178,107)
2. PROJECTED OVER/UNDER-RECOVERY TRUE-UP INCLUDED IN APRIL - DECEMBER 2022 RATES (Per Mid-Course correction Schedule E1-C, line 1B)	(\$97,303,593)
3. DIFFERENCE IN 2021 ESTIMATED TRUE-UP AMOUNT PROJECTED IN MID-COURSE 2022 RATES AND AMOUNT COLLECTED IN 2022 (\$72,171,466 under-recovery less (\$81,354) collected January through March 2022)	<u>(\$72,090,112)</u>
4. ACTUAL-ESTIMATED 2022 OVER/(UNDER) RECOVERY (Line 1 - Line 2 + Line 3)	(\$411,964,625)
5. FINAL TRUE-UP (January 2021 - December 2021) (Per True-Up filed April 1, 2022)	<u>0</u>
6. TOTAL OVER/(UNDER) RECOVERY TO BE COLLECTED IN 2023 (Line 4 + Line 5) To be included in the 12-month projected period January 2023 through December 2023 (2023 Schedule E1, line 29)	<u><u>\$0</u></u>
7. JURISDICTIONAL MWH SALES (Projected January 2023 through December 2023)	19,953,481
8. TRUE-UP FACTOR - cents/kWh (Using Effective MWh Sales of 19,923,795)	0.0000

**TAMPA ELECTRIC COMPANY
 INCENTIVE FACTOR AND TRUE-UP FACTOR
 FOR THE PERIOD: JANUARY 2023 THROUGH DECEMBER 2023**

SCHEDULE E1-C

1. TOTAL AMOUNT OF ADJUSTMENTS			
A.	GENERATING PERFORMANCE INCENTIVE REWARD / (PENALTY) (January 2023 through December 2023)	\$546,170	
B.	TRUE-UP OVER / (UNDER) RECOVERED (January 2023 through December 2023)	\$0	
C.	OPTIMIZATION MECHANISM GAIN / (LOSS) (January 2023 through December 2023)	\$4,819,866	
2. TOTAL SALES (January 2023 through December 2023)			
		19,953,481	MWh
3. ADJUSTMENT FACTORS			
A.	GENERATING PERFORMANCE INCENTIVE FACTOR (Using Effective MWh Sales of 19,923,795)	0.0027	Cents/kWh
B.	TRUE-UP FACTOR (Using Effective MWh Sales of 19,923,795)	0.0000	Cents/kWh
C.	OPTIMIZATION MECHANISM FACTOR (Using Effective MWh Sales of 19,923,795)	0.0242	Cents/kWh

**DETERMINATION OF FUEL RECOVERY FACTOR
TIME OF USE RATE SCHEDULES
TAMPA ELECTRIC COMPANY
ESTIMATED FOR THE PERIOD: JANUARY 2023 THROUGH DECEMBER 2023**

SCHEDULE E1-D

			NET ENERGY FOR LOAD (%)	FUEL COST (%)
		ON PEAK	30.09	\$38.30
		OFF PEAK	69.91	\$34.63
			100.00	1.1060
		<u>TOTAL</u>	<u>ON PEAK</u>	<u>OFF PEAK</u>
1	Total Fuel & Net Power Trans (Jurisd)	(Sch E1 line 25)	\$956,732,804	
2	MWH Sales (Jurisd)	(Sch E1 line 25)	19,953,481	
2a	Effective MWH Sales (Jurisd)		19,923,795	
3	Cost Per KWH Sold	(line 1 / line 2)	4.7948	
4	Jurisdictional Loss Factor		1.00000	
5	Jurisdictional Fuel Factor		NA	
6	True-Up	(Sch E1 line 29)	\$0	
7	Optimization Mechanism	(Sch E1 line 28)	\$4,819,866	
8	TOTAL	(line 1 x line 4) + line 6 + line 7	\$961,552,670	
9	Revenue Tax Factor		1.00072	
10	Recovery Factor	(line 8 x line 9) / line 2a / 10	4.8296	
11	GPIF Factor	(Sch E1-C line 3A)	0.0027	
12	Recovery Factor Including GPIF	(line 10 + line 11)	4.8323	5.1793
13	Recovery Factor Rounded to the Nearest .001 cents/KWH		4.832	5.179
14	Hours: ON PEAK		25.59%	
15	OFF PEAK		74.41%	
			100.00%	

Jurisdictional Sales (MWH)

Metering Voltage:	Meter	Line Loss	Secondary
Distribution Secondary	17,687,299		17,687,299
Distribution Primary	1,563,798	0.99	1,548,160
Transmission	702,384	0.98	688,336
Total	19,953,481		19,923,795

	Standard	On-Peak	Off-Peak
Distribution Secondary	4.832	5.179	4.683
Distribution Primary	4.784	5.127	4.636
Transmission	4.735	5.075	4.589
RS 1st Tier	4.525		
RS 2nd Tier	5.525		
Lighting	4.767		

SCHEDULE E1-E

TAMPA ELECTRIC COMPANY
 FUEL COST RECOVERY FACTORS
 ESTIMATED FOR THE PERIOD: JANUARY 2023 THROUGH DECEMBER 2023

METERING VOLTAGE LEVEL	LEVELIZED FUEL RECOVERY FACTOR cents/kWh	FIRST TIER (Up to 1000 kWh) cents/kWh	SECOND TIER (OVER 1000 kWh) cents/kWh
STANDARD			
Distribution Secondary (RS only)		4.525	5.525
Distribution Secondary	4.832		
Distribution Primary	4.784		
Transmission	4.735		
Lighting Service ⁽¹⁾	4.767		
TIME-OF-USE			
Distribution Secondary - On-Peak	5.179		
Distribution Secondary - Off-Peak	4.683		
Distribution Primary - On-Peak	5.127		
Distribution Primary - Off-Peak	4.636		
Transmission - On-Peak	5.075		
Transmission - Off-Peak	4.589		

(1) Lighting service is based on distribution secondary, 17% on-peak and 83% off-peak

TAMPA ELECTRIC COMPANY
 FUEL AND PURCHASED POWER COST RECOVERY CLAUSE CALCULATION
 ESTIMATED FOR THE PERIOD: JANUARY 2023 THROUGH DECEMBER 2023

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
	Jan-23	Feb-23	Mar-23	Apr-23	May-23	ESTIMATED Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	TOTAL PERIOD
1. Fuel Cost of System Net Generation	97,901,703	84,987,682	80,591,341	65,478,460	75,352,417	81,905,386	87,315,870	89,715,675	82,918,437	77,998,360	61,682,842	67,866,398	953,714,571
2. Nuclear Fuel Disposal	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Fuel Cost of Power Sold ⁽¹⁾	289,859	286,460	229,782	115,061	150,099	115,880	125,399	137,006	188,722	161,771	171,804	145,684	2,117,527
4. Fuel Cost of Purchased Power	5,080	0	0	0	0	0	0	0	0	0	0	13,790	18,870
5. Demand and Non-Fuel Cost of Purchased Power	0	0	0	0	0	0	0	0	0	0	0	0	0
6. Payments to Qualifying Facilities	183,860	162,520	144,580	132,170	152,920	141,350	164,850	138,020	146,150	141,890	130,070	149,440	1,787,820
7. Energy Cost of Economy Purchases	132,290	0	72,950	24,840	64,420	64,480	57,670	165,710	1,341,690	714,780	466,690	223,550	3,329,070
8. Adjustment	0	0	0	0	0	0	0	0	0	0	0	0	0
9. Adjustment	0	0	0	0	0	0	0	0	0	0	0	0	0
10. TOTAL FUEL & NET POWER TRANSACTIONS	97,933,074	84,863,742	80,579,089	65,520,409	75,419,658	81,995,336	87,412,991	89,882,399	84,217,555	78,693,259	62,107,798	68,107,494	956,732,804
11. Jurisdictional MWh Sold	1,512,552	1,387,952	1,366,922	1,449,850	1,618,094	1,857,135	1,952,000	1,957,588	2,008,757	1,845,885	1,550,632	1,446,115	19,953,481
12. Jurisdictional % of Total Sales	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000	1.0000000
13. Jurisdictional Total Fuel & Net Power Transactions (Line 10 * Line 12)	97,933,074	84,863,742	80,579,089	65,520,409	75,419,658	81,995,336	87,412,991	89,882,399	84,217,555	78,693,259	62,107,798	68,107,494	956,732,804
14. Jurisdictional Loss Multiplier	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000	1.00000
15. JURISD. TOTAL FUEL & NET PWR. TRANS. Adjusted for Line Losses (Line 13 * Line 14)	97,933,074	84,863,742	80,579,089	65,520,409	75,419,658	81,995,336	87,412,991	89,882,399	84,217,555	78,693,259	62,107,798	68,107,494	956,732,804
16. Cost Per kWh Sold (Cents/kWh)	6.4747	6.1143	5.8949	4.5191	4.6610	4.4152	4.4781	4.5915	4.1925	4.2632	4.0053	4.7097	4.7948
17. Optimization Mechanism (Cents/kWh) ⁽²⁾	0.0242	0.0242	0.0242	0.0242	0.0242	0.0242	0.0242	0.0242	0.0242	0.0242	0.0242	0.0242	0.0242
18. True-up (Cents/kWh) ⁽²⁾	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
19. Total (Cents/kWh) (Line 16+17+18)	6.4989	6.1385	5.9191	4.5433	4.6852	4.4394	4.5023	4.6157	4.2167	4.2874	4.0295	4.7339	4.8190
20. Revenue Tax Factor	1.00072	1.00072	1.00072	1.00072	1.00072	1.00072	1.00072	1.00072	1.00072	1.00072	1.00072	1.00072	1.00072
21. Recovery Factor Adjusted for Taxes (Cents/kWh) (Excluding GPIF)	6.5036	6.1429	5.9234	4.5466	4.6886	4.4426	4.5055	4.6190	4.2197	4.2905	4.0324	4.7373	4.8225
22. GPIF Adjusted for Taxes (Cents/kWh) ⁽²⁾	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027
23. TOTAL RECOVERY FACTOR (LINE 21+22)	6.5063	6.1456	5.9261	4.5493	4.6913	4.4453	4.5082	4.6217	4.2224	4.2932	4.0351	4.7400	4.8252
24. RECOVERY FACTOR ROUNDED TO NEAREST 0.001 CENTS/KWH	6.506	6.146	5.926	4.549	4.691	4.445	4.508	4.622	4.222	4.293	4.035	4.740	4.825

⁽¹⁾ Includes Gains

⁽²⁾ Based on Effective MWh Sales shown on Schedule E1-C

23

TAMPA ELECTRIC COMPANY
GENERATING SYSTEM COMPARATIVE DATA BY FUEL TYPE
ESTIMATED FOR THE PERIOD: JANUARY 2023 THROUGH JUNE 2023

SCHEDULE E3

	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
FUEL COST OF SYSTEM NET GENERATION (\$)						
1. HEAVY OIL	0	0	0	0	0	0
2. LIGHT OIL	94,382	94,428	94,473	94,517	94,561	94,604
3. COAL	7,572,646	2,332,840	3,095,472	0	0	2,688,592
4. NATURAL GAS	90,234,675	82,560,414	77,401,396	65,383,943	75,257,856	79,122,190
5. SOLAR	0	0	0	0	0	0
6. OTHER	0	0	0	0	0	0
7. TOTAL (\$)	97,901,703	84,987,682	80,591,341	65,478,460	75,352,417	81,905,386
SYSTEM NET GENERATION (MWH)						
8. HEAVY OIL	0	0	0	0	0	0
9. LIGHT OIL	300	300	300	300	300	300
10. COAL	232,250	66,200	84,590	0	0	61,670
11. NATURAL GAS	1,166,980	1,159,580	1,239,020	1,343,100	1,605,430	1,700,360
12. SOLAR	144,810	162,350	199,140	249,240	275,250	236,210
13. OTHER	0	0	0	0	0	0
14. TOTAL (MWH)	1,544,340	1,388,430	1,523,050	1,592,640	1,880,980	1,998,540
UNITS OF FUEL BURNED						
15. HEAVY OIL (BBL)	0	0	0	0	0	0
16. LIGHT OIL (BBL)	665	665	665	665	665	665
17. COAL (TON)	107,170	30,760	39,630	0	0	31,490
18. NATURAL GAS (MCF)	8,078,345	7,825,885	8,544,725	9,028,365	10,775,735	11,452,675
19. SOLAR	0	0	0	0	0	0
20. OTHER	0	0	0	0	0	0
BTUS BURNED (MMBTU)						
21. HEAVY OIL	0	0	0	0	0	0
22. LIGHT OIL	3,900	3,900	3,900	3,900	3,900	3,900
23. COAL	2,411,430	691,990	891,780	0	0	708,510
24. NATURAL GAS	8,295,110	8,045,030	8,768,550	9,281,190	11,077,480	11,760,920
25. SOLAR	0	0	0	0	0	0
26. OTHER	0	0	0	0	0	0
27. TOTAL (MMBTU)	10,710,440	8,740,920	9,664,230	9,285,090	11,081,380	12,473,330
GENERATION MIX (% MWH)						
28. HEAVY OIL	0.00	0.00	0.00	0.00	0.00	0.00
29. LIGHT OIL	0.02	0.02	0.02	0.02	0.02	0.02
30. COAL	15.04	4.77	5.55	0.00	0.00	3.08
31. NATURAL GAS	75.56	83.52	81.35	84.33	85.35	85.08
32. SOLAR	9.38	11.69	13.08	15.65	14.63	11.82
33. OTHER	0.00	0.00	0.00	0.00	0.00	0.00
34. TOTAL (%)	100.00	100.00	100.00	100.00	100.00	100.00
FUEL COST PER UNIT						
35. HEAVY OIL (\$/BBL)	0.00	0.00	0.00	0.00	0.00	0.00
36. LIGHT OIL (\$/BBL)	141.93	142.00	142.06	142.13	142.20	142.26
37. COAL (\$/TON)	70.66	75.84	78.11	0.00	0.00	85.38
38. NATURAL GAS (\$/MCF)	11.17	10.55	9.06	7.24	6.98	6.91
39. SOLAR	0.00	0.00	0.00	0.00	0.00	0.00
40. OTHER	0.00	0.00	0.00	0.00	0.00	0.00
FUEL COST PER MMBTU (\$/MMBTU)						
41. HEAVY OIL	0.00	0.00	0.00	0.00	0.00	0.00
42. LIGHT OIL	24.20	24.21	24.22	24.24	24.25	24.26
43. COAL	3.14	3.37	3.47	0.00	0.00	3.79
44. NATURAL GAS	10.88	10.26	8.83	7.04	6.79	6.73
45. SOLAR	0.00	0.00	0.00	0.00	0.00	0.00
46. OTHER	0.00	0.00	0.00	0.00	0.00	0.00
47. TOTAL (\$/MMBTU)	9.14	9.72	8.34	7.05	6.80	6.57
BTU BURNED PER KWH (BTU/KWH)						
48. HEAVY OIL	0	0	0	0	0	0
49. LIGHT OIL	13,000	13,000	13,000	13,000	13,000	13,000
50. COAL	10,383	10,453	10,542	0	0	11,489
51. NATURAL GAS	7,108	6,938	7,077	6,910	6,900	6,917
52. SOLAR	0	0	0	0	0	0
53. OTHER	0	0	0	0	0	0
54. TOTAL (BTU/KWH)	6,935	6,296	6,345	5,830	5,891	6,241
GENERATED FUEL COST PER KWH (CENTS/KWH)						
55. HEAVY OIL	0.00	0.00	0.00	0.00	0.00	0.00
56. LIGHT OIL	31.46	31.48	31.49	31.51	31.52	31.53
57. COAL	3.26	3.52	3.66	0.00	0.00	4.36
58. NATURAL GAS	7.73	7.12	6.25	4.87	4.69	4.65
59. SOLAR	0.00	0.00	0.00	0.00	0.00	0.00
60. OTHER	0.00	0.00	0.00	0.00	0.00	0.00
61. TOTAL (CENTS/KWH)	6.34	6.12	5.29	4.11	4.01	4.10

TAMPA ELECTRIC COMPANY
GENERATING SYSTEM COMPARATIVE DATA BY FUEL TYPE
ESTIMATED FOR THE PERIOD: JULY 2023 THROUGH DECEMBER 2023

SCHEDULE E3

	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	TOTAL
FUEL COST OF SYSTEM NET GENERATION (\$)							
1. HEAVY OIL	0	0	0	0	0	0	0
2. LIGHT OIL	94,646	94,676	94,691	94,693	94,683	94,663	1,135,017
3. COAL	3,034,523	3,900,479	5,857,911	6,864,534	2,516,837	3,142,712	41,006,546
4. NATURAL GAS	84,186,701	85,720,520	76,965,835	71,039,133	59,071,322	64,629,023	911,573,008
5. SOLAR	0	0	0	0	0	0	0
6. OTHER	0	0	0	0	0	0	0
7. TOTAL (\$)	87,315,870	89,715,675	82,918,437	77,998,360	61,682,842	67,866,398	953,714,571
SYSTEM NET GENERATION (MWH)							
8. HEAVY OIL	0	0	0	0	0	0	0
9. LIGHT OIL	300	300	300	300	300	300	3,600
10. COAL	69,140	86,950	133,980	154,380	54,910	69,010	1,013,080
11. NATURAL GAS	1,796,650	1,828,880	1,631,670	1,501,730	1,253,120	1,316,260	17,542,780
12. SOLAR	229,700	222,010	191,890	190,960	147,780	150,180	2,399,520
13. OTHER	0	0	0	0	0	0	0
14. TOTAL (MWH)	2,095,790	2,138,140	1,957,840	1,847,370	1,456,110	1,535,750	20,958,980
UNITS OF FUEL BURNED							
15. HEAVY OIL (BBL)	0	0	0	0	0	0	0
16. LIGHT OIL (BBL)	665	665	665	665	665	665	7,980
17. COAL (TON)	35,080	44,270	66,390	77,130	28,050	34,800	494,770
18. NATURAL GAS (MCF)	12,118,035	12,354,675	11,012,615	10,022,165	8,353,255	8,848,985	118,415,460
19. SOLAR	0	0	0	0	0	0	0
20. OTHER	0	0	0	0	0	0	0
BTUS BURNED (MMBTU)							
21. HEAVY OIL	0	0	0	0	0	0	0
22. LIGHT OIL	3,900	3,900	3,900	3,900	3,900	3,900	46,800
23. COAL	789,390	996,120	1,493,790	1,735,530	631,050	782,960	11,132,550
24. NATURAL GAS	12,450,060	12,688,170	11,315,810	10,300,620	8,581,980	9,089,460	121,654,380
25. SOLAR	0	0	0	0	0	0	0
26. OTHER	0	0	0	0	0	0	0
27. TOTAL (MMBTU)	13,243,350	13,688,190	12,813,500	12,040,050	9,216,930	9,876,320	132,833,730
GENERATION MIX (% MWH)							
28. HEAVY OIL	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29. LIGHT OIL	0.01	0.01	0.02	0.02	0.02	0.02	0.02
30. COAL	3.30	4.07	6.84	8.35	3.77	4.49	4.83
31. NATURAL GAS	85.73	85.54	83.34	81.29	86.06	85.71	83.70
32. SOLAR	10.96	10.38	9.80	10.34	10.15	9.78	11.45
33. OTHER	0.00	0.00	0.00	0.00	0.00	0.00	0.00
34. TOTAL (%)	100.00						
FUEL COST PER UNIT							
35. HEAVY OIL (\$/BBL)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36. LIGHT OIL (\$/BBL)	142.32	142.37	142.39	142.40	142.38	142.35	142.23
37. COAL (\$/TON)	86.50	88.11	88.23	89.00	89.73	90.31	82.88
38. NATURAL GAS (\$/MCF)	6.95	6.94	6.99	7.09	7.07	7.30	7.70
39. SOLAR	0.00	0.00	0.00	0.00	0.00	0.00	0.00
40. OTHER	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUEL COST PER MMBTU (\$/MMBTU)							
41. HEAVY OIL	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42. LIGHT OIL	24.27	24.28	24.28	24.28	24.28	24.27	24.25
43. COAL	3.84	3.92	3.92	3.96	3.99	4.01	3.68
44. NATURAL GAS	6.76	6.76	6.80	6.90	6.88	7.11	7.49
45. SOLAR	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46. OTHER	0.00	0.00	0.00	0.00	0.00	0.00	0.00
47. TOTAL (\$/MMBTU)	6.59	6.55	6.47	6.48	6.69	6.87	7.18
BTU BURNED PER KWH (BTU/KWH)							
48. HEAVY OIL	0	0	0	0	0	0	0
49. LIGHT OIL	13,000	13,000	13,000	13,000	13,000	13,000	13,000
50. COAL	11,417	11,456	11,149	11,242	11,492	11,346	10,989
51. NATURAL GAS	6,930	6,938	6,935	6,859	6,848	6,906	6,935
52. SOLAR	0	0	0	0	0	0	0
53. OTHER	0	0	0	0	0	0	0
54. TOTAL (BTU/KWH)	6,319	6,402	6,545	6,517	6,330	6,431	6,338
GENERATED FUEL COST PER KWH (CENTS/KWH)							
55. HEAVY OIL	0.00	0.00	0.00	0.00	0.00	0.00	0.00
56. LIGHT OIL	31.55	31.56	31.56	31.56	31.56	31.55	31.53
57. COAL	4.39	4.49	4.37	4.45	4.58	4.55	4.05
58. NATURAL GAS	4.69	4.69	4.72	4.73	4.71	4.91	5.20
59. SOLAR	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60. OTHER	0.00	0.00	0.00	0.00	0.00	0.00	0.00
61. TOTAL (CENTS/KWH)	4.17	4.20	4.24	4.22	4.24	4.42	4.55

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: JANUARY 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MW)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$) ⁽¹⁾	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
1. TIA SOLAR	1.6	270	22.7	-	22.7	-	SOLAR	-	-	-	-	-	-
2. BIG BEND SOLAR	19.7	190	1.3	-	1.3	-	SOLAR	-	-	-	-	-	-
3. LEGOLAND SOLAR	1.4	2,850	273.6	-	273.6	-	SOLAR	-	-	-	-	-	-
4. PAYNE CREEK SOLAR	70.1	9,740	18.7	-	18.7	-	SOLAR	-	-	-	-	-	-
5. BALM SOLAR	74.2	10,080	18.3	-	18.3	-	SOLAR	-	-	-	-	-	-
6. LITHIA SOLAR	74.3	12,230	22.1	-	22.1	-	SOLAR	-	-	-	-	-	-
7. GRANGE HALL SOLAR	60.9	8,340	18.4	-	18.4	-	SOLAR	-	-	-	-	-	-
8. PEACE CREEK SOLAR	55.2	7,640	18.6	-	18.6	-	SOLAR	-	-	-	-	-	-
9. BONNIE MINE SOLAR	37.4	5,410	19.4	-	19.4	-	SOLAR	-	-	-	-	-	-
10. LAKE HANCOCK SOLAR	49.3	6,440	17.6	-	17.6	-	SOLAR	-	-	-	-	-	-
11. WIMAUMA SOLAR	74.7	11,420	20.5	-	20.5	-	SOLAR	-	-	-	-	-	-
12. LITTLE MANATEE RIVER SOLAR	74.3	12,170	22.0	-	22.0	-	SOLAR	-	-	-	-	-	-
13. DURRRANCE SOLAR	59.8	8,560	19.2	-	19.2	-	SOLAR	-	-	-	-	-	-
14. FUTURE SOLAR	31.4	3,570.0	15.3	-	15.3	-	SOLAR	-	-	-	-	-	-
15. FUTURE SOLAR	74.3	6,200.0	11.2	-	11.2	-	SOLAR	-	-	-	-	-	-
16. FUTURE SOLAR	54.4	8,450.0	20.9	-	20.9	-	SOLAR	-	-	-	-	-	-
17. FUTURE SOLAR	74.3	8,450.0	15.3	-	15.3	-	SOLAR	-	-	-	-	-	-
18. FUTURE SOLAR	14.2	6,270.0	59.3	-	59.3	-	SOLAR	-	-	-	-	-	-
19. FUTURE SOLAR	55.0	6,970.0	17.0	-	17.0	-	SOLAR	-	-	-	-	-	-
20. FUTURE SOLAR	70.0	1,590.0	3.1	-	3.1	-	SOLAR	-	-	-	-	-	-
21. FUTURE SOLAR	61.0	7,970.0	17.6	-	17.6	-	SOLAR	-	-	-	-	-	-
22. FUTURE SOLAR	25.0	-	-	-	-	-	SOLAR	-	-	-	-	-	-
23. FUTURE SOLAR	60.0	-	-	-	-	-	SOLAR	-	-	-	-	-	-
24. FUTURE SOLAR	74.5	-	-	-	-	-	SOLAR	-	-	-	-	-	-
25. FUTURE SOLAR	74.5	-	-	-	-	-	SOLAR	-	-	-	-	-	-
26. SOLAR TOTAL	⁽³⁾ 1321.5	144,810	14.7	-	14.7	-	SOLAR	-	-	-	-	-	-
27. BIG BEND #1 CC TOTAL	335	710,780	285.2	0.0	292.2	6,298	GAS	4,354,780	1,028,001	4,476,720.0	48,642,656	6.84	11.17
28. BIG BEND #2 TOTAL	0	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
29. B.B.#3 (GAS)	355	16,670	6.3	-	-	-	GAS	192,350	1,027,970	197,730.0	2,148,539	12.89	11.17
30. B.B.#3 (COAL)	0	0	0.0	-	-	-	COAL	0	0	0.0	0	0.00	0.00
31. BIG BEND #3 TOTAL	355	16,670	6.3	82.1	7.0	11,861	-	-	-	197,730.0	2,148,539	12.89	-
32. B.B.#4 (GAS)	420	40,980	13.1	-	-	-	GAS	413,950	1,028,023	425,550.0	4,623,799	11.28	11.17
33. B.B.#4 (COAL)	432	232,250	72.3	-	-	-	COAL	107,170	22,500,980	2,411,430.0	7,572,646	3.26	70.66
34. BIG BEND #4 TOTAL	432	273,230	85.0	89.3	83.2	10,383	-	-	-	2,836,980.0	12,196,445	4.46	-
35. B.B. IGNITION	-	-	-	-	-	-	GAS	9,190	1,028,292	9,450.0	102,652	-	11.17
36. B.B.C.T.#4 TOTAL	61	30	0.1	98.3	24.6	19,667	GAS	570	1,035,088	590.0	6,367	21.22	11.17
37. B.B.C.T.#5 TOTAL	350	0	0.0	96.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
38. B.B.C.T.#6 TOTAL	350	0	0.0	96.1	0.0	0	GAS	0	0	0.0	0	0.00	0.00
39. BIG BEND STATION TOTAL	1,883	1,000,710	71.4	74.9	123.6	7,507	-	-	-	7,512,020.0	63,096,659	6.31	-
40. POLK #1 GASIFIER	245	0	0.0	-	0.0	0	COAL	0	0	0.0	0	0.00	0.00
41. POLK #1 CT (GAS)	220	10,950	6.7	-	77.8	8,942	GAS	95,250	1,027,927	97,910.0	1,063,937	9.72	11.17
42. POLK #1 TOTAL	245	10,950	6.0	93.8	77.8	8,942	-	-	-	97,910.0	1,063,937	9.72	-
43. POLK #2 ST DUCT FIRING	120	1,080	1.2	-	75.0	8,185	GAS	8,600	1,027,907	8,840.0	96,062	8.89	11.17
44. POLK #2 ST W/O DUCT FIRING	360	110,470	-	-	-	-	-	771,785	1,028,007	793,400.0	8,620,796	7.80	11.17
45. POLK #2 ST TOTAL	480	111,550	31.2	-	70.6	7,192	GAS	-	-	802,240.0	8,716,858	7.81	-
46. POLK #2 CT (GAS)	180	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
47. POLK #2 CT (OIL)	187	150	0.1	-	80.2	13,000	LGT OIL	333	5,855,856	1,950.0	47,262	31.51	141.93
48. POLK #2 TOTAL	⁽⁴⁾ 180	150	0.1	-	80.2	13,000	-	-	-	1,950.0	47,262	31.51	-
49. POLK #3 CT (GAS)	180	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
50. POLK #3 CT (OIL)	187	150	0.1	-	80.2	13,000	LGT OIL	332	5,873,494	1,950.0	47,120	31.41	141.93
51. POLK #3 TOTAL	⁽⁴⁾ 180	150	0.1	-	80.2	13,000	-	-	-	1,950.0	47,120	31.41	-

26

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: JANUARY 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MW)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$) ⁽¹⁾	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
52. POLK #4 CT (GAS) TOTAL	⁽⁴⁾ 180	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
53. POLK #5 CT (GAS) TOTAL	⁽⁴⁾ 180	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
54. POLK #2 CC TOTAL	1,200	111,850	12.5	97.4	70.7	7,207	-	-	-	806,140.0	8,811,240	7.88	-
55. POLK STATION TOTAL	1,445	122,800	11.4	96.8	71.8	7,362	-	-	-	904,050.0	9,875,177	8.04	-
56. BAYSIDE #1	792	159,320	27.0	96.6	28.0	7,843	GAS	1,215,490	1,027,997	1,249,520.0	13,576,957	8.52	11.17
57. BAYSIDE #2	1,047	115,800	14.9	97.3	15.5	8,923	GAS	1,005,120	1,027,997	1,033,260.0	11,227,136	9.70	11.17
58. BAYSIDE #3	61	200	0.4	98.6	65.6	12,900	GAS	2,500	1,032,000	2,580.0	27,925	13.96	11.17
59. BAYSIDE #4	61	150	0.3	98.6	61.5	13,200	GAS	1,930	1,025,907	1,980.0	21,558	14.37	11.17
60. BAYSIDE #5	61	290	0.6	98.6	67.9	12,966	GAS	3,660	1,027,322	3,760.0	40,882	14.10	11.17
61. BAYSIDE #6	61	260	0.6	98.6	71.0	12,577	GAS	3,170	1,031,546	3,270.0	35,409	13.62	11.17
62. BAYSIDE STATION TOTAL	2,083	276,020	17.8	97.2	20.9	8,312	GAS	2,231,870	1,028,003	2,294,370.0	24,929,867	9.03	11.17
63. SYSTEM TOTAL	6,733	1,544,340	30.8	71.8	68.4	6,935	-	-	-	10,710,440.0	97,901,703	6.34	-

LEGEND:
B.B. = BIG BEND
CT = COMBUSTION TURBINE
CC = COMBINED CYCLE

CT = COMBUSTION TURBINE
ST = STEAM TURBINE

⁽¹⁾ As burned fuel cost system total includes ignition
⁽²⁾ Fuel burned (MM BTU) system total excludes ignition
⁽³⁾ AC rating

⁽⁴⁾ In Simple Cycle Mode

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: FEBRUARY 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MWH)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$) ⁽¹⁾	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
1. TIA SOLAR	1.6	260	24.2	-	24.2	-	SOLAR	-	-	-	-	-	-
2. BIG BEND SOLAR	19.7	190	1.4	-	1.4	-	SOLAR	-	-	-	-	-	-
3. LEGOLAND SOLAR	1.4	3,030	322.1	-	322.1	-	SOLAR	-	-	-	-	-	-
4. PAYNE CREEK SOLAR	70.1	11,240	23.9	-	23.9	-	SOLAR	-	-	-	-	-	-
5. BALM SOLAR	74.2	11,670	23.4	-	23.4	-	SOLAR	-	-	-	-	-	-
6. LITHIA SOLAR	74.3	13,030	26.1	-	26.1	-	SOLAR	-	-	-	-	-	-
7. GRANGE HALL SOLAR	60.9	9,270	22.7	-	22.7	-	SOLAR	-	-	-	-	-	-
8. PEACE CREEK SOLAR	55.2	8,480	22.9	-	22.9	-	SOLAR	-	-	-	-	-	-
9. BONNIE MINE SOLAR	37.4	5,780	23.0	-	23.0	-	SOLAR	-	-	-	-	-	-
10. LAKE HANCOCK SOLAR	49.3	7,430	22.4	-	22.4	-	SOLAR	-	-	-	-	-	-
11. WIMAUMA SOLAR	74.7	12,050	24.0	-	24.0	-	SOLAR	-	-	-	-	-	-
12. LITTLE MANATEE RIVER SOLAR	74.3	12,870	25.8	-	25.8	-	SOLAR	-	-	-	-	-	-
13. DURRANCE SOLAR	59.8	9,880	24.6	-	24.6	-	SOLAR	-	-	-	-	-	-
14. FUTURE SOLAR	31.4	4,130.0	19.6	-	19.6	-	SOLAR	-	-	-	-	-	-
15. FUTURE SOLAR	74.3	7,160.0	14.3	-	14.3	-	SOLAR	-	-	-	-	-	-
16. FUTURE SOLAR	54.4	9,770.0	26.7	-	26.7	-	SOLAR	-	-	-	-	-	-
17. FUTURE SOLAR	74.3	9,770.0	19.6	-	19.6	-	SOLAR	-	-	-	-	-	-
18. FUTURE SOLAR	14.2	7,240.0	75.9	-	75.9	-	SOLAR	-	-	-	-	-	-
19. FUTURE SOLAR	55.0	8,050.0	21.8	-	21.8	-	SOLAR	-	-	-	-	-	-
20. FUTURE SOLAR	70.0	1,840.0	3.9	-	3.9	-	SOLAR	-	-	-	-	-	-
21. FUTURE SOLAR	61.0	9,210.0	22.5	-	22.5	-	SOLAR	-	-	-	-	-	-
22. FUTURE SOLAR	25.0	-	-	-	-	-	SOLAR	-	-	-	-	-	-
23. FUTURE SOLAR	60.0	-	-	-	-	-	SOLAR	-	-	-	-	-	-
24. FUTURE SOLAR	74.5	-	-	-	-	-	SOLAR	-	-	-	-	-	-
25. FUTURE SOLAR	74.5	-	-	-	-	-	SOLAR	-	-	-	-	-	-
26. SOLAR TOTAL	⁽³⁾ 1321.5	162,350	18.3	-	18.3	-	SOLAR	-	-	-	-	-	-
27. BIG BEND #1 CC TOTAL	335	697,560	309.9	0.0	317.4	6,277	GAS	4,259,610	1,028,003	4,378,890.0	44,937,431	6.44	10.55
28. BIG BEND #2 TOTAL	0	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
29. B.B.#3 (GAS)	355	7,600	3.2	-	-	-	GAS	87,200	1,027,867	89,630.0	919,930	12.10	10.55
30. B.B.#3 (COAL)	0	0	0.0	-	-	-	COAL	0	0	0.0	0	0.00	0.00
31. BIG BEND #3 TOTAL	355	7,600	3.2	48.5	10.6	11,793	-	-	-	89,630.0	919,930	12.10	-
32. B.B.#4 (GAS)	420	11,680	4.1	-	-	-	GAS	118,790	1,028,033	122,120.0	1,253,194	10.73	10.55
33. B.B.#4 (COAL)	432	66,200	22.8	-	-	-	COAL	30,760	22,496,424	691,950.0	2,332,840	3.52	75.84
34. BIG BEND #4 TOTAL	432	77,880	26.8	89.3	74.5	10,453	-	-	-	814,110.0	3,586,034	4.60	-
35. B.B. IGNITION	-	-	-	-	-	-	GAS	0	0	0.0	0	-	0.00
36. B.B.C.T.#4 TOTAL	61	0	0.0	98.3	0.0	0	GAS	0	0	0.0	0	0.00	0.00
37. B.B.C.T.#5 TOTAL	350	0	0.0	94.9	0.0	0	GAS	0	0	0.0	0	0.00	0.00
38. B.B.C.T.#6 TOTAL	350	0	0.0	96.1	0.0	0	GAS	0	0	0.0	0	0.00	0.00
39. BIG BEND STATION TOTAL	1,883	783,040	61.9	68.3	197.7	6,746	-	-	-	5,282,630.0	49,443,395	6.31	-
40. POLK #1 GASIFIER	245	0	0.0	-	0.0	0	COAL	0	0	0.0	0	0.00	0.00
41. POLK #1 CT (GAS)	220	5,320	3.6	-	75.6	8,977	GAS	46,450	1,028,202	47,760.0	490,032	9.21	10.55
42. POLK #1 TOTAL	245	5,320	3.2	93.8	75.6	8,977	-	-	-	47,760.0	490,032	9.21	-
43. POLK #2 ST DUCT FIRING	120	200	0.2	-	83.3	8,150	GAS	1,580	1,031,646	1,630.0	16,668	8.33	10.55
44. POLK #2 ST W/O DUCT FIRING	360	173,510	-	-	-	-	-	1,204,015	1,028,010	1,237,740.0	12,701,947	7.32	10.55
45. POLK #2 ST TOTAL	480	173,710	53.9	-	80.4	7,135	GAS	-	-	1,239,370.0	12,718,615	7.32	-
46. POLK #2 CT (GAS)	180	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
47. POLK #2 CT (OIL)	187	150	0.1	-	80.2	13,000	LGT OIL	333	5,855,856	1,950.0	47,285	31.52	142.00
48. POLK #2 TOTAL	⁽⁴⁾ 180	150	0.1	-	80.2	13,000	-	-	-	1,950.0	47,285	31.52	-
49. POLK #3 CT (GAS)	180	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
50. POLK #3 CT (OIL)	187	150	0.1	-	80.2	13,000	LGT OIL	332	5,873,494	1,950.0	47,143	31.43	142.00
51. POLK #3 TOTAL	⁽⁴⁾ 180	150	0.1	-	80.2	13,000	-	-	-	1,950.0	47,143	31.43	-

28

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: FEBRUARY 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MW)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$) ⁽¹⁾	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
52. POLK #4 CT (GAS) TOTAL	⁽⁴⁾ 180	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
53. POLK #5 CT (GAS) TOTAL	⁽⁴⁾ 180	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
54. POLK #2 CC TOTAL	1,200	174,010	21.6	97.4	80.4	7,145	-	-	-	1,243,270.0	12,813,043	7.36	-
55. POLK STATION TOTAL	1,445	179,330	18.5	96.8	80.1	7,199	-	-	-	1,291,030.0	13,303,075	7.42	-
56. BAYSIDE #1	792	161,970	30.4	96.6	31.5	7,737	GAS	1,219,000	1,027,990	1,253,120.0	12,860,034	7.94	10.55
57. BAYSIDE #2	1,047	101,660	14.4	97.3	15.1	8,982	GAS	888,280	1,027,998	913,150.0	9,371,050	9.22	10.55
58. BAYSIDE #3	61	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
59. BAYSIDE #4	61	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
60. BAYSIDE #5	61	40	0.1	98.6	65.6	12,250	GAS	480	1,020,833	490.0	5,064	12.66	10.55
61. BAYSIDE #6	61	40	0.1	98.6	65.6	12,500	GAS	480	1,041,667	500.0	5,064	12.66	10.55
62. BAYSIDE STATION TOTAL	2,083	263,710	18.8	91.4	22.2	8,218	GAS	2,108,240	1,027,995	2,167,260.0	22,241,212	8.43	10.55
63. SYSTEM TOTAL	6,733	1,388,430	30.7	68.2	79.1	6,296	-	-	-	8,740,920.0	84,987,682	6.12	-

LEGEND:

B.B. = BIG BEND
CT = COMBUSTION TURBINE
CC = COMBINED CYCLE
ST = STEAM TURBINE

⁽¹⁾ As burned fuel cost system total includes ignition
⁽²⁾ Fuel burned (MM BTU) system total excludes ignition
⁽³⁾ AC rating

⁽⁴⁾ In Simple Cycle Mode

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: MARCH 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MW)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$ ⁽¹⁾)	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
1. TIA SOLAR	1.6	330	27.8	-	27.8	-	SOLAR	-	-	-	-	-	-
2. BIG BEND SOLAR	19.7	250	1.7	-	1.7	-	SOLAR	-	-	-	-	-	-
3. LEGOLAND SOLAR	1.4	4,040	388.4	-	388.4	-	SOLAR	-	-	-	-	-	-
4. PAYNE CREEK SOLAR	70.1	13,210	25.4	-	25.4	-	SOLAR	-	-	-	-	-	-
5. BALM SOLAR	74.2	13,700	24.9	-	24.9	-	SOLAR	-	-	-	-	-	-
6. LITHIA SOLAR	74.3	17,210	31.2	-	31.2	-	SOLAR	-	-	-	-	-	-
7. GRANGE HALL SOLAR	60.9	11,010	24.3	-	24.3	-	SOLAR	-	-	-	-	-	-
8. PEACE CREEK SOLAR	55.2	10,080	24.6	-	24.6	-	SOLAR	-	-	-	-	-	-
9. BONNIE MINE SOLAR	37.4	8,240	29.7	-	29.7	-	SOLAR	-	-	-	-	-	-
10. LAKE HANCOCK SOLAR	49.3	8,740	23.9	-	23.9	-	SOLAR	-	-	-	-	-	-
11. WIMAUMA SOLAR	74.7	16,390	29.5	-	29.5	-	SOLAR	-	-	-	-	-	-
12. LITTLE MANATEE RIVER SOLAR	74.3	17,290	31.3	-	31.3	-	SOLAR	-	-	-	-	-	-
13. DURRANCE SOLAR	59.8	11,700	26.3	-	26.3	-	SOLAR	-	-	-	-	-	-
14. FUTURE SOLAR	31.4	4,830.0	20.7	-	20.7	-	SOLAR	-	-	-	-	-	-
15. FUTURE SOLAR	74.3	8,380.0	15.2	-	15.2	-	SOLAR	-	-	-	-	-	-
16. FUTURE SOLAR	54.4	11,430.0	28.3	-	28.3	-	SOLAR	-	-	-	-	-	-
17. FUTURE SOLAR	74.3	11,430.0	20.7	-	20.7	-	SOLAR	-	-	-	-	-	-
18. FUTURE SOLAR	14.2	8,480.0	60.4	-	60.4	-	SOLAR	-	-	-	-	-	-
19. FUTURE SOLAR	55.0	9,440.0	23.1	-	23.1	-	SOLAR	-	-	-	-	-	-
20. FUTURE SOLAR	70.0	2,160.0	4.2	-	4.2	-	SOLAR	-	-	-	-	-	-
21. FUTURE SOLAR	61.0	10,800.0	23.8	-	23.8	-	SOLAR	-	-	-	-	-	-
22. FUTURE SOLAR	25.0	-	-	-	-	-	SOLAR	-	-	-	-	-	-
23. FUTURE SOLAR	60.0	-	-	-	-	-	SOLAR	-	-	-	-	-	-
24. FUTURE SOLAR	74.5	-	-	-	-	-	SOLAR	-	-	-	-	-	-
25. FUTURE SOLAR	74.5	-	-	-	-	-	SOLAR	-	-	-	-	-	-
26. SOLAR TOTAL	⁽³⁾ 1321.5	199,140	20.3	-	20.3	-	SOLAR	-	-	-	-	-	-
27. BIG BEND #1 CC TOTAL	335	649,430	260.9	0.0	318.3	6,280	GAS	3,967,290	1,028,001	4,078,380.0	35,937,234	5.53	9.06
28. BIG BEND #2 TOTAL	0	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
29. B.B.#3 (GAS)	355	22,970	8.7	-	-	-	GAS	261,770	1,027,963	269,090.0	2,371,213	10.32	9.06
30. B.B.#3 (COAL)	0	0	0.0	-	-	-	COAL	0	0	0.0	0	0.00	0.00
31. BIG BEND #3 TOTAL	355	22,970	8.7	82.1	23.9	11,715	-	-	-	269,090.0	2,371,213	10.32	-
32. B.B.#4 (GAS)	420	14,930	4.8	-	-	-	GAS	153,090	1,027,957	157,370.0	1,386,748	9.29	9.06
33. B.B.#4 (COAL)	432	84,590	26.4	-	-	-	COAL	39,630	22,502,650	891,780.0	3,095,472	3.66	78.11
34. BIG BEND #4 TOTAL	432	99,520	31.0	72.0	59.2	10,542	-	-	-	1,049,150.0	4,482,220	4.50	-
35. B.B. IGNITION	-	-	-	-	-	-	GAS	15,030	1,027,944	15,450.0	136,148	-	9.06
36. B.B.C.T.#4 TOTAL	61	10	0.0	98.3	16.4	29,000	GAS	280	1,035,714	290.0	2,536	25.36	9.06
37. B.B.C.T.#5 TOTAL	350	0	0.0	96.9	0.0	0	GAS	0	0	0.0	0	0.00	0.00
38. B.B.C.T.#6 TOTAL	350	0	0.0	96.1	0.0	0	GAS	0	0	0.0	0	0.00	0.00
39. BIG BEND STATION TOTAL	1,883	771,930	55.2	71.0	164.8	6,991	-	-	-	5,396,910.0	42,929,351	5.56	-
40. POLK #1 GASIFIER	245	0	0.0	-	0.0	0	COAL	0	0	0.0	0	0.00	0.00
41. POLK #1 CT (GAS)	220	8,580	5.2	-	75.0	8,978	GAS	74,930	1,028,026	77,030.0	678,745	7.91	9.06
42. POLK #1 TOTAL	245	8,580	4.7	93.8	75.0	8,978	-	-	-	77,030.0	678,745	7.91	-
43. POLK #2 ST DUCT FIRING	120	180	0.2	-	50.0	8,167	GAS	1,430	1,027,972	1,470.0	12,953	7.20	9.06
44. POLK #2 ST W/O DUCT FIRING	360	168,020	-	-	-	-	GAS	1,164,485	1,028,008	1,197,100.0	10,548,352	6.28	9.06
45. POLK #2 ST TOTAL	480	168,200	47.2	-	81.3	7,126	GAS	-	-	1,198,570.0	10,561,305	6.28	-
46. POLK #2 CT (GAS)	180	0	0.0	-	0.0	0	GAS	0	0	0.0	(1)	0.00	0.00
47. POLK #2 CT (OIL)	187	150	0.1	-	80.2	13,000	LGT OIL	333	5,855,856	1,950.0	47,307	31.54	142.06
48. POLK #2 TOTAL	⁽⁴⁾ 180	150	0.1	-	80.2	13,000	-	-	-	1,950.0	47,306	31.54	-
49. POLK #3 CT (GAS)	180	1,650	1.2	-	76.4	11,164	GAS	17,910	1,028,476	18,420.0	162,236	9.83	9.06
50. POLK #3 CT (OIL)	187	150	0.1	-	80.2	13,000	LGT OIL	332	5,873,494	1,950.0	47,166	31.44	142.07
51. POLK #3 TOTAL	⁽⁴⁾ 180	1,800	1.3	-	76.7	11,317	-	-	-	20,370.0	209,402	11.63	-

30

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: MARCH 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MW)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$) ⁽¹⁾	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
52. POLK #4 CT (GAS) TOTAL	⁽⁴⁾ 180	1,150	0.9	-	91.3	10,513	GAS	11,760	1,028,061	12,090.0	106,527	9.26	9.06
53. POLK #5 CT (GAS) TOTAL	⁽⁴⁾ 180	1,050	0.8	-	72.9	11,457	GAS	11,700	1,028,205	12,030.0	105,983	10.09	9.06
54. POLK #2 CC TOTAL	1,200	172,350	19.3	81.7	81.2	7,224	-	-	-	1,245,010.0	11,030,523	6.40	-
55. POLK STATION TOTAL	1,445	180,930	16.9	83.8	80.5	7,307	-	-	-	1,322,040.0	11,709,268	6.47	-
56. BAYSIDE #1	792	225,500	38.3	96.6	39.6	7,562	GAS	1,658,700	1,028,004	1,705,150.0	15,025,141	6.66	9.06
57. BAYSIDE #2	1,047	145,510	18.7	97.3	19.5	8,515	GAS	1,205,230	1,027,995	1,238,970.0	10,917,437	7.50	9.06
58. BAYSIDE #3	61	10	0.0	79.5	16.4	29,000	GAS	280	1,035,714	290.0	2,536	25.36	9.06
59. BAYSIDE #4	61	10	0.0	98.6	16.4	29,000	GAS	280	1,035,714	290.0	2,536	25.36	9.06
60. BAYSIDE #5	61	10	0.0	98.6	16.4	29,000	GAS	280	1,035,714	290.0	2,536	25.36	9.06
61. BAYSIDE #6	61	10	0.0	98.6	16.4	29,000	GAS	280	1,035,714	290.0	2,536	25.36	9.06
62. BAYSIDE STATION TOTAL	2,083	371,050	24.0	96.6	28.2	7,938	GAS	2,865,050	1,028,003	2,945,280.0	25,952,722	6.99	9.06
63. SYSTEM TOTAL	6,733	1,523,050	30.4	67.7	77.8	6,345	-	-	-	9,664,230.0	80,591,341	5.29	-

LEGEND:

B.B. = BIG BEND
CC = COMBINED CYCLE

CT = COMBUSTION TURBINE
ST = STEAM TURBINE

⁽¹⁾ As burned fuel cost system total includes ignition
⁽²⁾ Fuel burned (MM BTU) system total excludes ignition
⁽³⁾ AC rating

⁽⁴⁾ In Simple Cycle Mode

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: APRIL 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MW)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$) ⁽¹⁾	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
1. TIA SOLAR	1.6	320	27.8	-	27.8	-	SOLAR	-	-	-	-	-	-
2. BIG BEND SOLAR	19.7	300	2.1	-	2.1	-	SOLAR	-	-	-	-	-	-
3. LEGOLAND SOLAR	1.4	4,600	456.3	-	456.3	-	SOLAR	-	-	-	-	-	-
4. PAYNE CREEK SOLAR	70.1	17,260	34.2	-	34.2	-	SOLAR	-	-	-	-	-	-
5. BALM SOLAR	74.2	17,990	33.7	-	33.7	-	SOLAR	-	-	-	-	-	-
6. LITHIA SOLAR	74.3	19,470	36.4	-	36.4	-	SOLAR	-	-	-	-	-	-
7. GRANGE HALL SOLAR	60.9	14,490	33.0	-	33.0	-	SOLAR	-	-	-	-	-	-
8. PEACE CREEK SOLAR	55.2	13,220	33.3	-	33.3	-	SOLAR	-	-	-	-	-	-
9. BONNIE MINE SOLAR	37.4	9,170	34.1	-	34.1	-	SOLAR	-	-	-	-	-	-
10. LAKE HANCOCK SOLAR	49.3	11,510	32.4	-	32.4	-	SOLAR	-	-	-	-	-	-
11. WIMAUMA SOLAR	74.7	18,640	34.7	-	34.7	-	SOLAR	-	-	-	-	-	-
12. LITTLE MANATEE RIVER SOLAR	74.3	19,540	36.5	-	36.5	-	SOLAR	-	-	-	-	-	-
13. DURRANCE SOLAR	59.8	14,780	34.3	-	34.3	-	SOLAR	-	-	-	-	-	-
14. FUTURE SOLAR	31.4	6,350.0	28.1	-	28.1	-	SOLAR	-	-	-	-	-	-
15. FUTURE SOLAR	74.3	11,010.0	20.6	-	20.6	-	SOLAR	-	-	-	-	-	-
16. FUTURE SOLAR	54.4	15,030.0	38.4	-	38.4	-	SOLAR	-	-	-	-	-	-
17. FUTURE SOLAR	74.3	15,030.0	28.1	-	28.1	-	SOLAR	-	-	-	-	-	-
18. FUTURE SOLAR	14.2	11,140.0	109.0	-	109.0	-	SOLAR	-	-	-	-	-	-
19. FUTURE SOLAR	55.0	12,390.0	31.3	-	31.3	-	SOLAR	-	-	-	-	-	-
20. FUTURE SOLAR	70.0	2,830.0	5.6	-	5.6	-	SOLAR	-	-	-	-	-	-
21. FUTURE SOLAR	61.0	14,170.0	32.3	-	32.3	-	SOLAR	-	-	-	-	-	-
22. FUTURE SOLAR	25.0	-	-	-	-	-	SOLAR	-	-	-	-	-	-
23. FUTURE SOLAR	60.0	-	-	-	-	-	SOLAR	-	-	-	-	-	-
24. FUTURE SOLAR	74.5	-	-	-	-	-	SOLAR	-	-	-	-	-	-
25. FUTURE SOLAR	74.5	-	-	-	-	-	SOLAR	-	-	-	-	-	-
26. SOLAR TOTAL	⁽³⁾ 1321.5	249,240	26.2	-	26.2	-	SOLAR	-	-	-	-	-	-
27. BIG BEND #1 CC TOTAL	335	717,980	297.7	0.0	305.3	6,244	GAS	4,361,200	1,028,001	4,483,320.0	31,584,064	4.40	7.24
28. BIG BEND #2 TOTAL	0	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
29. B.B.#3 (GAS)	345	0	0.0	-	-	-	GAS	0	0	0.0	0	0.00	0.00
30. B.B.#3 (COAL)	0	0	0.0	-	-	-	COAL	0	0	0.0	0	0.00	0.00
31. BIG BEND #3 TOTAL	345	0	0.0	82.1	0.0	0	-	-	-	0.0	0	0.00	-
32. B.B.#4 (GAS)	422	0	0.0	-	-	-	GAS	0	0	0.0	0	0.00	0.00
33. B.B.#4 (COAL)	410	0	0.0	-	-	-	COAL	0	0	0.0	0	0.00	0.00
34. BIG BEND #4 TOTAL	410	0	0.0	65.5	0.0	0	-	-	-	0.0	0	0.00	-
35. B.B. IGNITION	-	-	-	-	-	-	GAS	0	0	0.0	0	-	0.00
36. B.B.C.T.#4 TOTAL	56	130	0.3	78.6	77.4	13,077	GAS	1,650	1,030,303	1,700.0	11,949	9.19	7.24
37. B.B.C.T.#5 TOTAL	330	0	0.0	95.9	0.0	0	GAS	0	0	0.0	0	0.00	0.00
38. B.B.C.T.#6 TOTAL	330	0	0.0	96.1	0.0	0	GAS	0	0	0.0	0	0.00	0.00
39. BIG BEND STATION TOTAL	1,806	718,110	55.2	68.1	305.1	6,246	-	-	-	4,485,020.0	31,596,013	4.40	-
40. POLK #1 GASIFIER	245	0	0.0	-	0.0	0	COAL	0	0	0.0	0	0.00	0.00
41. POLK #1 CT (GAS)	220	5,310	3.4	-	75.4	8,913	GAS	46,050	1,027,796	47,330.0	333,497	6.28	7.24
42. POLK #1 TOTAL	245	5,310	3.0	93.8	75.4	8,913	-	-	-	47,330.0	333,497	6.28	-
43. POLK #2 ST DUCT FIRING	120	450	0.5	-	53.6	8,267	GAS	3,620	1,027,624	3,720.0	26,216	5.83	7.24
44. POLK #2 ST W/O DUCT FIRING	360	314,780	-	-	-	-	-	2,159,685	1,028,006	2,220,170.0	15,640,564	4.97	7.24
45. POLK #2 ST TOTAL	480	315,230	91.2	-	93.8	7,055	GAS	-	-	2,223,890.0	15,666,780	4.97	-
46. POLK #2 CT (GAS)	150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
47. POLK #2 CT (OIL)	159	150	0.1	-	94.3	13,000	LGT OIL	333	5,855,856	1,950.0	47,330	31.55	142.13
48. POLK #2 TOTAL	⁽⁴⁾ 150	150	0.1	-	94.3	13,000	-	-	-	1,950.0	47,330	31.55	-
49. POLK #3 CT (GAS)	150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
50. POLK #3 CT (OIL)	159	150	0.1	-	94.3	13,000	LGT OIL	332	5,873,494	1,950.0	47,187	31.46	142.13
51. POLK #3 TOTAL	⁽⁴⁾ 150	150	0.1	-	94.3	13,000	-	-	-	1,950.0	47,187	31.46	-

32

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: APRIL 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MW)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$) ⁽¹⁾	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
52. POLK #4 CT (GAS) TOTAL	⁽⁴⁾ 150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
53. POLK #5 CT (GAS) TOTAL	⁽⁴⁾ 150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
54. POLK #2 CC TOTAL	1,080	315,530	40.6	97.4	93.8	7,060	-	-	-	2,227,790.0	15,761,297	5.00	-
55. POLK STATION TOTAL	1,325	320,840	33.6	96.8	93.0	7,091	-	-	-	2,275,120.0	16,094,794	5.02	-
56. BAYSIDE #1	720	184,300	35.6	96.6	36.8	7,817	GAS	1,401,460	1,027,999	1,440,700.0	10,149,455	5.51	7.24
57. BAYSIDE #2	954	119,810	17.4	51.9	18.2	9,015	GAS	1,050,640	1,028,002	1,080,060.0	7,608,796	6.35	7.24
58. BAYSIDE #3	56	110	0.3	98.6	98.2	11,909	GAS	1,270	1,031,496	1,310.0	9,197	8.36	7.24
59. BAYSIDE #4	56	110	0.3	78.9	98.2	11,455	GAS	1,220	1,032,787	1,260.0	8,835	8.03	7.24
60. BAYSIDE #5	56	10	0.0	78.9	17.9	31,000	GAS	300	1,033,333	310.0	2,173	21.73	7.24
61. BAYSIDE #6	56	110	0.3	78.9	98.2	11,909	GAS	1,270	1,031,496	1,310.0	9,197	8.36	7.24
62. BAYSIDE STATION TOTAL	1,898	304,450	22.3	72.6	26.2	8,293	GAS	2,456,160	1,028,007	2,524,950.0	17,787,653	5.84	7.24
63. SYSTEM TOTAL	6,351	1,592,640	34.8	61.2	96.3	5,830	-	-	-	9,285,090.0	65,478,460	4.11	-

LEGEND:

B.B. = BIG BEND
CC = COMBINED CYCLE

CT = COMBUSTION TURBINE
ST = STEAM TURBINE

⁽¹⁾ As burned fuel cost system total includes ignition
⁽²⁾ Fuel burned (MM BTU) system total excludes ignition
⁽³⁾ AC rating

⁽⁴⁾ In Simple Cycle Mode

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: MAY 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MWH)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$) ⁽¹⁾	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
1. TIA SOLAR	1.6	340	28.6	-	28.6	-	SOLAR	-	-	-	-	-	-
2. BIG BEND SOLAR	19.7	320	2.2	-	2.2	-	SOLAR	-	-	-	-	-	-
3. LEGOLAND SOLAR	1.4	4,970	477.2	-	477.2	-	SOLAR	-	-	-	-	-	-
4. PAYNE CREEK SOLAR	70.1	19,380	37.2	-	37.2	-	SOLAR	-	-	-	-	-	-
5. BALM SOLAR	74.2	20,170	36.5	-	36.5	-	SOLAR	-	-	-	-	-	-
6. LITHIA SOLAR	74.3	20,280	36.7	-	36.7	-	SOLAR	-	-	-	-	-	-
7. GRANGE HALL SOLAR	60.9	16,220	35.8	-	35.8	-	SOLAR	-	-	-	-	-	-
8. PEACE CREEK SOLAR	55.2	14,790	36.0	-	36.0	-	SOLAR	-	-	-	-	-	-
9. BONNIE MINE SOLAR	37.4	9,990	35.9	-	35.9	-	SOLAR	-	-	-	-	-	-
10. LAKE HANCOCK SOLAR	49.3	12,870	35.1	-	35.1	-	SOLAR	-	-	-	-	-	-
11. WIMAUMA SOLAR	74.7	20,110	36.2	-	36.2	-	SOLAR	-	-	-	-	-	-
12. LITTLE MANATEE RIVER SOLAR	74.3	20,350	36.8	-	36.8	-	SOLAR	-	-	-	-	-	-
13. DURRANCE SOLAR	59.8	16,810	37.8	-	37.8	-	SOLAR	-	-	-	-	-	-
14. FUTURE SOLAR	31.4	7,130.0	30.5	-	30.5	-	SOLAR	-	-	-	-	-	-
15. FUTURE SOLAR	74.3	12,350.0	22.3	-	22.3	-	SOLAR	-	-	-	-	-	-
16. FUTURE SOLAR	54.4	16,850.0	41.6	-	41.6	-	SOLAR	-	-	-	-	-	-
17. FUTURE SOLAR	74.3	16,850.0	30.5	-	30.5	-	SOLAR	-	-	-	-	-	-
18. FUTURE SOLAR	14.2	12,490.0	118.2	-	118.2	-	SOLAR	-	-	-	-	-	-
19. FUTURE SOLAR	55.0	13,900.0	34.0	-	34.0	-	SOLAR	-	-	-	-	-	-
20. FUTURE SOLAR	70.0	3,180.0	6.1	-	6.1	-	SOLAR	-	-	-	-	-	-
21. FUTURE SOLAR	61.0	15,900.0	35.0	-	35.0	-	SOLAR	-	-	-	-	-	-
22. FUTURE SOLAR	25.0	-	-	-	-	-	SOLAR	-	-	-	-	-	-
23. FUTURE SOLAR	60.0	-	-	-	-	-	SOLAR	-	-	-	-	-	-
24. FUTURE SOLAR	74.5	-	-	-	-	-	SOLAR	-	-	-	-	-	-
25. FUTURE SOLAR	74.5	-	-	-	-	-	SOLAR	-	-	-	-	-	-
26. SOLAR TOTAL	⁽³⁾ 1321.5	275,250	28.0	-	28.0	-	SOLAR	-	-	-	-	-	-
27. BIG BEND #1 CC TOTAL	335	761,470	305.5	0.0	313.1	6,239	GAS	4,621,480	1,028,002	4,750,890.0	32,276,469	4.24	6.98
28. BIG BEND #2 TOTAL	0	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
29. B.B.#3 (GAS)	345	0	0.0	-	-	-	GAS	0	0	0.0	0	0.00	0.00
30. B.B.#3 (COAL)	0	0	0.0	-	-	-	COAL	0	0	0.0	0	0.00	0.00
31. BIG BEND #3 TOTAL	345	0	0.0	82.1	0.0	0	-	-	-	0.0	0	0.00	-
32. B.B.#4 (GAS)	422	0	0.0	-	-	-	GAS	0	0	0.0	0	0.00	0.00
33. B.B.#4 (COAL)	410	0	0.0	-	-	-	COAL	0	0	0.0	0	0.00	0.00
34. BIG BEND #4 TOTAL	410	0	0.0	89.3	0.0	0	-	-	-	0.0	0	0.00	-
35. B.B. IGNITION	-	-	-	-	-	-	GAS	0	0	0.0	0	-	0.00
36. B.B.C.T.#4 TOTAL	56	330	0.8	98.3	73.7	12,394	GAS	3,990	1,025,063	4,090.0	27,866	8.44	6.98
37. B.B.C.T.#5 TOTAL	330	0	0.0	96.9	0.0	0	GAS	0	0	0.0	0	0.00	0.00
38. B.B.C.T.#6 TOTAL	330	0	0.0	96.1	0.0	0	GAS	0	0	0.0	0	0.00	0.00
39. BIG BEND STATION TOTAL	1,806	761,800	56.7	74.3	312.7	6,242	-	-	-	4,754,980.0	32,304,335	4.24	-
40. POLK #1 GASIFIER	245	0	0.0	-	0.0	0	COAL	0	0	0.0	0	0.00	0.00
41. POLK #1 CT (GAS)	220	10,230	6.3	-	77.5	8,867	GAS	88,240	1,027,992	90,710.0	616,269	6.02	6.98
42. POLK #1 TOTAL	245	10,230	5.6	72.6	77.5	8,867	-	-	-	90,710.0	616,269	6.02	-
43. POLK #2 ST DUCT FIRING	120	2,080	2.3	-	57.8	8,284	GAS	16,760	1,028,043	17,230.0	117,052	5.63	6.98
44. POLK #2 ST W/O DUCT FIRING	360	421,180	-	-	-	-	-	2,861,285	1,028,003	2,941,410.0	19,983,247	4.74	6.98
45. POLK #2 ST TOTAL	480	423,260	118.5	-	115.7	6,990	GAS	-	-	2,958,640.0	20,100,299	4.75	-
46. POLK #2 CT (GAS)	150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
47. POLK #2 CT (OIL)	159	150	0.1	-	94.3	13,000	LGT OIL	333	5,855,856	1,950.0	47,351	31.57	142.20
48. POLK #2 TOTAL	⁽⁴⁾ 150	150	0.1	-	94.3	13,000	-	-	-	1,950.0	47,351	31.57	-
49. POLK #3 CT (GAS)	150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
50. POLK #3 CT (OIL)	159	150	0.1	-	94.3	13,000	LGT OIL	332	5,873,494	1,950.0	47,210	31.47	142.20
51. POLK #3 TOTAL	⁽⁴⁾ 150	150	0.1	-	94.3	13,000	-	-	-	1,950.0	47,210	31.47	-

34

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: MAY 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MW)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$) ⁽¹⁾	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
52. POLK #4 CT (GAS) TOTAL ⁽⁴⁾	150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
53. POLK #5 CT (GAS) TOTAL ⁽⁴⁾	150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
54. POLK #2 CC TOTAL	1,080	423,560	52.7	97.4	115.7	6,994	-	-	-	2,962,540.0	20,194,860	4.77	-
55. POLK STATION TOTAL	1,325	433,790	44.0	92.8	112.9	7,039	-	-	-	3,053,250.0	20,811,129	4.80	-
56. BAYSIDE #1	720	248,930	46.5	96.6	48.1	7,602	GAS	1,840,890	1,028,003	1,892,440.0	12,856,797	5.16	6.98
57. BAYSIDE #2	954	159,810	22.5	97.3	23.5	8,530	GAS	1,326,020	1,027,994	1,363,140.0	9,260,939	5.79	6.98
58. BAYSIDE #3	56	300	0.7	98.6	76.5	12,467	GAS	3,640	1,027,473	3,740.0	25,422	8.47	6.98
59. BAYSIDE #4	56	220	0.5	98.6	78.6	12,909	GAS	2,750	1,032,727	2,840.0	19,206	8.73	6.98
60. BAYSIDE #5	56	460	1.1	98.6	74.7	12,304	GAS	5,500	1,029,091	5,660.0	38,412	8.35	6.98
61. BAYSIDE #6	56	420	1.0	79.5	68.2	12,690	GAS	5,180	1,028,958	5,330.0	36,177	8.61	6.98
62. BAYSIDE STATION TOTAL	1,898	410,140	29.0	96.6	34.2	7,981	GAS	3,183,980	1,028,006	3,273,150.0	22,236,953	5.42	6.98
63. SYSTEM TOTAL	6,351	1,880,980	39.8	69.4	108.9	5,891	-	-	-	11,081,380.0	75,352,417	4.01	-

LEGEND:

B.B. = BIG BEND
CC = COMBINED CYCLE

CT = COMBUSTION TURBINE
ST = STEAM TURBINE

⁽¹⁾ As burned fuel cost system total includes ignition
⁽²⁾ Fuel burned (MM BTU) system total excludes ignition
⁽³⁾ AC rating

⁽⁴⁾ In Simple Cycle Mode

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: JUNE 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MW)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$ ⁽¹⁾)	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
1. TIA SOLAR	1.6	290	25.2	-	25.2	-	SOLAR	-	-	-	-	-	-
2. BIG BEND SOLAR	19.7	290	2.0	-	2.0	-	SOLAR	-	-	-	-	-	-
3. LEGOLAND SOLAR	1.4	4,400	436.5	-	436.5	-	SOLAR	-	-	-	-	-	-
4. PAYNE CREEK SOLAR	70.1	16,730	33.1	-	33.1	-	SOLAR	-	-	-	-	-	-
5. BALM SOLAR	74.2	17,360	32.5	-	32.5	-	SOLAR	-	-	-	-	-	-
6. LITHIA SOLAR	74.3	17,370	32.5	-	32.5	-	SOLAR	-	-	-	-	-	-
7. GRANGE HALL SOLAR	60.9	13,970	31.9	-	31.9	-	SOLAR	-	-	-	-	-	-
8. PEACE CREEK SOLAR	55.2	12,750	32.1	-	32.1	-	SOLAR	-	-	-	-	-	-
9. BONNIE MINE SOLAR	37.4	8,650	32.1	-	32.1	-	SOLAR	-	-	-	-	-	-
10. LAKE HANCOCK SOLAR	49.3	11,070	31.2	-	31.2	-	SOLAR	-	-	-	-	-	-
11. WIMAUMA SOLAR	74.7	16,510	30.7	-	30.7	-	SOLAR	-	-	-	-	-	-
12. LITTLE MANATEE RIVER SOLAR	74.3	17,440	32.6	-	32.6	-	SOLAR	-	-	-	-	-	-
13. DURRANCE SOLAR	59.8	14,810	34.4	-	34.4	-	SOLAR	-	-	-	-	-	-
14. FUTURE SOLAR	31.4	6,110.0	27.0	-	27.0	-	SOLAR	-	-	-	-	-	-
15. FUTURE SOLAR	74.3	10,590.0	19.8	-	19.8	-	SOLAR	-	-	-	-	-	-
16. FUTURE SOLAR	54.4	14,450.0	36.9	-	36.9	-	SOLAR	-	-	-	-	-	-
17. FUTURE SOLAR	74.2	14,450.0	27.0	-	27.0	-	SOLAR	-	-	-	-	-	-
18. FUTURE SOLAR	14.2	10,710.0	104.8	-	104.8	-	SOLAR	-	-	-	-	-	-
19. FUTURE SOLAR	55.0	11,910.0	30.1	-	30.1	-	SOLAR	-	-	-	-	-	-
20. FUTURE SOLAR	70.0	2,720.0	5.4	-	5.4	-	SOLAR	-	-	-	-	-	-
21. FUTURE SOLAR	61.0	13,630.0	31.0	-	31.0	-	SOLAR	-	-	-	-	-	-
22. FUTURE SOLAR	25.0	-	-	-	-	-	SOLAR	-	-	-	-	-	-
23. FUTURE SOLAR	60.0	-	-	-	-	-	SOLAR	-	-	-	-	-	-
24. FUTURE SOLAR	74.5	-	-	-	-	-	SOLAR	-	-	-	-	-	-
25. FUTURE SOLAR	74.5	-	-	-	-	-	SOLAR	-	-	-	-	-	-
26. SOLAR TOTAL	⁽³⁾ 1321.5	236,210	24.8	-	24.8	-	SOLAR	-	-	-	-	-	-
27. BIG BEND #1 CC TOTAL	335	740,710	307.1	0.0	314.5	6,238	GAS	4,494,360	1,028,002	4,620,210.0	31,049,829	4.19	6.91
28. BIG BEND #2 TOTAL	0	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
29. B.B.#3 (GAS)	345	0	0.0	-	-	-	GAS	0	0	0.0	0	0.00	0.00
30. B.B.#3 (COAL)	0	0	0.0	-	-	-	COAL	0	0	0.0	0	0.00	0.00
31. BIG BEND #3 TOTAL	345	0	0.0	82.1	0.0	0	-	-	-	0.0	0	0.00	-
32. B.B.#4 (GAS)	422	10,880	3.6	-	-	-	GAS	121,630	1,027,954	125,030.0	840,296	7.72	6.91
33. B.B.#4 (COAL)	410	61,870	20.9	-	-	-	COAL	31,490	22,499,524	708,510.0	2,688,592	4.36	85.38
34. BIG BEND #4 TOTAL	410	72,550	24.6	89.3	60.6	11,489	-	-	-	833,540.0	3,528,888	4.86	-
35. B.B. IGNITION	-	-	-	-	-	-	GAS	12,100	1,028,926	12,450.0	83,594	-	6.91
36. B.B.C.T.#4 TOTAL	56	180	0.4	98.3	64.3	12,556	GAS	2,200	1,027,273	2,260.0	15,199	8.44	6.91
37. B.B.C.T.#5 TOTAL	330	0	0.0	96.9	0.0	0	GAS	0	0	0.0	0	0.00	0.00
38. B.B.C.T.#6 TOTAL	330	0	0.0	96.1	0.0	0	GAS	0	0	0.0	0	0.00	0.00
39. BIG BEND STATION TOTAL	1,806	813,440	62.6	74.3	178.3	6,707	-	-	-	5,456,010.0	34,677,510	4.26	-
40. POLK #1 GASIFIER	245	0	0.0	-	0.0	0	COAL	0	0	0.0	0	0.00	0.00
41. POLK #1 CT (GAS)	220	11,260	7.1	-	77.5	8,897	GAS	97,480	1,027,909	100,180.0	673,314	5.98	6.91
42. POLK #1 TOTAL	245	11,260	6.4	93.8	77.5	8,897	-	-	-	100,180.0	673,314	5.98	-
43. POLK #2 ST DUCT FIRING	120	1,980	2.3	-	55.0	8,273	GAS	15,930	1,028,249	16,380.0	110,054	5.56	6.91
44. POLK #2 ST W/O DUCT FIRING	360	461,700	-	-	-	-	-	3,115,455	1,028,004	3,202,700.0	21,523,497	4.66	6.91
45. POLK #2 ST TOTAL	480	463,680	134.2	-	134.0	6,942	GAS	-	-	3,219,080.0	21,633,551	4.67	-
46. POLK #2 CT (GAS)	150	0	0.0	-	0.0	0	GAS	0	0	0.0	1	0.00	0.00
47. POLK #2 CT (OIL)	159	150	0.1	-	94.3	13,000	LGT OIL	333	5,855,856	1,950.0	47,373	31.58	142.26
48. POLK #2 TOTAL	⁽⁴⁾ 150	150	0.1	-	94.3	13,000	-	-	-	1,950.0	47,374	31.58	-
49. POLK #3 CT (GAS)	150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
50. POLK #3 CT (OIL)	159	150	0.1	-	94.3	13,000	LGT OIL	332	5,873,494	1,950.0	47,231	31.49	142.26
51. POLK #3 TOTAL	⁽⁴⁾ 150	150	0.1	-	94.3	13,000	-	-	-	1,950.0	47,231	31.49	-

36

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: JUNE 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MW)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$) ⁽¹⁾	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
52. POLK #4 CT (GAS) TOTAL ⁽⁴⁾	150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
53. POLK #5 CT (GAS) TOTAL ⁽⁴⁾	150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
54. POLK #2 CC TOTAL	1,080	463,980	59.7	97.4	133.9	6,946	-	-	-	3,222,980.0	21,728,156	4.68	-
55. POLK STATION TOTAL	1,325	475,240	49.8	96.8	129.2	6,993	-	-	-	3,323,160.0	22,401,470	4.71	-
56. BAYSIDE #1	720	278,710	53.8	96.6	55.6	7,513	GAS	2,036,880	1,027,999	2,093,910.0	14,072,032	5.05	6.91
57. BAYSIDE #2	954	194,280	28.3	97.3	29.5	8,191	GAS	1,548,040	1,028,003	1,591,390.0	10,694,821	5.50	6.91
58. BAYSIDE #3	56	190	0.5	98.6	56.5	13,579	GAS	2,500	1,032,000	2,580.0	17,272	9.09	6.91
59. BAYSIDE #4	56	100	0.2	98.6	44.6	15,600	GAS	1,520	1,026,316	1,560.0	10,501	10.50	6.91
60. BAYSIDE #5	56	110	0.3	98.6	65.5	13,091	GAS	1,410	1,021,277	1,440.0	9,741	8.86	6.91
61. BAYSIDE #6	56	260	0.6	98.6	66.3	12,615	GAS	3,190	1,028,213	3,280.0	22,039	8.48	6.91
62. BAYSIDE STATION TOTAL	1,898	473,650	34.7	97.2	40.8	7,799	GAS	3,593,540	1,028,000	3,694,160.0	24,826,406	5.24	6.91
63. SYSTEM TOTAL	6,351	1,998,540	43.7	70.3	105.9	6,241	-	-	-	12,473,330.0	81,905,386	4.10	-

LEGEND:

B.B. = BIG BEND
CC = COMBINED CYCLE

CT = COMBUSTION TURBINE
ST = STEAM TURBINE

⁽¹⁾ As burned fuel cost system total includes ignition
⁽²⁾ Fuel burned (MM BTU) system total excludes ignition
⁽³⁾ AC rating

⁽⁴⁾ In Simple Cycle Mode

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: JULY 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MWH)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$ ⁽¹⁾)	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
1. TIA SOLAR	1.6	290	24.4	-	24.4	-	SOLAR	-	-	-	-	-	-
2. BIG BEND SOLAR	19.7	290	2.0	-	2.0	-	SOLAR	-	-	-	-	-	-
3. LEGOLAND SOLAR	1.4	4,260	409.0	-	409.0	-	SOLAR	-	-	-	-	-	-
4. PAYNE CREEK SOLAR	70.1	16,210	31.1	-	31.1	-	SOLAR	-	-	-	-	-	-
5. BALM SOLAR	74.2	16,820	30.5	-	30.5	-	SOLAR	-	-	-	-	-	-
6. LITHIA SOLAR	74.3	17,170	31.1	-	31.1	-	SOLAR	-	-	-	-	-	-
7. GRANGE HALL SOLAR	60.9	13,530	29.9	-	29.9	-	SOLAR	-	-	-	-	-	-
8. PEACE CREEK SOLAR	55.2	12,360	30.1	-	30.1	-	SOLAR	-	-	-	-	-	-
9. BONNIE MINE SOLAR	37.4	8,420	30.3	-	30.3	-	SOLAR	-	-	-	-	-	-
10. LAKE HANCOCK SOLAR	49.3	10,720	29.2	-	29.2	-	SOLAR	-	-	-	-	-	-
11. WIMAUMA SOLAR	74.7	16,260	29.3	-	29.3	-	SOLAR	-	-	-	-	-	-
12. LITTLE MANATEE RIVER SOLAR	74.3	17,230	31.2	-	31.2	-	SOLAR	-	-	-	-	-	-
13. DURRANCE SOLAR	59.8	14,210	31.9	-	31.9	-	SOLAR	-	-	-	-	-	-
14. FUTURE SOLAR	31.4	5,920.0	25.3	-	25.3	-	SOLAR	-	-	-	-	-	-
15. FUTURE SOLAR	74.3	10,260.0	18.6	-	18.6	-	SOLAR	-	-	-	-	-	-
16. FUTURE SOLAR	54.4	14,000.0	34.6	-	34.6	-	SOLAR	-	-	-	-	-	-
17. FUTURE SOLAR	14.2	14,000.0	25.3	-	25.3	-	SOLAR	-	-	-	-	-	-
18. FUTURE SOLAR	14.2	10,370.0	98.2	-	98.2	-	SOLAR	-	-	-	-	-	-
19. FUTURE SOLAR	55.0	11,540.0	28.2	-	28.2	-	SOLAR	-	-	-	-	-	-
20. FUTURE SOLAR	70.0	2,640.0	5.1	-	5.1	-	SOLAR	-	-	-	-	-	-
21. FUTURE SOLAR	61.0	13,200.0	29.1	-	29.1	-	SOLAR	-	-	-	-	-	-
22. FUTURE SOLAR	25.0	-	-	-	-	-	SOLAR	-	-	-	-	-	-
23. FUTURE SOLAR	60.0	-	-	-	-	-	SOLAR	-	-	-	-	-	-
24. FUTURE SOLAR	74.5	-	-	-	-	-	SOLAR	-	-	-	-	-	-
25. FUTURE SOLAR	74.5	-	-	-	-	-	SOLAR	-	-	-	-	-	-
26. SOLAR TOTAL	⁽³⁾ 1321.5	229,700	23.4	-	23.4	-	SOLAR	-	-	-	-	-	-
27. BIG BEND #1 CC TOTAL	335	765,360	307.1	0.0	314.7	6,237	GAS	4,643,780	1,028,001	4,773,810.0	32,261,378	4.22	6.95
28. BIG BEND #2 TOTAL	0	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
29. B.B.#3 (GAS)	345	0	0.0	-	-	-	GAS	0	0	0.0	0	0.00	0.00
30. B.B.#3 (COAL)	0	0	0.0	-	-	-	COAL	0	0	0.0	0	0.00	0.00
31. BIG BEND #3 TOTAL	345	0	0.0	82.1	0.0	0	-	-	-	0.0	0	0.00	-
32. B.B.#4 (GAS)	422	12,200	3.9	-	-	-	GAS	135,510	1,027,968	139,300.0	941,418	7.72	6.95
33. B.B.#4 (COAL)	410	69,140	22.7	-	-	-	COAL	35,080	22,502,566	789,390.0	3,034,523	4.39	86.50
34. BIG BEND #4 TOTAL	410	81,340	26.7	89.3	62.2	11,417	-	-	-	928,690.0	3,975,941	4.89	-
35. B.B. IGNITION	-	-	-	-	-	-	GAS	7,090	1,028,209	7,290.0	49,256	-	6.95
36. B.B.C.T.#4 TOTAL	56	350	0.8	98.3	78.1	12,171	GAS	4,140	1,028,986	4,260.0	28,762	8.22	6.95
37. B.B.C.T.#5 TOTAL	330	0	0.0	96.9	0.0	0	GAS	0	0	0.0	0	0.00	0.00
38. B.B.C.T.#6 TOTAL	330	0	0.0	96.1	0.0	0	GAS	0	0	0.0	0	0.00	0.00
39. BIG BEND STATION TOTAL	1,806	847,050	63.0	74.3	174.8	6,737	-	-	-	5,706,760.0	36,315,337	4.29	-
40. POLK #1 GASIFIER	245	0	0.0	-	0.0	0	COAL	0	0	0.0	0	0.00	0.00
41. POLK #1 CT (GAS)	220	15,280	9.3	-	77.2	8,923	GAS	132,630	1,028,048	136,350.0	921,410	6.03	6.95
42. POLK #1 TOTAL	245	15,280	8.4	93.8	77.2	8,923	-	-	-	136,350.0	921,410	6.03	-
43. POLK #2 ST DUCT FIRING	120	2,110	2.4	-	58.6	8,303	GAS	17,040	1,028,169	17,520.0	118,381	5.61	6.95
44. POLK #2 ST W/O DUCT FIRING	360	501,510	-	-	-	-	-	3,382,195	1,028,004	3,476,910.0	23,496,866	4.69	6.95
45. POLK #2 ST TOTAL	480	503,620	141.0	-	137.9	6,939	GAS	-	-	3,494,430.0	23,615,247	4.69	-
46. POLK #2 CT (GAS)	150	500	0.4	-	83.3	11,480	GAS	5,550	1,028,829	5,710.0	38,557	7.71	6.95
47. POLK #2 CT (OIL)	159	150	0.1	-	94.3	13,000	LGT OIL	332	5,855,856	1,950.0	47,394	31.60	142.32
48. POLK #2 TOTAL	⁽⁴⁾ 150	650	0.6	-	85.6	11,785	-	-	-	7,660.0	85,951	13.22	-
49. POLK #3 CT (GAS)	150	500	0.4	-	83.3	11,480	GAS	5,590	1,026,834	5,740.0	38,835	7.77	6.95
50. POLK #3 CT (OIL)	159	150	0.1	-	94.3	13,000	LGT OIL	332	5,873,494	1,950.0	47,252	31.50	142.33
51. POLK #3 TOTAL	⁽⁴⁾ 150	650	0.6	-	85.6	11,831	-	-	-	7,690.0	86,087	13.24	-

38

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: JULY 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MW)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$) ⁽¹⁾	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
52. POLK #4 CT (GAS) TOTAL	⁽⁴⁾ 150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
53. POLK #5 CT (GAS) TOTAL	⁽⁴⁾ 150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
54. POLK #2 CC TOTAL	1,080	504,920	62.8	97.4	137.2	6,951	-	-	-	3,509,780.0	23,787,285	4.71	-
55. POLK STATION TOTAL	1,325	520,200	52.8	96.8	130.9	7,009	-	-	-	3,646,130.0	24,708,695	4.75	-
56. BAYSIDE #1	720	297,600	55.6	96.6	57.5	7,491	GAS	2,168,750	1,027,998	2,229,470.0	15,066,792	5.06	6.95
57. BAYSIDE #2	954	199,250	28.1	97.3	29.3	8,207	GAS	1,590,790	1,027,992	1,635,320.0	11,051,573	5.55	6.95
58. BAYSIDE #3	56	510	1.2	98.6	70.1	12,725	GAS	6,310	1,028,526	6,490.0	43,837	8.60	6.95
59. BAYSIDE #4	56	400	1.0	98.6	71.4	12,825	GAS	4,990	1,028,056	5,130.0	34,667	8.67	6.95
60. BAYSIDE #5	56	480	1.2	98.6	71.4	12,708	GAS	5,940	1,026,936	6,100.0	41,267	8.60	6.95
61. BAYSIDE #6	56	600	1.4	98.6	63.0	13,250	GAS	7,730	1,028,461	7,950.0	53,702	8.95	6.95
62. BAYSIDE STATION TOTAL	1,898	498,840	35.3	97.2	41.5	7,799	GAS	3,784,510	1,027,996	3,890,460.0	26,291,838	5.27	6.95
63. SYSTEM TOTAL	6,351	2,095,790	44.4	70.3	106.0	6,319	-	-	-	13,243,350.0	87,315,870	4.17	-

LEGEND:

B.B. = BIG BEND
CC = COMBINED CYCLE

CT = COMBUSTION TURBINE
ST = STEAM TURBINE

⁽¹⁾ As burned fuel cost system total includes ignition
⁽²⁾ Fuel burned (MM BTU) system total excludes ignition
⁽³⁾ AC rating

⁽⁴⁾ In Simple Cycle Mode

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: AUGUST 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MW)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$ ⁽¹⁾)	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
1. TIA SOLAR	1.6	290	24.4	-	24.4	-	SOLAR	-	-	-	-	-	-
2. BIG BEND SOLAR	19.7	270	1.8	-	1.8	-	SOLAR	-	-	-	-	-	-
3. LEGOLAND SOLAR	1.4	4,170	400.3	-	400.3	-	SOLAR	-	-	-	-	-	-
4. PAYNE CREEK SOLAR	70.1	15,640	30.0	-	30.0	-	SOLAR	-	-	-	-	-	-
5. BALM SOLAR	74.2	16,210	29.4	-	29.4	-	SOLAR	-	-	-	-	-	-
6. LITHIA SOLAR	74.3	16,580	30.0	-	30.0	-	SOLAR	-	-	-	-	-	-
7. GRANGE HALL SOLAR	60.9	13,060	28.8	-	28.8	-	SOLAR	-	-	-	-	-	-
8. PEACE CREEK SOLAR	55.2	11,940	29.1	-	29.1	-	SOLAR	-	-	-	-	-	-
9. BONNIE MINE SOLAR	37.4	8,290	29.8	-	29.8	-	SOLAR	-	-	-	-	-	-
10. LAKE HANCOCK SOLAR	49.3	10,340	28.2	-	28.2	-	SOLAR	-	-	-	-	-	-
11. WIMAUMA SOLAR	74.7	15,770	28.4	-	28.4	-	SOLAR	-	-	-	-	-	-
12. LITTLE MANATEE RIVER SOLAR	74.3	16,660	30.1	-	30.1	-	SOLAR	-	-	-	-	-	-
13. DURRANCE SOLAR	59.8	13,780	31.0	-	31.0	-	SOLAR	-	-	-	-	-	-
14. FUTURE SOLAR	31.4	5,710.0	24.4	-	24.4	-	SOLAR	-	-	-	-	-	-
15. FUTURE SOLAR	74.3	9,900.0	17.9	-	17.9	-	SOLAR	-	-	-	-	-	-
16. FUTURE SOLAR	54.4	13,500.0	33.4	-	33.4	-	SOLAR	-	-	-	-	-	-
17. FUTURE SOLAR	74.3	13,500.0	24.4	-	24.4	-	SOLAR	-	-	-	-	-	-
18. FUTURE SOLAR	14.2	10,000.0	94.7	-	94.7	-	SOLAR	-	-	-	-	-	-
19. FUTURE SOLAR	55.0	11,130.0	27.2	-	27.2	-	SOLAR	-	-	-	-	-	-
20. FUTURE SOLAR	70.0	2,540.0	4.9	-	4.9	-	SOLAR	-	-	-	-	-	-
21. FUTURE SOLAR	61.0	12,730.0	28.0	-	28.0	-	SOLAR	-	-	-	-	-	-
22. FUTURE SOLAR	25.0	-	-	-	-	-	SOLAR	-	-	-	-	-	-
23. FUTURE SOLAR	60.0	-	-	-	-	-	SOLAR	-	-	-	-	-	-
24. FUTURE SOLAR	74.5	-	-	-	-	-	SOLAR	-	-	-	-	-	-
25. FUTURE SOLAR	74.5	-	-	-	-	-	SOLAR	-	-	-	-	-	-
26. SOLAR TOTAL	⁽³⁾ 1321.5	222,010	22.6	-	22.6	-	SOLAR	-	-	-	-	-	-
27. BIG BEND #1 CC TOTAL	335	765,270	307.0	0.0	314.7	6,237	GAS	4,643,250	1,028,004	4,773,280.0	32,216,291	4.21	6.94
28. BIG BEND #2 TOTAL	0	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
29. B.B.#3 (GAS)	345	0	0.0	-	-	-	GAS	0	0	0.0	0	0.00	0.00
30. B.B.#3 (COAL)	0	0	0.0	-	-	-	COAL	0	0	0.0	0	0.00	0.00
31. BIG BEND #3 TOTAL	345	0	0.0	82.1	0.0	0	-	-	-	0.0	0	0.00	-
32. B.B.#4 (GAS)	422	15,340	4.9	-	-	-	GAS	171,000	1,027,953	175,780.0	1,186,450	7.73	6.94
33. B.B.#4 (COAL)	410	86,950	28.5	-	-	-	COAL	44,270	22,501,016	996,120.0	3,900,479	4.49	88.11
34. BIG BEND #4 TOTAL	410	102,290	33.5	89.3	61.3	11,457	-	-	-	1,171,900.0	5,086,929	4.97	-
35. B.B. IGNITION	-	-	-	-	-	-	GAS	12,110	1,027,250	12,440.0	84,023	-	6.94
36. B.B.C.T.#4 TOTAL	56	640	1.5	98.3	81.6	11,813	GAS	7,350	1,028,571	7,560.0	50,997	7.97	6.94
37. B.B.C.T.#5 TOTAL	330	0	0.0	96.9	0.0	0	GAS	0	0	0.0	0	0.00	0.00
38. B.B.C.T.#6 TOTAL	330	0	0.0	96.1	0.0	0	GAS	0	0	0.0	0	0.00	0.00
39. BIG BEND STATION TOTAL	1,806	868,200	64.6	74.3	157.5	6,856	-	-	-	5,952,740.0	37,438,240	4.31	-
40. POLK #1 GASIFIER	245	0	0.0	-	0.0	0	COAL	0	0	0.0	0	0.00	0.00
41. POLK #1 CT (GAS)	220	17,290	10.6	-	77.0	8,894	GAS	149,590	1,027,943	153,770.0	1,037,901	6.00	6.94
42. POLK #1 TOTAL	245	17,290	9.5	93.8	77.0	8,894	-	-	-	153,770.0	1,037,901	6.00	-
43. POLK #2 ST DUCT FIRING	120	2,360	2.6	-	61.5	8,254	GAS	18,950	1,027,968	19,480.0	131,481	5.57	6.94
44. POLK #2 ST W/O DUCT FIRING	360	518,620	-	-	-	-	-	3,492,715	1,028,005	3,590,530.0	24,233,527	4.67	6.94
45. POLK #2 ST TOTAL	480	520,980	145.9	-	142.8	6,929	GAS	-	-	3,610,010.0	24,365,008	4.68	-
46. POLK #2 CT (GAS)	150	90	0.1	-	60.0	13,667	GAS	1,200	1,025,000	1,230.0	8,326	9.25	6.94
47. POLK #2 CT (OIL)	159	150	0.1	-	94.3	13,000	LGT OIL	333	5,855,856	1,950.0	47,409	31.61	142.37
48. POLK #2 TOTAL	⁽⁴⁾ 150	240	0.2	-	77.7	13,250	-	-	-	3,180.0	55,735	23.22	-
49. POLK #3 CT (GAS)	150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
50. POLK #3 CT (OIL)	159	150	0.1	-	94.3	13,000	LGT OIL	332	5,873,494	1,950.0	47,267	31.51	142.37
51. POLK #3 TOTAL	⁽⁴⁾ 150	150	0.1	-	94.3	13,000	-	-	-	1,950.0	47,267	31.51	-

40

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: AUGUST 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MW)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$) ⁽¹⁾	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
52. POLK #4 CT (GAS) TOTAL	⁽⁴⁾ 150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
53. POLK #5 CT (GAS) TOTAL	⁽⁴⁾ 150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
54. POLK #2 CC TOTAL	1,080	521,370	64.9	97.4	142.6	6,934	-	-	-	3,615,140.0	24,468,010	4.69	-
55. POLK STATION TOTAL	1,325	538,660	54.6	96.8	134.9	6,997	-	-	-	3,768,910.0	25,505,911	4.74	-
56. BAYSIDE #1	720	308,440	57.6	96.6	59.6	7,475	GAS	2,242,670	1,028,002	2,305,470.0	15,560,331	5.04	6.94
57. BAYSIDE #2	954	198,000	27.9	97.3	29.1	8,212	GAS	1,581,740	1,028,001	1,626,030.0	10,974,597	5.54	6.94
58. BAYSIDE #3	56	760	1.8	98.6	71.4	12,618	GAS	9,330	1,027,867	9,590.0	64,734	8.52	6.94
59. BAYSIDE #4	56	550	1.3	98.6	81.8	12,127	GAS	6,490	1,027,735	6,670.0	45,030	8.19	6.94
60. BAYSIDE #5	56	790	1.9	98.6	78.4	12,241	GAS	9,420	1,026,539	9,670.0	65,359	8.27	6.94
61. BAYSIDE #6	56	730	1.8	98.6	76.7	12,479	GAS	8,860	1,028,217	9,110.0	61,473	8.42	6.94
62. BAYSIDE STATION TOTAL	1,898	509,270	36.1	97.2	42.3	7,789	GAS	3,858,510	1,027,998	3,966,540.0	26,771,524	5.26	6.94
63. SYSTEM TOTAL	6,351	2,138,140	45.3	70.3	104.5	6,402	-	-	-	13,688,190.0	89,715,675	4.20	-

LEGEND:

B.B. = BIG BEND
CC = COMBINED CYCLE

CT = COMBUSTION TURBINE
ST = STEAM TURBINE

⁽¹⁾ As burned fuel cost system total includes ignition
⁽²⁾ Fuel burned (MM BTU) system total excludes ignition
⁽³⁾ AC rating

⁽⁴⁾ In Simple Cycle Mode

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: SEPTEMBER 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MWH)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$) ⁽¹⁾	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
1. TIA SOLAR	1.6	260	22.6	-	22.6	-	SOLAR	-	-	-	-	-	-
2. BIG BEND SOLAR	19.7	230	1.6	-	1.6	-	SOLAR	-	-	-	-	-	-
3. LEGOLAND SOLAR	1.4	3,460	343.3	-	343.3	-	SOLAR	-	-	-	-	-	-
4. PAYNE CREEK SOLAR	70.1	13,590	26.9	-	26.9	-	SOLAR	-	-	-	-	-	-
5. BALM SOLAR	74.2	14,080	26.4	-	26.4	-	SOLAR	-	-	-	-	-	-
6. LITHIA SOLAR	74.3	14,270	26.7	-	26.7	-	SOLAR	-	-	-	-	-	-
7. GRANGE HALL SOLAR	60.9	11,340	25.9	-	25.9	-	SOLAR	-	-	-	-	-	-
8. PEACE CREEK SOLAR	55.2	10,380	26.1	-	26.1	-	SOLAR	-	-	-	-	-	-
9. BONNIE MINE SOLAR	37.4	6,690	24.8	-	24.8	-	SOLAR	-	-	-	-	-	-
10. LAKE HANCOCK SOLAR	49.3	8,990	25.3	-	25.3	-	SOLAR	-	-	-	-	-	-
11. WIMAUMA SOLAR	74.7	13,620	25.3	-	25.3	-	SOLAR	-	-	-	-	-	-
12. LITTLE MANATEE RIVER SOLAR	74.3	14,310	26.7	-	26.7	-	SOLAR	-	-	-	-	-	-
13. DURRANCE SOLAR	59.8	12,020	27.9	-	27.9	-	SOLAR	-	-	-	-	-	-
14. FUTURE SOLAR	31.4	4,960.0	21.9	-	21.9	-	SOLAR	-	-	-	-	-	-
15. FUTURE SOLAR	74.3	8,600.0	16.1	-	16.1	-	SOLAR	-	-	-	-	-	-
16. FUTURE SOLAR	54.4	11,730.0	29.9	-	29.9	-	SOLAR	-	-	-	-	-	-
17. FUTURE SOLAR	74.3	11,730.0	21.9	-	21.9	-	SOLAR	-	-	-	-	-	-
18. FUTURE SOLAR	14.2	8,690.0	85.0	-	85.0	-	SOLAR	-	-	-	-	-	-
19. FUTURE SOLAR	55.0	9,670.0	24.4	-	24.4	-	SOLAR	-	-	-	-	-	-
20. FUTURE SOLAR	70.0	2,210.0	4.4	-	4.4	-	SOLAR	-	-	-	-	-	-
21. FUTURE SOLAR	61.0	11,060.0	25.2	-	25.2	-	SOLAR	-	-	-	-	-	-
22. FUTURE SOLAR	25.0	-	-	-	-	-	SOLAR	-	-	-	-	-	-
23. FUTURE SOLAR	60.0	-	-	-	-	-	SOLAR	-	-	-	-	-	-
24. FUTURE SOLAR	74.5	-	-	-	-	-	SOLAR	-	-	-	-	-	-
25. FUTURE SOLAR	74.5	-	-	-	-	-	SOLAR	-	-	-	-	-	-
26. SOLAR TOTAL	⁽³⁾ 1321.5	191,890	20.2	-	20.2	-	SOLAR	-	-	-	-	-	-
27. BIG BEND #1 CC TOTAL	335	740,680	307.1	0.0	314.5	6,238	GAS	4,494,220	1,028,000	4,620,060.0	31,409,560	4.24	6.99
28. BIG BEND #2 TOTAL	0	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
29. B.B.#3 (GAS)	345	0	0.0	-	-	-	GAS	0	0	0.0	0	0.00	0.00
30. B.B.#3 (COAL)	0	0	0.0	-	-	-	COAL	0	0	0.0	0	0.00	0.00
31. BIG BEND #3 TOTAL	345	0	0.0	82.1	0.0	0	-	-	-	0.0	0	0.00	-
32. B.B.#4 (GAS)	422	23,640	7.8	-	-	-	GAS	256,430	1,028,000	263,610.0	1,792,159	7.58	6.99
33. B.B.#4 (COAL)	410	133,980	45.4	-	-	-	COAL	66,390	22,500,226	1,493,790.0	5,857,911	4.37	88.23
34. BIG BEND #4 TOTAL	410	157,620	53.4	89.3	68.9	11,150	-	-	-	1,757,400.0	7,650,070	4.85	-
35. B.B. IGNITION	-	-	-	-	-	-	GAS	5,010	1,027,944	5,150.0	35,014	-	6.99
36. B.B.C.T.#4 TOTAL	56	2,580	6.4	98.3	78.1	11,961	GAS	30,020	1,027,981	30,860.0	209,806	8.13	6.99
37. B.B.C.T.#5 TOTAL	330	0	0.0	96.9	0.0	0	GAS	0	0	0.0	0	0.00	0.00
38. B.B.C.T.#6 TOTAL	330	0	0.0	96.1	0.0	0	GAS	0	0	0.0	0	0.00	0.00
39. BIG BEND STATION TOTAL	1,806	900,880	69.3	74.3	136.5	7,113	-	-	-	6,408,320.0	39,304,450	4.36	-
40. POLK #1 GASIFIER	245	0	0.0	-	0.0	0	COAL	0	0	0.0	0	0.00	0.00
41. POLK #1 CT (GAS)	220	54,160	34.2	-	79.2	8,824	GAS	464,890	1,028,007	477,910.0	3,249,060	6.00	6.99
42. POLK #1 TOTAL	245	54,160	30.7	93.8	79.2	8,824	-	-	-	477,910.0	3,249,060	6.00	-
43. POLK #2 ST DUCT FIRING	120	10,970	12.7	-	63.5	8,273	GAS	88,280	1,027,979	90,750.0	616,978	5.62	6.99
44. POLK #2 ST W/O DUCT FIRING	360	466,290	-	-	-	-	-	3,149,055	1,028,004	3,237,240.0	22,008,365	4.72	6.99
45. POLK #2 ST TOTAL	480	477,260	138.1	-	116.8	6,973	GAS	-	-	3,327,990.0	22,625,343	4.74	-
46. POLK #2 CT (GAS)	150	190	0.2	-	63.3	12,737	GAS	2,360	1,025,424	2,420.0	16,494	8.68	6.99
47. POLK #2 CT (OIL)	159	150	0.1	-	94.3	13,000	LGT OIL	333	5,855,856	1,950.0	47,417	31.61	142.39
48. POLK #2 TOTAL	⁽⁴⁾ 150	340	0.3	-	74.1	12,853	-	-	-	4,370.0	63,911	18.80	-
49. POLK #3 CT (GAS)	150	100	0.1	-	66.7	12,800	GAS	1,240	1,032,258	1,280.0	8,666	8.67	6.99
50. POLK #3 CT (OIL)	159	150	0.1	-	94.3	13,000	LGT OIL	332	5,873,494	1,950.0	47,274	31.52	142.39
51. POLK #3 TOTAL	⁽⁴⁾ 150	250	0.2	-	80.9	12,920	-	-	-	3,230.0	55,940	22.38	-

42

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: SEPTEMBER 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MW)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$) ⁽¹⁾	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
52. POLK #4 CT (GAS) TOTAL ⁽⁴⁾	150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
53. POLK #5 CT (GAS) TOTAL ⁽⁴⁾	150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
54. POLK #2 CC TOTAL	1,080	477,850	61.5	97.4	116.6	6,980	-	-	-	3,335,590.0	22,745,194	4.76	-
55. POLK STATION TOTAL	1,325	532,010	55.8	96.8	106.6	7,168	-	-	-	3,813,500.0	25,994,254	4.89	-
56. BAYSIDE #1	720	287,400	55.4	29.0	57.4	7,505	GAS	2,098,230	1,028,000	2,156,980.0	14,664,276	5.10	6.99
57. BAYSIDE #2	954	34,260	5.0	97.3	22.2	8,632	GAS	287,660	1,028,019	295,720.0	2,010,421	5.87	6.99
58. BAYSIDE #3	56	2,640	6.5	98.6	78.6	12,064	GAS	30,990	1,027,751	31,850.0	216,585	8.20	6.99
59. BAYSIDE #4	56	2,230	5.5	98.6	79.6	12,022	GAS	26,080	1,027,991	26,810.0	182,270	8.17	6.99
60. BAYSIDE #5	56	3,340	8.3	98.6	75.5	12,234	GAS	39,760	1,027,666	40,860.0	277,878	8.32	6.99
61. BAYSIDE #6	56	3,190	7.9	98.6	74.0	12,370	GAS	38,390	1,027,872	39,460.0	268,303	8.41	6.99
62. BAYSIDE STATION TOTAL	1,898	333,060	24.4	71.5	49.7	7,781	GAS	2,521,110	1,027,992	2,591,680.0	17,619,733	5.29	6.99
63. SYSTEM TOTAL	6,351	1,957,840	42.8	62.7	116.6	6,545	-	-	-	12,813,500.0	82,918,437	4.24	-

LEGEND:

B.B. = BIG BEND
CC = COMBINED CYCLE

CT = COMBUSTION TURBINE
ST = STEAM TURBINE

⁽¹⁾ As burned fuel cost system total includes ignition
⁽²⁾ Fuel burned (MM BTU) system total excludes ignition
⁽³⁾ AC rating

⁽⁴⁾ In Simple Cycle Mode

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: OCTOBER 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MW)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$ ⁽¹⁾)	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
1. TIA SOLAR	1.6	290	24.4	-	24.4	-	SOLAR	-	-	-	-	-	-
2. BIG BEND SOLAR	19.7	220	1.5	-	1.5	-	SOLAR	-	-	-	-	-	-
3. LEGOLAND SOLAR	1.4	3,580	343.7	-	343.7	-	SOLAR	-	-	-	-	-	-
4. PAYNE CREEK SOLAR	70.1	13,430	25.8	-	25.8	-	SOLAR	-	-	-	-	-	-
5. BALM SOLAR	74.2	13,930	25.2	-	25.2	-	SOLAR	-	-	-	-	-	-
6. LITHIA SOLAR	74.3	13,920	25.2	-	25.2	-	SOLAR	-	-	-	-	-	-
7. GRANGE HALL SOLAR	60.9	11,200	24.7	-	24.7	-	SOLAR	-	-	-	-	-	-
8. PEACE CREEK SOLAR	55.2	10,250	25.0	-	25.0	-	SOLAR	-	-	-	-	-	-
9. BONNIE MINE SOLAR	37.4	7,070	25.4	-	25.4	-	SOLAR	-	-	-	-	-	-
10. LAKE HANCOCK SOLAR	49.3	8,890	24.2	-	24.2	-	SOLAR	-	-	-	-	-	-
11. WIMAUMA SOLAR	74.7	14,150	25.5	-	25.5	-	SOLAR	-	-	-	-	-	-
12. LITTLE MANATEE RIVER SOLAR	74.3	13,980	25.3	-	25.3	-	SOLAR	-	-	-	-	-	-
13. DURRANCE SOLAR	59.8	11,950	26.9	-	26.9	-	SOLAR	-	-	-	-	-	-
14. FUTURE SOLAR	31.4	4,920.0	21.1	-	21.1	-	SOLAR	-	-	-	-	-	-
15. FUTURE SOLAR	74.3	8,530.0	15.4	-	15.4	-	SOLAR	-	-	-	-	-	-
16. FUTURE SOLAR	54.4	11,640.0	28.8	-	28.8	-	SOLAR	-	-	-	-	-	-
17. FUTURE SOLAR	74.3	11,640.0	21.1	-	21.1	-	SOLAR	-	-	-	-	-	-
18. FUTURE SOLAR	14.2	8,620.0	81.6	-	81.6	-	SOLAR	-	-	-	-	-	-
19. FUTURE SOLAR	55.0	9,590.0	23.4	-	23.4	-	SOLAR	-	-	-	-	-	-
20. FUTURE SOLAR	70.0	2,190.0	4.2	-	4.2	-	SOLAR	-	-	-	-	-	-
21. FUTURE SOLAR	61.0	10,970.0	24.2	-	24.2	-	SOLAR	-	-	-	-	-	-
22. FUTURE SOLAR	25.0	-	-	-	-	-	SOLAR	-	-	-	-	-	-
23. FUTURE SOLAR	60.0	-	-	-	-	-	SOLAR	-	-	-	-	-	-
24. FUTURE SOLAR	74.5	-	-	-	-	-	SOLAR	-	-	-	-	-	-
25. FUTURE SOLAR	74.5	-	-	-	-	-	SOLAR	-	-	-	-	-	-
26. SOLAR TOTAL	⁽³⁾ 1321.5	190,960	19.4	-	19.4	-	SOLAR	-	-	-	-	-	-
27. BIG BEND #1 CC TOTAL	335	762,690	306.0	0.0	313.6	6,239	GAS	4,627,950	1,028,002	4,757,540.0	32,803,846	4.30	7.09
28. BIG BEND #2 TOTAL	0	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
29. B.B.#3 (GAS)	345	0	0.0	-	-	-	GAS	0	0	0.0	0	0.00	0.00
30. B.B.#3 (COAL)	0	0	0.0	-	-	-	COAL	0	0	0.0	0	0.00	0.00
31. BIG BEND #3 TOTAL	345	0	0.0	82.1	0.0	0	-	-	-	0.0	0	0.00	-
32. B.B.#4 (GAS)	422	27,240	8.7	-	-	-	GAS	297,930	1,027,993	306,270.0	2,111,788	7.75	7.09
33. B.B.#4 (COAL)	410	154,380	50.6	-	-	-	COAL	77,130	22,501,361	1,735,530.0	6,864,534	4.45	89.00
34. BIG BEND #4 TOTAL	410	181,620	59.5	8.6	66.5	11,242	-	-	-	2,041,800.0	8,976,322	4.94	-
35. B.B. IGNITION	-	-	-	-	-	-	GAS	2,090	1,028,708	2,150.0	14,814	-	7.09
36. B.B.C.T.#4 TOTAL	56	1,940	4.7	98.3	82.5	12,010	GAS	22,660	1,028,244	23,300.0	160,619	8.28	7.09
37. B.B.C.T.#5 TOTAL	330	0	0.0	96.9	0.0	0	GAS	0	0	0.0	0	0.00	0.00
38. B.B.C.T.#6 TOTAL	330	0	0.0	96.1	0.0	0	GAS	0	0	0.0	0	0.00	0.00
39. BIG BEND STATION TOTAL	1,806	946,150	70.4	55.9	126.4	7,211	-	-	-	6,822,640.0	41,955,601	4.43	-
40. POLK #1 GASIFIER	245	0	0.0	-	0.0	0	COAL	0	0	0.0	0	0.00	0.00
41. POLK #1 CT (GAS)	220	30,250	18.5	-	79.5	8,842	GAS	260,180	1,027,981	267,460.0	1,844,208	6.10	7.09
42. POLK #1 TOTAL	245	30,250	16.6	93.8	79.5	8,842	-	-	-	267,460.0	1,844,208	6.10	-
43. POLK #2 ST DUCT FIRING	120	9,150	10.2	-	61.5	8,272	GAS	73,630	1,027,978	75,690.0	521,904	5.70	7.09
44. POLK #2 ST W/O DUCT FIRING	360	416,180	-	-	-	-	-	2,824,165	1,028,007	2,903,260.0	20,018,252	4.81	7.09
45. POLK #2 ST TOTAL	480	425,330	119.1	-	104.0	7,004	GAS	-	-	2,978,950.0	20,540,156	4.83	-
46. POLK #2 CT (GAS)	150	360	0.3	-	60.0	12,861	GAS	4,510	1,026,608	4,630.0	31,969	8.88	7.09
47. POLK #2 CT (OIL)	159	150	0.1	-	94.3	13,000	LGT OIL	333	5,855,856	1,950.0	47,418	31.61	142.40
48. POLK #2 TOTAL	⁽⁴⁾ 150	510	0.5	-	67.2	12,902	-	-	-	6,580.0	79,387	15.57	-
49. POLK #3 CT (GAS)	150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
50. POLK #3 CT (OIL)	159	150	0.1	-	94.3	13,000	LGT OIL	332	5,873,494	1,950.0	47,275	31.52	142.39
51. POLK #3 TOTAL	⁽⁴⁾ 150	150	0.1	-	94.3	13,000	-	-	-	1,950.0	47,275	31.52	-

44

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: OCTOBER 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MW)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$) ⁽¹⁾	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
52. POLK #4 CT (GAS) TOTAL	⁽⁴⁾ 150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
53. POLK #5 CT (GAS) TOTAL	⁽⁴⁾ 150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
54. POLK #2 CC TOTAL	1,080	425,990	53.0	97.4	103.8	7,013	-	-	-	2,987,480.0	20,666,818	4.85	-
55. POLK STATION TOTAL	1,325	466,240	46.3	96.8	99.7	7,134	-	-	-	3,254,940.0	22,511,026	4.93	-
56. BAYSIDE #1	720	247,770	46.3	0.0	47.9	7,617	GAS	1,835,790	1,027,999	1,887,190.0	13,012,451	5.25	7.09
57. BAYSIDE #2	954	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
58. BAYSIDE #3	56	1,260	3.0	98.6	83.3	12,048	GAS	14,780	1,027,064	15,180.0	104,764	8.31	7.09
59. BAYSIDE #4	56	1,050	2.5	98.6	89.3	11,781	GAS	12,030	1,028,263	12,370.0	85,271	8.12	7.09
60. BAYSIDE #5	56	1,560	3.7	98.6	79.6	12,205	GAS	18,530	1,027,523	19,040.0	131,344	8.42	7.09
61. BAYSIDE #6	56	2,380	5.7	98.6	80.2	12,055	GAS	27,920	1,027,579	28,690.0	197,903	8.32	7.09
62. BAYSIDE STATION TOTAL	1,898	254,020	18.0	11.6	48.4	7,726	GAS	1,909,050	1,027,983	1,962,470.0	13,531,733	5.33	7.09
63. SYSTEM TOTAL	6,351	1,847,370	39.1	39.6	115.9	6,517	-	-	-	12,040,050.0	77,998,360	4.22	-

LEGEND:

B.B. = BIG BEND
CC = COMBINED CYCLE

CT = COMBUSTION TURBINE
ST = STEAM TURBINE

⁽¹⁾ As burned fuel cost system total includes ignition
⁽²⁾ Fuel burned (MM BTU) system total excludes ignition
⁽³⁾ AC rating

⁽⁴⁾ In Simple Cycle Mode

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: NOVEMBER 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MW)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$) ⁽¹⁾	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
1. TIA SOLAR	1.6	270	23.4	-	23.4	-	SOLAR	-	-	-	-	-	-
2. BIG BEND SOLAR	19.7	180	1.3	-	1.3	-	SOLAR	-	-	-	-	-	-
3. LEGOLAND SOLAR	1.4	2,950	292.3	-	292.3	-	SOLAR	-	-	-	-	-	-
4. PAYNE CREEK SOLAR	70.1	10,040	19.9	-	19.9	-	SOLAR	-	-	-	-	-	-
5. BALM SOLAR	74.2	10,410	19.5	-	19.5	-	SOLAR	-	-	-	-	-	-
6. LITHIA SOLAR	74.3	11,940	22.3	-	22.3	-	SOLAR	-	-	-	-	-	-
7. GRANGE HALL SOLAR	60.9	8,360	19.0	-	19.0	-	SOLAR	-	-	-	-	-	-
8. PEACE CREEK SOLAR	55.2	7,650	19.2	-	19.2	-	SOLAR	-	-	-	-	-	-
9. BONNIE MINE SOLAR	37.4	5,990	22.2	-	22.2	-	SOLAR	-	-	-	-	-	-
10. LAKE HANCOCK SOLAR	49.3	6,650	18.7	-	18.7	-	SOLAR	-	-	-	-	-	-
11. WIMAUMA SOLAR	74.7	11,690	21.7	-	21.7	-	SOLAR	-	-	-	-	-	-
12. LITTLE MANATEE RIVER SOLAR	74.3	11,970	22.3	-	22.3	-	SOLAR	-	-	-	-	-	-
13. DURRANCE SOLAR	59.8	8,720	20.2	-	20.2	-	SOLAR	-	-	-	-	-	-
14. FUTURE SOLAR	31.4	3,680.0	16.3	-	16.3	-	SOLAR	-	-	-	-	-	-
15. FUTURE SOLAR	74.3	6,380.0	11.9	-	11.9	-	SOLAR	-	-	-	-	-	-
16. FUTURE SOLAR	54.4	8,710.0	22.2	-	22.2	-	SOLAR	-	-	-	-	-	-
17. FUTURE SOLAR	74.3	8,710.0	16.3	-	16.3	-	SOLAR	-	-	-	-	-	-
18. FUTURE SOLAR	14.2	6,450.0	63.0	-	63.0	-	SOLAR	-	-	-	-	-	-
19. FUTURE SOLAR	55.0	7,180.0	18.1	-	18.1	-	SOLAR	-	-	-	-	-	-
20. FUTURE SOLAR	70.0	1,640.0	3.2	-	3.2	-	SOLAR	-	-	-	-	-	-
21. FUTURE SOLAR	61.0	8,210.0	18.7	-	18.7	-	SOLAR	-	-	-	-	-	-
22. FUTURE SOLAR	25.0	-	-	-	-	-	SOLAR	-	-	-	-	-	-
23. FUTURE SOLAR	60.0	-	-	-	-	-	SOLAR	-	-	-	-	-	-
24. FUTURE SOLAR	74.5	-	-	-	-	-	SOLAR	-	-	-	-	-	-
25. FUTURE SOLAR	74.5	-	-	-	-	-	SOLAR	-	-	-	-	-	-
26. SOLAR TOTAL	⁽³⁾ 1321.5	147,780	15.5	-	15.5	-	SOLAR	-	-	-	-	-	-
27. BIG BEND #1 CC TOTAL	335	724,890	300.1	0.0	307.8	6,244	GAS	4,403,120	1,028,003	4,526,420.0	31,137,337	4.30	7.07
28. BIG BEND #2 TOTAL	0	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
29. B.B.#3 (GAS)	345	0	0.0	-	-	-	GAS	0	0	0.0	0	0.00	0.00
30. B.B.#3 (COAL)	0	0	0.0	-	-	-	COAL	0	0	0.0	0	0.00	0.00
31. BIG BEND #3 TOTAL	345	0	0.0	43.8	0.0	0	-	-	-	0.0	0	0.00	-
32. B.B.#4 (GAS)	422	9,690	3.2	-	-	-	GAS	108,330	1,027,970	111,360.0	766,072	7.91	7.07
33. B.B.#4 (COAL)	410	54,910	18.6	-	-	-	COAL	28,050	22,497,326	631,050.0	2,516,837	4.58	89.73
34. BIG BEND #4 TOTAL	410	64,600	21.9	83.3	60.6	11,492	-	-	-	742,410.0	3,282,909	5.08	-
35. B.B. IGNITION	-	-	-	-	-	-	GAS	5,010	1,027,944	5,150.0	35,429	-	7.07
36. B.B.C.T.#4 TOTAL	56	960	2.4	98.3	81.6	11,938	GAS	11,160	1,026,882	11,460.0	78,920	8.22	7.07
37. B.B.C.T.#5 TOTAL	330	0	0.0	96.9	0.0	0	GAS	0	0	0.0	0	0.00	0.00
38. B.B.C.T.#6 TOTAL	330	0	0.0	96.1	0.0	0	GAS	0	0	0.0	0	0.00	0.00
39. BIG BEND STATION TOTAL	1,806	790,450	60.7	65.6	182.6	6,680	-	-	-	5,280,290.0	34,534,595	4.37	-
40. POLK #1 GASIFIER	245	0	0.0	-	0.0	0	COAL	0	0	0.0	0	0.00	0.00
41. POLK #1 CT (GAS)	220	22,850	14.4	-	78.7	8,855	GAS	196,840	1,027,941	202,340.0	1,391,984	6.09	7.07
42. POLK #1 TOTAL	245	22,850	12.9	93.8	78.7	8,855	-	-	-	202,340.0	1,391,984	6.09	-
43. POLK #2 ST DUCT FIRING	120	5,550	6.4	-	63.4	8,270	GAS	44,650	1,027,996	45,900.0	315,749	5.69	7.07
44. POLK #2 ST W/O DUCT FIRING	360	298,780	-	-	-	-	-	2,057,365	1,028,004	2,114,980.0	14,548,972	4.87	7.07
45. POLK #2 ST TOTAL	480	304,330	87.9	-	81.0	7,100	GAS	-	-	2,160,880.0	14,864,721	4.88	-
46. POLK #2 CT (GAS)	150	90	0.1	-	60.0	13,667	GAS	1,200	1,025,000	1,230.0	8,487	9.43	7.07
47. POLK #2 CT (OIL)	159	150	0.1	-	94.3	13,000	LGT OIL	333	5,855,856	1,950.0	47,413	31.51	142.38
48. POLK #2 TOTAL	⁽⁴⁾ 150	240	0.2	-	77.7	13,250	-	-	-	3,180.0	55,900	23.29	-
49. POLK #3 CT (GAS)	150	360	0.3	-	60.0	12,639	GAS	4,430	1,027,088	4,550.0	31,327	8.70	7.07
50. POLK #3 CT (OIL)	159	150	0.1	-	94.3	13,000	LGT OIL	332	5,873,494	1,950.0	47,270	31.51	142.38
51. POLK #3 TOTAL	⁽⁴⁾ 150	510	0.5	-	67.2	12,745	-	-	-	6,500.0	78,597	15.41	-

46

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: NOVEMBER 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MW)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$) ⁽¹⁾	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
52. POLK #4 CT (GAS) TOTAL ⁽⁴⁾	150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
53. POLK #5 CT (GAS) TOTAL ⁽⁴⁾	150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
54. POLK #2 CC TOTAL	1,080	305,080	39.2	97.4	80.9	7,115	-	-	-	2,170,560.0	14,999,218	4.92	-
55. POLK STATION TOTAL	1,325	327,930	34.3	96.8	80.6	7,236	-	-	-	2,372,900.0	16,391,202	5.00	-
56. BAYSIDE #1	720	150,140	28.9	25.8	34.6	7,883	GAS	1,151,260	1,028,004	1,183,500.0	8,141,311	5.42	7.07
57. BAYSIDE #2	954	35,830	5.2	97.3	16.3	9,287	GAS	323,680	1,027,991	332,740.0	2,288,952	6.39	7.07
58. BAYSIDE #3	56	1,040	2.6	98.6	80.7	12,029	GAS	12,180	1,027,094	12,510.0	86,133	8.28	7.07
59. BAYSIDE #4	56	770	1.9	98.6	85.9	12,000	GAS	9,000	1,026,667	9,240.0	63,645	8.27	7.07
60. BAYSIDE #5	56	1,030	2.6	98.6	80.0	11,981	GAS	12,000	1,028,333	12,340.0	84,860	8.24	7.07
61. BAYSIDE #6	56	1,140	2.8	98.6	84.8	11,763	GAS	13,030	1,029,163	13,410.0	92,144	8.08	7.07
62. BAYSIDE STATION TOTAL	1,898	189,950	13.9	70.3	28.8	8,232	GAS	1,521,150	1,027,999	1,563,740.0	10,757,045	5.66	7.07
63. SYSTEM TOTAL	6,351	1,456,110	31.8	59.9	104.8	6,330	-	-	-	9,216,930.0	61,682,842	4.24	-

LEGEND:

B.B. = BIG BEND
CC = COMBINED CYCLE

CT = COMBUSTION TURBINE
ST = STEAM TURBINE

⁽¹⁾ As burned fuel cost system total includes ignition
⁽²⁾ Fuel burned (MM BTU) system total excludes ignition
⁽³⁾ AC rating

⁽⁴⁾ In Simple Cycle Mode

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: DECEMBER 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MWH)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$ ⁽¹⁾)	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
1. TIA SOLAR	1.6	260	21.8	-	21.8	-	SOLAR	-	-	-	-	-	-
2. BIG BEND SOLAR	19.7	160	1.1	-	1.1	-	SOLAR	-	-	-	-	-	-
3. LEGOLAND SOLAR	1.4	2,670	256.3	-	256.3	-	SOLAR	-	-	-	-	-	-
4. PAYNE CREEK SOLAR	70.1	8,430	16.2	-	16.2	-	SOLAR	-	-	-	-	-	-
5. BALM SOLAR	74.2	8,730	15.8	-	15.8	-	SOLAR	-	-	-	-	-	-
6. LITHIA SOLAR	74.3	10,300	18.6	-	18.6	-	SOLAR	-	-	-	-	-	-
7. GRANGE HALL SOLAR	60.9	7,000	15.4	-	15.4	-	SOLAR	-	-	-	-	-	-
8. PEACE CREEK SOLAR	55.2	6,420	15.6	-	15.6	-	SOLAR	-	-	-	-	-	-
9. BONNIE MINE SOLAR	37.4	5,010	18.0	-	18.0	-	SOLAR	-	-	-	-	-	-
10. LAKE HANCOCK SOLAR	49.3	5,580	15.2	-	15.2	-	SOLAR	-	-	-	-	-	-
11. WIMAUMA SOLAR	74.7	10,370	18.7	-	18.7	-	SOLAR	-	-	-	-	-	-
12. LITTLE MANATEE RIVER SOLAR	74.3	10,350	18.7	-	18.7	-	SOLAR	-	-	-	-	-	-
13. DURRANCE SOLAR	59.8	7,600	17.1	-	17.1	-	SOLAR	-	-	-	-	-	-
14. FUTURE SOLAR	31.4	3,090	13.2	-	13.2	-	SOLAR	-	-	-	-	-	-
15. FUTURE SOLAR	74.3	5,350	9.7	-	9.7	-	SOLAR	-	-	-	-	-	-
16. FUTURE SOLAR	54.4	7,300	18.0	-	18.0	-	SOLAR	-	-	-	-	-	-
17. FUTURE SOLAR	74.3	8,930	16.2	-	16.2	-	SOLAR	-	-	-	-	-	-
18. FUTURE SOLAR	14.2	5,410	51.2	-	51.2	-	SOLAR	-	-	-	-	-	-
19. FUTURE SOLAR	55.0	6,020	14.7	-	14.7	-	SOLAR	-	-	-	-	-	-
20. FUTURE SOLAR	70.0	1,380	2.6	-	2.6	-	SOLAR	-	-	-	-	-	-
21. FUTURE SOLAR	61.0	6,890	15.2	-	15.2	-	SOLAR	-	-	-	-	-	-
22. FUTURE SOLAR	25.0	2,280	12.3	-	12.3	-	SOLAR	-	-	-	-	-	-
23. FUTURE SOLAR	60.0	5,930	13.3	-	13.3	-	SOLAR	-	-	-	-	-	-
24. FUTURE SOLAR	74.5	7,360	13.3	-	13.3	-	SOLAR	-	-	-	-	-	-
25. FUTURE SOLAR	74.5	7,360	13.3	-	13.3	-	SOLAR	-	-	-	-	-	-
26. SOLAR TOTAL	⁽³⁾ 1321.5	150,180	15.3	-	15.3	-	SOLAR	-	-	-	-	-	-
27. BIG BEND #1 CC TOTAL	1,120	776,200	93.1	98.0	95.5	6,279	GAS	4,741,110	1,028,000	4,873,860.0	34,626,944	4.46	7.30
28. BIG BEND #2 TOTAL	350	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
29. B.B.#3 (GAS)	355	0	0.0	-	-	-	GAS	0	0	0.0	0	0.00	0.00
30. B.B.#3 (COAL)	400	0	0.0	-	-	-	COAL	0	0	0.0	0	0.00	0.00
31. BIG BEND #3 TOTAL	355	0	0.0	82.1	0.0	0	-	-	-	0.0	0	0.00	-
32. B.B.#4 (GAS)	160	12,180	10.2	-	-	-	GAS	134,400	1,028,051	138,170.0	981,597	8.06	7.30
33. B.B.#4 (COAL)	432	69,010	21.5	-	-	-	COAL	34,800	22,498,851	782,960.0	3,142,712	4.55	90.31
34. BIG BEND #4 TOTAL	432	81,190	25.3	89.3	58.7	11,345	-	-	-	921,130.0	4,124,309	5.08	-
35. B.B. IGNITION	-	-	-	-	-	-	GAS	7,090	1,028,209	7,290.0	51,782	-	7.30
36. B.B.C.T.#4 TOTAL	61	320	0.7	98.3	52.5	13,188	GAS	4,100	1,029,268	4,220.0	29,945	9.36	7.30
37. B.B.C.T.#5 TOTAL	350	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
38. B.B.C.T.#6 TOTAL	350	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
39. BIG BEND STATION TOTAL	3,018	857,710	38.2	60.8	80.5	6,761	-	-	-	5,799,210.0	38,832,980	4.53	-
40. POLK #1 GASIFIER	220	0	0.0	-	0.0	0	COAL	0	0	0.0	0	0.00	0.00
41. POLK #1 CT (GAS)	230	16,700	9.8	-	74.1	8,954	GAS	145,480	1,027,980	149,530.0	1,062,375	6.36	7.30
42. POLK #1 TOTAL	230	16,700	9.8	93.8	74.1	8,954	-	-	-	149,530.0	1,062,375	6.36	-
43. POLK #2 ST DUCT FIRING	120	2,610	2.9	-	57.2	8,157	GAS	20,710	1,028,006	21,290.0	151,257	5.80	7.30
44. POLK #2 ST W/O DUCT FIRING	360	242,600	-	-	-	-	GAS	1,677,745	1,028,005	1,724,730.0	12,253,498	5.05	7.30
45. POLK #2 ST TOTAL	480	245,210	68.7	-	81.2	7,121	GAS	-	-	1,746,020.0	12,404,755	5.06	-
46. POLK #2 CT (GAS)	180	0	0.0	-	0.0	0	GAS	0	0	0.0	(1)	0.00	0.00
47. POLK #2 CT (OIL)	187	150	0.1	-	80.2	13,000	LGT OIL	333	5,855,856	1,950.0	47,403	31.60	142.35
48. POLK #2 TOTAL	⁽⁴⁾ 180	150	0.1	-	80.2	13,000	-	-	-	1,950.0	47,402	31.60	-
49. POLK #3 CT (GAS)	180	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
50. POLK #3 CT (OIL)	187	150	0.1	-	80.2	13,000	LGT OIL	332	5,873,494	1,950.0	47,260	31.51	142.35
51. POLK #3 TOTAL	⁽⁴⁾ 180	150	0.1	-	80.2	13,000	-	-	-	1,950.0	47,260	31.51	-

48

TAMPA ELECTRIC COMPANY
SYSTEM NET GENERATION AND FUEL COST
ESTIMATED FOR THE PERIOD: DECEMBER 2023

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPABILITY (MW)	NET GENERATION (MWH)	NET CAPACITY FACTOR (%)	EQUIV. AVAIL. FACTOR (%)	NET OUTPUT FACTOR (%)	AVG. NET HEAT RATE (BTU/KWH)	FUEL TYPE	FUEL BURNED (UNITS)	FUEL HEAT VALUE (BTU/UNIT)	FUEL BURNED (MM BTU) ⁽²⁾	AS BURNED FUEL COST (\$) ⁽¹⁾	FUEL COST PER KWH (cents/KWH)	COST OF FUEL (\$/UNIT)
52. POLK #4 CT (GAS) TOTAL	⁽⁴⁾ 180	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
53. POLK #5 CT (GAS) TOTAL	⁽⁴⁾ 180	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
54. POLK #2 CC TOTAL	1,200	245,510	27.5	81.7	81.2	7,128	-	-	-	1,749,920.0	12,499,417	5.09	-
55. POLK STATION TOTAL	1,430	262,210	24.6	83.7	80.3	7,244	-	-	-	1,899,450.0	13,561,792	5.17	-
56. BAYSIDE #1	792	127,940	21.7	96.6	33.2	7,699	GAS	958,180	1,028,001	985,010.0	6,998,118	5.47	7.30
57. BAYSIDE #2	1,047	136,560	17.5	97.3	18.3	8,615	GAS	1,144,450	1,027,996	1,176,490.0	8,358,550	6.12	7.30
58. BAYSIDE #3	61	310	0.7	98.6	46.2	13,742	GAS	4,140	1,028,986	4,260.0	30,237	9.75	7.30
59. BAYSIDE #4	61	270	0.6	98.6	44.3	14,148	GAS	3,730	1,024,129	3,820.0	27,242	10.09	7.30
60. BAYSIDE #5	61	260	0.6	98.6	42.6	14,500	GAS	3,670	1,027,248	3,770.0	26,804	10.31	7.30
61. BAYSIDE #6	61	310	0.7	98.6	46.2	13,903	GAS	4,200	1,026,190	4,310.0	30,675	9.90	7.30
62. BAYSIDE STATION TOTAL	2,083	265,650	17.1	97.2	23.4	8,197	GAS	2,118,370	1,027,989	2,177,660.0	15,471,626	5.82	7.30
63. SYSTEM TOTAL	7,853	1,535,750	26.3	64.4	62.9	6,431	-	-	-	9,876,320.0	67,866,398	4.42	-

LEGEND:

B.B. = BIG BEND
CC = COMBINED CYCLE

CT = COMBUSTION TURBINE
ST = STEAM TURBINE

⁽¹⁾ As burned fuel cost system total includes ignition
⁽²⁾ Fuel burned (MM BTU) system total excludes ignition
⁽³⁾ AC rating

⁽⁴⁾ In Simple Cycle Mode

SCHEDULE E5

TAMPA ELECTRIC COMPANY
SYSTEM GENERATED FUEL COST INVENTORY ANALYSIS
ESTIMATED FOR THE PERIOD: JANUARY 2023 THROUGH JUNE 2023

	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23
HEAVY OIL						
1. PURCHASES:						
2. UNITS (BBL)	0	0	0	0	0	0
3. UNIT COST (\$/BBL)	0.00	0.00	0.00	0.00	0.00	0.00
4. AMOUNT (\$)	0	0	0	0	0	0
5. BURNED:						
6. UNITS (BBL)	0	0	0	0	0	0
7. UNIT COST (\$/BBL)	0.00	0.00	0.00	0.00	0.00	0.00
8. AMOUNT (\$)	0	0	0	0	0	0
9. ENDING INVENTORY:						
10. UNITS (BBL)	0	0	0	0	0	0
11. UNIT COST (\$/BBL)	0.00	0.00	0.00	0.00	0.00	0.00
12. AMOUNT (\$)	0	0	0	0	0	0
13. DAYS SUPPLY:	0	0	0	0	0	0
LIGHT OIL						
14. PURCHASES:						
15. UNITS (BBL)	665	665	665	665	665	665
16. UNIT COST (\$/BBL)	146.18	146.18	146.18	146.18	146.18	146.18
17. AMOUNT (\$)	97,210	97,210	97,210	97,210	97,210	97,210
18. BURNED:						
19. UNITS (BBL)	665	665	665	665	665	665
20. UNIT COST (\$/BBL)	141.93	142.00	142.06	142.13	142.20	142.26
21. AMOUNT (\$)	94,382	94,428	94,473	94,517	94,561	94,604
22. ENDING INVENTORY:						
23. UNITS (BBL)	40,483	40,483	40,483	40,483	40,483	40,483
24. UNIT COST (\$/BBL)	141.89	141.96	142.03	142.09	142.16	142.22
25. AMOUNT (\$)	5,744,215	5,746,997	5,749,735	5,752,427	5,755,077	5,757,683
26. DAYS SUPPLY: NORMAL	1,851,205	1,851,205	1,856,276	1,856,276	1,856,276	1,856,276
27. DAYS SUPPLY: EMERGENCY	6	6	6	6	6	6
COAL						
28. PURCHASES:						
29. UNITS (TONS)	41,850	41,650	41,650	41,650	41,650	41,650
30. UNIT COST (\$/TON)	91.44	91.44	91.44	91.44	91.44	91.44
31. AMOUNT (\$)	3,826,938	3,808,649	3,808,649	3,808,649	3,808,649	3,808,649
32. BURNED:						
33. UNITS (TONS)	107,170	30,760	39,630	0	0	31,490
34. UNIT COST (\$/TON)	70.66	75.84	78.11	0.00	0.00	85.38
35. AMOUNT (\$)	7,572,646	2,332,840	3,095,472	0	0	2,688,592
36. ENDING INVENTORY:						
37. UNITS (TONS)	141,180	152,070	154,090	195,740	237,390	247,550
38. UNIT COST (\$/TON)	68.98	74.02	77.78	80.69	82.58	83.76
39. AMOUNT (\$)	9,737,961	11,256,212	11,985,419	15,794,068	19,602,717	20,735,511
40. DAYS SUPPLY:	72	192	358	566	328	205
NATURAL GAS						
41. PURCHASES:						
42. UNITS (MCF)	8,078,345	7,825,885	8,544,725	9,028,365	10,775,735	11,452,675
43. UNIT COST (\$/MCF)	11.17	10.53	8.99	7.16	6.98	6.91
44. AMOUNT (\$)	90,260,834	82,376,494	76,853,956	64,687,863	75,187,616	79,141,950
45. BURNED:						
46. UNITS (MCF)	8,078,345	7,825,885	8,544,725	9,028,365	10,775,735	11,452,675
47. UNIT COST (\$/MCF)	11.17	10.55	9.06	7.24	6.98	6.91
48. AMOUNT (\$)	90,234,675	82,560,414	77,401,396	65,383,943	75,257,856	79,122,190
49. ENDING INVENTORY:						
50. UNITS (MCF)	389,105	389,105	389,105	389,105	389,105	389,105
51. UNIT COST (\$/MCF)	8.85	8.38	6.98	5.19	5.01	5.06
52. AMOUNT (\$)	3,445,440	3,261,520	2,714,080	2,018,001	1,947,760	1,967,520
53. DAYS SUPPLY:	1	1	1	1	1	1
NUCLEAR						
54. BURNED:						
55. UNITS (MMBTU)	0	0	0	0	0	0
56. UNIT COST (\$/MMBTU)	0.00	0.00	0.00	0.00	0.00	0.00
57. AMOUNT (\$)	0	0	0	0	0	0
OTHER						
58. PURCHASES:						
59. UNITS (MMBTU)	0	0	0	0	0	0
60. UNIT COST (\$/MMBTU)	0.00	0.00	0.00	0.00	0.00	0.00
61. AMOUNT (\$)	0	0	0	0	0	0
62. BURNED:						
63. UNITS (MMBTU)	0	0	0	0	0	0
64. UNIT COST (\$/MMBTU)	0.00	0.00	0.00	0.00	0.00	0.00
65. AMOUNT (\$)	0	0	0	0	0	0
66. ENDING INVENTORY:						
67. UNITS (MMBTU)	0	0	0	0	0	0
68. UNIT COST (\$/MMBTU)	0.00	0.00	0.00	0.00	0.00	0.00
69. AMOUNT (\$)	0	0	0	0	0	0
70. DAYS SUPPLY:	0	0	0	0	0	0

NOTE: BEGINNING & ENDING INVENTORIES MAY NOT BALANCE BECAUSE OF THE FOLLOWING
(1) LIGHT OIL-IGNITION AND ANALYSIS (2) COAL-IGNITION, ADDITIVES, ANALYSIS, AND INVENTORY ADJUSTMENT (3) GAS-IGNITION

SCHEDULE E5

TAMPA ELECTRIC COMPANY
SYSTEM GENERATED FUEL COST INVENTORY ANALYSIS
ESTIMATED FOR THE PERIOD: JULY 2023 THROUGH DECEMBER 2023

	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	TOTAL
HEAVY OIL							
1. PURCHASES:							
2. UNITS (BBL)	0	0	0	0	0	0	0
3. UNIT COST (\$/BBL)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4. AMOUNT (\$)	0	0	0	0	0	0	0
5. BURNED:							
6. UNITS (BBL)	0	0	0	0	0	0	0
7. UNIT COST (\$/BBL)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8. AMOUNT (\$)	0	0	0	0	0	0	0
9. ENDING INVENTORY:							
10. UNITS (BBL)	0	0	0	0	0	0	0
11. UNIT COST (\$/BBL)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12. AMOUNT (\$)	0	0	0	0	0	0	0
13. DAYS SUPPLY:	0	0	0	0	0	0	-
LIGHT OIL							
14. PURCHASES:							
15. UNITS (BBL)	665	665	665	665	665	665	7,980
16. UNIT COST (\$/BBL)	146.18	145.11	143.81	142.57	141.49	140.50	144.73
17. AMOUNT (\$)	97,210	96,498	95,632	94,809	94,090	93,435	1,154,934
18. BURNED:							
19. UNITS (BBL)	665	665	665	665	665	665	7,980
20. UNIT COST (\$/BBL)	142.32	142.37	142.39	142.40	142.38	142.35	142.23
21. AMOUNT (\$)	94,646	94,676	94,691	94,693	94,683	94,663	1,135,017
22. ENDING INVENTORY:							
23. UNITS (BBL)	40,483	40,483	40,483	40,483	40,483	40,483	40,483
24. UNIT COST (\$/BBL)	142.29	142.33	142.36	142.36	142.34	142.31	142.31
25. AMOUNT (\$)	5,760,248	5,762,070	5,763,011	5,763,127	5,762,533	5,761,305	5,761,305
26. DAYS SUPPLY: NORMAL	1,856,276	1,856,276	1,856,276	1,856,276	1,856,276	1,856,276	-
27. DAYS SUPPLY: EMERGENCY	6	6	6	6	6	6	-
COAL							
28. PURCHASES:							
29. UNITS (TONS)	41,650	41,650	41,650	41,650	41,650	41,650	500,000
30. UNIT COST (\$/TON)	91.44	91.44	91.44	91.44	91.44	91.44	91.44
31. AMOUNT (\$)	3,808,649	3,808,649	3,808,649	3,808,649	3,808,649	3,808,649	45,722,077
32. BURNED:							
33. UNITS (TONS)	35,080	44,270	66,390	77,130	28,050	34,800	494,770
34. UNIT COST (\$/TON)	86.50	88.11	88.23	89.00	89.73	90.31	82.88
35. AMOUNT (\$)	3,034,523	3,900,479	5,857,911	6,864,534	2,516,837	3,142,712	41,006,546
36. ENDING INVENTORY:							
37. UNITS (TONS)	254,120	251,500	226,760	191,280	204,880	211,730	211,730
38. UNIT COST (\$/TON)	84.70	85.41	85.81	85.91	86.57	86.98	86.98
39. AMOUNT (\$)	21,523,826	21,479,903	19,457,495	16,432,808	17,735,966	18,415,979	18,415,979
40. DAYS SUPPLY:	160	123	120	126	111	112	-
NATURAL GAS							
41. PURCHASES:							
42. UNITS (MCF)	12,118,035	12,354,675	11,012,615	10,022,165	8,353,255	8,848,985	118,415,460
43. UNIT COST (\$/MCF)	6.95	6.94	6.99	7.09	7.08	7.31	7.69
44. AMOUNT (\$)	84,208,461	85,723,879	76,957,035	71,059,854	59,135,882	64,717,663	910,311,487
45. BURNED:							
46. UNITS (MCF)	12,118,035	12,354,675	11,012,615	10,022,165	8,353,255	8,848,985	118,415,460
47. UNIT COST (\$/MCF)	6.95	6.94	6.99	7.09	7.07	7.30	7.70
48. AMOUNT (\$)	84,186,701	85,720,520	76,965,835	71,039,133	59,071,322	64,629,023	911,573,008
49. ENDING INVENTORY:							
50. UNITS (MCF)	389,105	389,105	389,105	389,105	389,105	389,105	389,105
51. UNIT COST (\$/MCF)	5.11	5.12	5.10	5.15	5.32	5.55	5.55
52. AMOUNT (\$)	1,989,280	1,992,640	1,983,840	2,004,561	2,069,120	2,157,760	2,157,760
53. DAYS SUPPLY:	1	1	1	1	1	1	-
NUCLEAR							
54. BURNED:							
55. UNITS (MMBTU)	0	0	0	0	0	0	0
56. UNIT COST (\$/MMBTU)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
57. AMOUNT (\$)	0	0	0	0	0	0	0
OTHER							
58. PURCHASES:							
59. UNITS (MMBTU)	0	0	0	0	0	0	0
60. UNIT COST (\$/MMBTU)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
61. AMOUNT (\$)	0	0	0	0	0	0	0
62. BURNED:							
63. UNITS (MMBTU)	0	0	0	0	0	0	0
64. UNIT COST (\$/MMBTU)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
65. AMOUNT (\$)	0	0	0	0	0	0	0
66. ENDING INVENTORY:							
67. UNITS (MMBTU)	0	0	0	0	0	0	0
68. UNIT COST (\$/MMBTU)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
69. AMOUNT (\$)	0	0	0	0	0	0	0
70. DAYS SUPPLY:	0	0	0	0	0	0	-

NOTE: BEGINNING & ENDING INVENTORIES MAY NOT BALANCE BECAUSE OF THE FOLLOWING
(1) LIGHT OIL-IGNITION AND ANALYSIS (2) COAL-IGNITION, ADDITIVES, ANALYSIS, AND INVENTORY ADJUSTMENT (3) GAS-IGNITION

TAMPA ELECTRIC COMPANY
POWER SOLD
ESTIMATED FOR THE PERIOD: JANUARY 2023 THROUGH JUNE 2023

SCHEDULE E6

(1) MONTH	(2) SOLD TO	(3) TYPE & SCHEDULE	(4) TOTAL MWH SOLD	(5) MWH WHEELED FROM OTHER SYSTEMS	(6) MWH FROM OWN GENERATION	(7) CENTS/KWH		(8) TOTAL \$ FOR FUEL ADJUSTMENT	(9) TOTAL COST \$	(10) GAINS ON SALES
						(A) FUEL COST	(B) TOTAL COST			
						Jan-23	SEMINOLE			
	VARIOUS	JURISD. MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
	TOTAL		4,140.0	0.0	4,140.0	6.406	7.001	265,220.00	289,859.00	24,639.00
Feb-23	SEMINOLE	JURISD. SCH. - D	4,260.0	0.0	4,260.0	6.153	6.724	262,110.00	286,460.00	24,350.00
	VARIOUS	JURISD. MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
	TOTAL		4,260.0	0.0	4,260.0	6.153	6.724	262,110.00	286,460.00	24,350.00
Mar-23	SEMINOLE	JURISD. SCH. - D	3,950.0	0.0	3,950.0	5.323	5.817	210,250.00	229,782.00	19,532.00
	VARIOUS	JURISD. MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
	TOTAL		3,950.0	0.0	3,950.0	5.323	5.817	210,250.00	229,782.00	19,532.00
Apr-23	SEMINOLE	JURISD. SCH. - D	2,550.0	0.0	2,550.0	4.129	4.512	105,280.00	115,061.00	9,781.00
	VARIOUS	JURISD. MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
	TOTAL		2,550.0	0.0	2,550.0	4.129	4.512	105,280.00	115,061.00	9,781.00
May-23	SEMINOLE	JURISD. SCH. - D	3,290.0	0.0	3,290.0	4.174	4.562	137,340.00	150,099.00	12,759.00
	VARIOUS	JURISD. MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
	TOTAL		3,290.0	0.0	3,290.0	4.174	4.562	137,340.00	150,099.00	12,759.00
Jun-23	SEMINOLE	JURISD. SCH. - D	2,460.0	0.0	2,460.0	4.310	4.711	106,030.00	115,880.00	9,850.00
	VARIOUS	JURISD. MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
	TOTAL		2,460.0	0.0	2,460.0	4.310	4.711	106,030.00	115,880.00	9,850.00

52

TAMPA ELECTRIC COMPANY
POWER SOLD
ESTIMATED FOR THE PERIOD: JULY 2023 THROUGH DECEMBER 2023

SCHEDULE E6

(1) MONTH	(2) SOLD TO	(3) TYPE & SCHEDULE	(4) TOTAL MWH SOLD	(5) WHEELED		(7) CENTS/KWH		(8) TOTAL \$ FOR FUEL ADJUSTMENT	(9) TOTAL COST \$	(10) GAINS ON SALES
				FROM	MWH	(A)	(B)			
				OTHER SYSTEMS	FROM OWN GENERATION	FUEL COST	TOTAL COST			
Jul-23	SEMINOLE	JURISD. SCH. - D	2,660.0	0.0	2,660.0	4.314	4.714	114,740.00	125,399.00	10,659.00
	VARIOUS	JURISD. MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
	TOTAL		2,660.0	0.0	2,660.0	4.314	4.714	114,740.00	125,399.00	10,659.00
Aug-23	SEMINOLE	JURISD. SCH. - D	2,860.0	0.0	2,860.0	4.383	4.790	125,360.00	137,006.00	11,646.00
	VARIOUS	JURISD. MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
	TOTAL		2,860.0	0.0	2,860.0	4.383	4.790	125,360.00	137,006.00	11,646.00
Sep-23	SEMINOLE	JURISD. SCH. - D	3,830.0	0.0	3,830.0	4.509	4.927	172,680.00	188,722.00	16,042.00
	VARIOUS	JURISD. MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
	TOTAL		3,830.0	0.0	3,830.0	4.509	4.927	172,680.00	188,722.00	16,042.00
Oct-23	SEMINOLE	JURISD. SCH. - D	3,240.0	0.0	3,240.0	4.569	4.993	148,020.00	161,771.00	13,751.00
	VARIOUS	JURISD. MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
	TOTAL		3,240.0	0.0	3,240.0	4.569	4.993	148,020.00	161,771.00	13,751.00
Nov-23	SEMINOLE	JURISD. SCH. - D	3,760.0	0.0	3,760.0	4.181	4.569	157,200.00	171,804.00	14,604.00
	VARIOUS	JURISD. MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
	TOTAL		3,760.0	0.0	3,760.0	4.181	4.569	157,200.00	171,804.00	14,604.00
Dec-23	SEMINOLE	JURISD. SCH. - D	3,120.0	0.0	3,120.0	4.272	4.669	133,300.00	145,684.00	12,384.00
	VARIOUS	JURISD. MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
	TOTAL		3,120.0	0.0	3,120.0	4.272	4.669	133,300.00	145,684.00	12,384.00
TOTAL										
Jan-23	SEMINOLE	JURISD. SCH. - D	40,120.0	0.0	40,120.0	4.829	5.278	1,937,530.00	2,117,527.00	179,997.00
THRU	VARIOUS	JURISD. MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
Dec-23	TOTAL		40,120.0	0.0	40,120.0	4.829	5.278	1,937,530.00	2,117,527.00	179,997.00

53

**TAMPA ELECTRIC COMPANY
PURCHASED POWER
EXCLUSIVE OF ECONOMY AND QUALIFYING FACILITIES
ESTIMATED FOR THE PERIOD: JANUARY 2023 THROUGH DECEMBER 2023**

SCHEDULE E7

(1) MONTH	(2) PURCHASED FROM	(3) TYPE & SCHEDULE	(4) TOTAL MWH PURCHASED	(5) MWH FOR OTHER UTILITIES	(6) MWH FOR INTERRUPTIBLE	(7) MWH FOR FIRM	(8) CENTS/KWH		(9) TOTAL \$ FOR FUEL ADJUSTMENT
							(A) FUEL COST	(B) TOTAL COST	
Jan-23	VARIOUS	FIRM	50.0	0.0	0.0	50.0	10.160	10.160	5,080.00
	TOTAL		50.0	0.0	0.0	50.0	10.160	10.160	5,080.00
Feb-23	VARIOUS	FIRM	0.0	0.0	0.0	0.0	0.000	0.000	0.00
	TOTAL		0.0	0.0	0.0	0.0	0.000	0.000	0.00
Mar-23	VARIOUS	FIRM	0.0	0.0	0.0	0.0	0.000	0.000	0.00
	TOTAL		0.0	0.0	0.0	0.0	0.000	0.000	0.00
Apr-23	VARIOUS	FIRM	0.0	0.0	0.0	0.0	0.000	0.000	0.00
	TOTAL		0.0	0.0	0.0	0.0	0.000	0.000	0.00
May-23	VARIOUS	FIRM	0.0	0.0	0.0	0.0	0.000	0.000	0.00
	TOTAL		0.0	0.0	0.0	0.0	0.000	0.000	0.00
Jun-23	VARIOUS	FIRM	0.0	0.0	0.0	0.0	0.000	0.000	0.00
	TOTAL		0.0	0.0	0.0	0.0	0.000	0.000	0.00
Jul-23	VARIOUS	FIRM	0.0	0.0	0.0	0.0	0.000	0.000	0.00
	TOTAL		0.0	0.0	0.0	0.0	0.000	0.000	0.00
Aug-23	VARIOUS	FIRM	0.0	0.0	0.0	0.0	0.000	0.000	0.00
	TOTAL		0.0	0.0	0.0	0.0	0.000	0.000	0.00
Sep-23	VARIOUS	FIRM	0.0	0.0	0.0	0.0	0.000	0.000	0.00
	TOTAL		0.0	0.0	0.0	0.0	0.000	0.000	0.00
Oct-23	VARIOUS	FIRM	0.0	0.0	0.0	0.0	0.000	0.000	0.00
	TOTAL		0.0	0.0	0.0	0.0	0.000	0.000	0.00
Nov-23	VARIOUS	FIRM	0.0	0.0	0.0	0.0	0.000	0.000	0.00
	TOTAL		0.0	0.0	0.0	0.0	0.000	0.000	0.00
Dec-23	VARIOUS	FIRM	140.0	0.0	0.0	140.0	9.850	9.850	13,790.00
	TOTAL		140.0	0.0	0.0	140.0	9.850	9.850	13,790.00
TOTAL									
Jan-23	VARIOUS	FIRM	190.0	0.0	0.0	190.0	9.932	9.932	18,870.00
THRU	TOTAL		190.0	0.0	0.0	190.0	9.932	9.932	18,870.00
Dec-23									

TAMPA ELECTRIC COMPANY
ENERGY PAYMENT TO QUALIFYING FACILITIES
ESTIMATED FOR THE PERIOD: JANUARY 2023 THROUGH DECEMBER 2023

SCHEDULE E8

(1) MONTH	(2) PURCHASED FROM	(3) TYPE & SCHEDULE	(4) TOTAL MWH PURCHASED	(5) MWH FOR OTHER UTILITIES	(6) MWH FOR INTERRUPTIBLE	(7) MWH FOR FIRM	(8) CENTS/KWH		(9) TOTAL \$ FOR FUEL ADJUSTMENT
							(A) FUEL COST	(B) TOTAL COST	
Jan-23	VARIOUS	CO-GEN. AS AVAIL.	5,740.0	0.0	0.0	5,740.0	3.203	3.203	183,860.00
	TOTAL		<u>5,740.0</u>	<u>0.0</u>	<u>0.0</u>	<u>5,740.0</u>	<u>3.203</u>	<u>3.203</u>	<u>183,860.00</u>
Feb-23	VARIOUS	CO-GEN. AS AVAIL.	5,240.0	0.0	0.0	5,240.0	3.102	3.102	162,520.00
	TOTAL		<u>5,240.0</u>	<u>0.0</u>	<u>0.0</u>	<u>5,240.0</u>	<u>3.102</u>	<u>3.102</u>	<u>162,520.00</u>
Mar-23	VARIOUS	CO-GEN. AS AVAIL.	5,500.0	0.0	0.0	5,500.0	2.629	2.629	144,580.00
	TOTAL		<u>5,500.0</u>	<u>0.0</u>	<u>0.0</u>	<u>5,500.0</u>	<u>2.629</u>	<u>2.629</u>	<u>144,580.00</u>
Apr-23	VARIOUS	CO-GEN. AS AVAIL.	5,190.0	0.0	0.0	5,190.0	2.547	2.547	132,170.00
	TOTAL		<u>5,190.0</u>	<u>0.0</u>	<u>0.0</u>	<u>5,190.0</u>	<u>2.547</u>	<u>2.547</u>	<u>132,170.00</u>
May-23	VARIOUS	CO-GEN. AS AVAIL.	5,510.0	0.0	0.0	5,510.0	2.775	2.775	152,920.00
	TOTAL		<u>5,510.0</u>	<u>0.0</u>	<u>0.0</u>	<u>5,510.0</u>	<u>2.775</u>	<u>2.775</u>	<u>152,920.00</u>
Jun-23	VARIOUS	CO-GEN. AS AVAIL.	5,420.0	0.0	0.0	5,420.0	2.608	2.608	141,350.00
	TOTAL		<u>5,420.0</u>	<u>0.0</u>	<u>0.0</u>	<u>5,420.0</u>	<u>2.608</u>	<u>2.608</u>	<u>141,350.00</u>
Jul-23	VARIOUS	CO-GEN. AS AVAIL.	5,310.0	0.0	0.0	5,310.0	3.105	3.105	164,850.00
	TOTAL		<u>5,310.0</u>	<u>0.0</u>	<u>0.0</u>	<u>5,310.0</u>	<u>3.105</u>	<u>3.105</u>	<u>164,850.00</u>
Aug-23	VARIOUS	CO-GEN. AS AVAIL.	5,330.0	0.0	0.0	5,330.0	2.589	2.589	138,020.00
	TOTAL		<u>5,330.0</u>	<u>0.0</u>	<u>0.0</u>	<u>5,330.0</u>	<u>2.589</u>	<u>2.589</u>	<u>138,020.00</u>
Sep-23	VARIOUS	CO-GEN. AS AVAIL.	5,550.0	0.0	0.0	5,550.0	2.633	2.633	146,150.00
	TOTAL		<u>5,550.0</u>	<u>0.0</u>	<u>0.0</u>	<u>5,550.0</u>	<u>2.633</u>	<u>2.633</u>	<u>146,150.00</u>
Oct-23	VARIOUS	CO-GEN. AS AVAIL.	5,580.0	0.0	0.0	5,580.0	2.543	2.543	141,890.00
	TOTAL		<u>5,580.0</u>	<u>0.0</u>	<u>0.0</u>	<u>5,580.0</u>	<u>2.543</u>	<u>2.543</u>	<u>141,890.00</u>
Nov-23	VARIOUS	CO-GEN. AS AVAIL.	4,920.0	0.0	0.0	4,920.0	2.644	2.644	130,070.00
	TOTAL		<u>4,920.0</u>	<u>0.0</u>	<u>0.0</u>	<u>4,920.0</u>	<u>2.644</u>	<u>2.644</u>	<u>130,070.00</u>
Dec-23	VARIOUS	CO-GEN. AS AVAIL.	5,680.0	0.0	0.0	5,680.0	2.631	2.631	149,440.00
	TOTAL		<u>5,680.0</u>	<u>0.0</u>	<u>0.0</u>	<u>5,680.0</u>	<u>2.631</u>	<u>2.631</u>	<u>149,440.00</u>
TOTAL Jan-23 THRU Dec-23	VARIOUS TOTAL	CO-GEN. AS AVAIL.	<u>64,970.0</u>	<u>0.0</u>	<u>0.0</u>	<u>64,970.0</u>	<u>2.752</u>	<u>2.752</u>	<u>1,787,820.00</u>

**TAMPA ELECTRIC COMPANY
ECONOMY ENERGY PURCHASES
ESTIMATED FOR THE PERIOD: JANUARY 2023 THROUGH DECEMBER 2023**

SCHEDULE E9

(1) MONTH	(2) PURCHASED FROM	(3) TYPE & SCHEDULE	(4) TOTAL MWH PURCHASED	(5) MWH FOR INTERRUPTIBLE	(6) MWH FOR FIRM	(7) TRANSACTION COST cents/KWH	(8) TOTAL \$ FOR FUEL ADJUSTMENT	(9) COST IF GENERATED		(10) FUEL SAVINGS (9B)-(8)
								(A) CENTS PER KWH	(B) DOLLARS	
Jan-23	VARIOUS	SCH. - J	700.0	0.0	700.0	18.899	132,290.00	69.407	485,850.00	353,560.00
Feb-23	VARIOUS	SCH. - J	0.0	0.0	0.0	0.000	0.00	0.000	725,180.00	725,180.00
Mar-23	VARIOUS	SCH. - J	930.0	0.0	930.0	7.844	72,950.00	127.173	1,182,710.00	1,109,760.00
Apr-23	VARIOUS	SCH. - J	340.0	0.0	340.0	7.306	24,840.00	255.606	869,060.00	844,220.00
May-23	VARIOUS	SCH. - J	1,470.0	0.0	1,470.0	4.382	64,420.00	133.584	1,963,690.00	1,899,270.00
Jun-23	VARIOUS	SCH. - J	1,000.0	0.0	1,000.0	6.448	64,480.00	160.602	1,606,020.00	1,541,540.00
Jul-23	VARIOUS	SCH. - J	480.0	0.0	480.0	12.015	57,670.00	409.646	1,966,300.00	1,908,630.00
Aug-23	VARIOUS	SCH. - J	2,060.0	0.0	2,060.0	8.044	165,710.00	98.803	2,035,350.00	1,869,640.00
Sep-23	VARIOUS	SCH. - J	11,080.0	0.0	11,080.0	12.109	1,341,690.00	56.993	6,314,820.00	4,973,130.00
Oct-23	VARIOUS	SCH. - J	10,010.0	0.0	10,010.0	7.141	714,780.00	51.120	5,117,070.00	4,402,290.00
Nov-23	VARIOUS	SCH. - J	7,390.0	0.0	7,390.0	6.315	466,690.00	43.765	3,234,240.00	2,767,550.00
Dec-23	VARIOUS	SCH. - J	1,200.0	0.0	1,200.0	18.629	223,550.00	80.659	967,910.00	744,360.00
TOTAL	VARIOUS	SCH. - J	36,660.0	0.0	36,660.0	9.081	3,329,070.00	72.199	26,468,200.00	23,139,130.00

56

**TAMPA ELECTRIC COMPANY
RESIDENTIAL BILL COMPARISON
FOR MONTHLY USAGE OF 1,000 KWH**

	Current	Current	Projected	Difference	
	Apr 2022 - Aug 2022	Sep 2022 - Dec 2022	Jan 2023 - Dec 2023	\$	%
Base Rate Revenue ⁽¹⁾	78.69	79.46	86.22	6.76	8.5%
Fuel Recovery Revenue	37.91	37.91	45.25	7.34	19.4%
Conservation Revenue	2.36	2.36	2.81	0.45	19.1%
Capacity Revenue	0.53	0.53	(0.18)	(0.71)	-134.0%
Environmental Revenue	1.38	1.38	0.92	(0.46)	-33.3%
Storm Protection Plan Revenue	3.29	3.29	3.76	0.47	14.3%
Clean Energy Transition Mechanism	4.41	4.41	4.41	0.00	0.0%
Florida Gross Receipts Tax Revenue	3.30	3.32	3.67	0.35	10.5%
TOTAL REVENUE	\$131.87	\$132.66	\$146.86	\$14.20	10.7%

(1) Includes Proposed 2023 Generation Base Rate Adjustment provision in the 2021 Agreement

SCHEDULE H1

TAMPA ELECTRIC COMPANY
GENERATING SYSTEM COMPARATIVE DATA BY FUEL TYPE
PERIOD: JANUARY THROUGH DECEMBER

	ACTUAL 2020	ACTUAL 2021	ACT/EST 2022	EST 2023	DIFFERENCE (%)		
					2021-2020	2022-2021	2023-2022
FUEL COST OF SYSTEM NET GENERATION (\$)							
1 HEAVY OIL ⁽¹⁾	0	0	0	0	0.0%	0.0%	0.0%
2 LIGHT OIL ⁽¹⁾	636,201	833,691	2,830,275	1,135,017	31.0%	239.5%	-59.9%
3 COAL	33,991,967	48,429,754	41,102,981	41,006,546	42.5%	-15.1%	-0.2%
4 NATURAL GAS	379,848,073	613,516,607	999,057,535	911,573,008	61.5%	62.8%	-8.8%
5 SOLAR	0	0	0	0	0.0%	0.0%	0.0%
6 OTHER	0	0	0	0	0.0%	0.0%	0.0%
7 TOTAL (\$)	414,476,241	662,780,052	1,042,990,791	953,714,571	59.9%	57.4%	-8.6%
SYSTEM NET GENERATION (MWH)							
8 HEAVY OIL ⁽¹⁾	0	0	0	0	0.0%	0.0%	0.0%
9 LIGHT OIL ⁽¹⁾	1,901	2,024	7,336	3,600	6.5%	262.5%	-50.9%
10 COAL	903,680	1,340,015	1,266,597	1,013,080	48.3%	-5.5%	-20.0%
11 NATURAL GAS	16,519,857	16,142,165	17,047,483	17,542,780	-2.3%	5.6%	2.9%
12 SOLAR	1,119,822	1,252,466	1,751,392	2,399,520	11.8%	39.8%	37.0%
13 OTHER	0	0	0	0	0.0%	0.0%	0.0%
14 TOTAL (MWH)	18,545,260	18,736,670	20,072,808	20,958,980	1.0%	7.1%	4.4%
UNITS OF FUEL BURNED							
15 HEAVY OIL (BBL) ⁽¹⁾	0	0	0	0	0.0%	0.0%	0.0%
16 LIGHT OIL (BBL) ⁽¹⁾	4,345	5,880	20,684	7,980	35.3%	251.8%	-61.4%
17 COAL (TON)	431,512	637,962	611,561	494,770	47.8%	-4.1%	-19.1%
18 NATURAL GAS (MCF)	127,992,191	124,139,525	126,142,120	118,415,460	-3.0%	1.6%	-6.1%
19 SOLAR	0	0	0	0	0.0%	0.0%	0.0%
20 OTHER	0	0	0	0	0.0%	0.0%	0.0%
BTUS BURNED (MMBTU)							
21 HEAVY OIL ⁽¹⁾	0	0	0	0	0.0%	0.0%	0.0%
22 LIGHT OIL ⁽¹⁾	25,328	34,272	120,715	46,800	35.3%	252.2%	-61.2%
23 COAL	9,830,729	14,535,162	13,776,770	11,132,550	47.9%	-5.2%	-19.2%
24 NATURAL GAS	131,021,110	126,980,604	129,656,183	121,654,380	-3.1%	2.1%	-6.2%
25 SOLAR	0	0	0	0	0.0%	0.0%	0.0%
26 OTHER	0	0	0	0	0.0%	0.0%	0.0%
27 TOTAL (MMBTU)	140,877,167	141,550,038	143,553,668	132,833,730	0.5%	1.4%	-7.5%
GENERATION MIX (% MWH)							
28 HEAVY OIL ⁽¹⁾	0.00	0.00	0.00	0.00	0.0%	0.0%	0.0%
29 LIGHT OIL ⁽¹⁾	0.01	0.01	0.04	0.02	0.0%	300.0%	-50.0%
30 COAL	4.87	7.16	6.30	4.83	47.0%	-12.0%	-23.3%
31 NATURAL GAS	89.08	86.15	84.93	83.70	-3.3%	-1.4%	-1.4%
32 SOLAR	6.04	6.68	8.73	11.45	10.6%	30.7%	31.2%
33 OTHER	0.00	0.00	0.00	0.00	0.0%	0.0%	0.0%
34 TOTAL (%)	100.00	100.00	100.00	100.00	0.0%	0.0%	0.0%
FUEL COST PER UNIT							
35 HEAVY OIL (\$/BBL) ⁽¹⁾	0.00	0.00	0.00	0.00	0.0%	0.0%	0.0%
36 LIGHT OIL (\$/BBL) ⁽¹⁾	146.42	141.78	136.83	142.23	-3.2%	-3.5%	3.9%
37 COAL (\$/TON)	78.77	75.91	67.21	82.88	-3.6%	-11.5%	23.3%
38 NATURAL GAS (\$/MCF)	2.97	4.94	7.92	7.70	66.3%	60.3%	-2.8%
39 SOLAR	0.00	0.00	0.00	0.00	0.0%	0.0%	0.0%
40 OTHER	0.00	0.00	0.00	0.00	0.0%	0.0%	0.0%
FUEL COST PER MMBTU (\$/MMBTU)							
41 HEAVY OIL ⁽¹⁾	0.00	0.00	0.00	0.00	0.0%	0.0%	0.0%
42 LIGHT OIL ⁽¹⁾	25.12	24.33	23.45	24.25	-3.1%	-3.6%	3.4%
43 COAL	3.46	3.33	2.98	3.68	-3.8%	-10.5%	23.5%
44 NATURAL GAS	2.90	4.83	7.71	7.49	66.6%	59.6%	-2.9%
45 SOLAR	0.00	0.00	0.00	0.00	0.0%	0.0%	0.0%
46 OTHER	0.00	0.00	0.00	0.00	0.0%	0.0%	0.0%
47 TOTAL (\$/MMBTU)	2.94	4.68	7.27	7.18	59.2%	55.3%	-1.2%
BTU BURNED PER KWH (BTU/KWH)							
48 HEAVY OIL ⁽¹⁾	0	0	0	0	0.0%	0.0%	0.0%
49 LIGHT OIL ⁽¹⁾	13,324	16,933	16,455	13,000	27.1%	-2.8%	-21.0%
50 COAL	10,879	10,847	10,877	10,989	-0.3%	0.3%	1.0%
51 NATURAL GAS	7,931	7,866	7,606	6,935	-0.8%	-3.3%	-8.8%
52 SOLAR	0	0	0	0	0.0%	0.0%	0.0%
53 OTHER	0	0	0	0	0.0%	0.0%	0.0%
54 TOTAL (BTU/KWH)	7,596	7,555	7,152	6,338	-0.5%	-5.3%	-11.4%
GENERATED FUEL COST PER KWH (cents/KWH)							
55 HEAVY OIL ⁽¹⁾	0.00	0.00	0.00	0.00	0.0%	0.0%	0.0%
56 LIGHT OIL ⁽¹⁾	33.47	41.19	38.58	31.53	23.1%	-6.3%	-18.3%
57 COAL	3.76	3.61	3.25	4.05	-4.0%	-10.0%	24.6%
58 NATURAL GAS	2.30	3.80	5.86	5.20	65.2%	54.2%	-11.3%
59 SOLAR	0.00	0.00	0.00	0.00	0.0%	0.0%	0.0%
60 OTHER	0.00	0.00	0.00	0.00	0.0%	0.0%	0.0%
61 TOTAL (cents/KWH)	2.23	3.54	5.20	4.55	58.7%	46.9%	-12.5%

⁽¹⁾ DISTILLATE (BBLs, MWH & \$) USED FOR FIRING, HOT STANDBY, ETC. IS INCLUDED IN FOSSIL STEAM PLANTS.

**EXHIBIT TO THE TESTIMONY OF
M. ASHLEY SIZEMORE**

DOCUMENT NO. 3

**LEVELIZED AND TIERED FUEL RATE
JANUARY 2023 - DECEMBER 2023**

**Tampa Electric Company
Comparison of Levelized and Tiered Fuel Revenues
For the Period January 2023 through December 2023**

	Annual Units MWH	Levelized Fuel Rate Cents/kWh	Annual Fuel Revenues \$	Tiered Fuel Rates Cents/kWh	Annual Fuel Revenues \$
Residential Excluding TOU:					
TIER I (Up to 1,000) kWh	6,858,868	4.832	331,420,508	4.525	310,363,783
TIER II (Over 1,000) kWh	3,038,488	4.832	146,819,763	5.525	167,876,488
Total	<u>9,897,357</u>		<u>478,240,271</u>		<u>478,240,271</u>



BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20220001-EI
FUEL & PURCHASED POWER COST RECOVERY
AND
CAPACITY COST RECOVERY

GENERATING PERFORMANCE INCENTIVE FACTOR
PROJECTIONS
JANUARY 2023 THROUGH DECEMBER 2023

TESTIMONY AND EXHIBIT
OF
PATRICK A. BOKOR

FILED: SEPTEMBER 2, 2022

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **PREPARED DIRECT TESTIMONY**

3 **OF**

4 **PATRICK A. BOKOR**

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

8
9 **A.** My name is Patrick A. Bokor. My business address is 702
10 N. Franklin Street, Tampa, Florida 33602. I am employed
11 by Tampa Electric Company ("Tampa Electric" or "company")
12 in the position of Manager, Gas & Power Trading.

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

16
17 **A.** I received a Bachelor of Science degree in Accounting in
18 2000 from the University of Florida and a Master of
19 Business Administration in 2010 from the University of
20 Tampa. I have over 16 years of experience in the electric
21 industry, in the areas of unit commitment and economic
22 dispatch, power and gas trading, accounting, finance, and
23 risk management. In my current role, I am responsible for
24 managing the procurement and delivery of wholesale
25 natural gas and power for Tampa Electric's portfolio.

1 Q. What is the purpose of your testimony?

2

3 A. My testimony describes Tampa Electric's methodology for
4 determining the various factors required to compute the
5 Generating Performance Incentive Factor ("GPIF") as
6 ordered by the Commission.

7

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

10

11 A. Yes. Exhibit No. PAB-2, consisting of two documents, was
12 prepared under my direction and supervision. Document No.
13 1 contains the GPIF schedules. Document No. 2 is a summary
14 of the GPIF targets for the 2023 period.

15

16 Q. Which generating units on Tampa Electric's system are
17 included in the determination of the GPIF?

18

19 A. Three natural gas combined cycle ("CC") units and one
20 coal unit are included. These are Polk Unit 2, Bayside
21 Units 1 and 2, and Big Bend Unit 4.

22

23 Q. Does your exhibit comply with the Commission's approved
24 GPIF methodology?

25

1 **A.** Yes. In accordance with the GPIF Manual, the GPIF units
2 selected represent no less than 80 percent of the
3 estimated system net generation. The units Tampa Electric
4 proposes to use for the period January 2023 through
5 December 2023 represent the top 97.4 percent of the total
6 forecasted system net generation for this period
7 excluding the Big Bend Unit 1 CC (Big Bend Modernization).
8 The Big Bend Unit 1 CC is expected to enter commercial
9 service in December 2022 and was excluded from the GPIF
10 calculation because the company does not have historical
11 operational data on which to base targets.

12
13 To account for the concerns presented in the testimony of
14 Commission Staff witness Sidney W. Matlock during the 2005
15 fuel hearing, Tampa Electric removes outliers from the
16 calculation of the GPIF targets. The methodology was
17 approved by the Commission in Order No. PSC-2006-1057-
18 FOF-EI issued in Docket No. 20060001-EI on December 22,
19 2006.

20
21 **Q.** Did Tampa Electric identify any outages as outliers?

22
23 **A.** Yes, Big Bend Unit 4 and Polk Unit 2 outages were
24 identified as outliers and were removed.

25

1 Q. Did Tampa Electric make any other adjustments?

2

3 A. Yes. As allowed per Section 4.3 of the GPIF Implementation
4 Manual, the Forced Outage and Maintenance Outage Factors
5 were adjusted to reflect recent unit performance and known
6 unit modifications or equipment changes.

7

8 Q. Please describe how Tampa Electric developed the various
9 factors associated with GPIF.

10

11 A. Targets were established for equivalent availability and
12 heat rate for each unit considered for the 2023 period.
13 A range of potential improvements and degradations were
14 determined for each of these metrics.

15

16 Q. How were the target values for unit availability
17 determined?

18

19 A. The Planned Outage Factor ("POF") and the Equivalent
20 Unplanned Outage Factor ("EUOF") were subtracted from 100
21 percent to determine the target Equivalent Availability
22 Factor ("EAF"). The factors for each of the four units
23 included within the GPIF are shown on page 5 of Document
24 No. 1.

25

1 To give an example for the 2023 period, the projected
2 EUOF for Big Bend Unit 4 is 19.9 percent, the POF is 18.9
3 percent. Therefore, the target EAF for Big Bend Unit 4
4 equals 61.2 percent or:

5
6
$$100\% - (19.9\% + 18.9\%) = 61.2\%$$

7
8 This is shown on Page 4, column 3 of Document No. 1.

9
10 **Q.** How was the potential for unit availability improvement
11 determined?

12
13 **A.** Maximum equivalent availability is derived using the
14 following formula:

15
16
$$EAF_{MAX} = 1 - [0.80 (EUOF_T) + 0.95 (POF_T)]$$

17
18 The factors included in the above equations are the same
19 factors that determine the target equivalent
20 availability. Calculating the maximum incentive points,
21 a 20 percent reduction in EUOF, plus a five percent
22 reduction in the POF is necessary. Continuing with the
23 Big Bend Unit 4 example:

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25
$$EAF_{MAX} = 1 - [0.80 (19.9\%) + 0.95 (18.9\%)] = 66.1\%$$

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This is shown on page 4, column 4 of Document No. 1.

Q. How was the potential for unit availability degradation determined?

A. The potential for unit availability degradation is significantly greater than the potential for unit availability improvement. This concept was discussed extensively during the development of the incentive. To incorporate this biased effect into the unit availability tables, Tampa Electric uses a potential degradation range equal to twice the potential improvement. Consequently, minimum equivalent availability is calculated using the following formula:

$$EAF_{MIN} = 1 - [1.40 (EUOF_T) + 1.10 (POF_T)]$$

Again, continuing using the Big Bend Unit 4 example,

$$EAF_{MIN} = 1 - [1.40 (19.9\%) + 1.10 (18.9\%)] = 51.4\%$$

The equivalent availability maximum and minimum for the other four units are computed in a similar manner.

Q. How did Tampa Electric determine the Planned Outage,

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Maintenance Outage, and Forced Outage Factors?

A. The company's planned outages for January 2023 through December 2023 are shown on page 15 of Document No. 1. Two GPIF units have a major planned outage of 28 days or greater in 2023; therefore, two Critical Path Method Diagrams are provided.

Planned Outage Factors are calculated for each unit. For example, Big Bend Unit 4 is scheduled for planned outages from April 1, 2023 to May 25, 2023 and from November 7, 2023 to November 20, 2023. There are 1,656 planned outage hours scheduled for the 2023 period, with a total of 8,760 hours during this 12-month period. Consequently, the POF for Big Bend Unit 4 is 18.9 percent or:

$$\frac{1,656}{8,760} \times 100\% = 18.9\%$$

The factor for each unit is shown on pages 5 and 11 through 14 of Document No. 1. Polk Unit 2 has a POF of 3.8 percent, Bayside Unit 1 has a POF of 5.3 percent, and Bayside Unit 2 has a POF of 21.8 percent.

Q. How did you determine the Forced Outage and Maintenance

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Outage Factors for each unit?

A. Projected factors are based upon historical unit performance. For each unit, the three most recent July through June annual periods formed the basis of the target development. Historical data and target values are analyzed to assure applicability to current conditions of operation. This provides assurance that any periods of abnormal operations or recent trends having material effect can be taken into consideration. These target factors are additive and result in a EUOF of 19.9 percent for Big Bend Unit 4. The EUOF of Big Bend Unit 4 is verified by the data shown on page 11, lines 3, 5, 10, and 11 of Document No. 1 and calculated using the following formula:

$$\text{EUOF} = \frac{(\text{EFOH} + \text{EMOH})}{\text{PH}} \times 100\%$$

Or

$$\text{EUOF} = \frac{(1,049 + 695)}{8,760} \times 100\% = 19.9\%$$

Relative to Big Bend Unit 4, the EUOF of 19.9 percent forms the basis of the equivalent availability target

1 development as shown on pages 4 and 5 of Document No. 1.

2

3 **Polk Unit 2**

4 The projected EUOF for this unit is 5.3 percent. The unit
5 will have two planned outages in 2023, and the POF is 3.8
6 percent. Therefore, the target equivalent availability
7 for this unit is 90.9 percent.

8

9 **Bayside Unit 1**

10 The projected EUOF for this unit is 4.7 percent. The unit
11 will have one planned outage in 2023, and the POF is 5.3
12 percent. Therefore, the target equivalent availability
13 for this unit is 90.0 percent.

14

15 **Bayside Unit 2**

16 The projected EUOF for this unit is 3.1 percent. The unit
17 will have one planned outage in 2023, and the POF is 21.8
18 percent. Therefore, the target equivalent availability
19 for this unit is 75.2 percent.

20

21 **Big Bend Unit 4**

22 The projected EUOF for this unit is 19.9 percent. The
23 unit will have two planned outages in 2023, and the POF
24 is 18.9 percent. Therefore, the target equivalent
25 availability for this unit is 61.2 percent.

1 Q. Please summarize your testimony regarding EAF.

2

3 A. The GPIF system weighted EAF of 81.6 percent is shown on
4 page 5 of Document No. 1.

5

6 Q. Why are Forced and Maintenance Outage Factors adjusted
7 for planned outage hours?

8

9 A. The adjustment makes the factors more accurate and
10 comparable. A unit in a planned outage stage or reserve
11 shutdown stage cannot incur a forced or maintenance
12 outage. To demonstrate the effects of a planned outage,
13 note the Equivalent Unplanned Outage Rate and Equivalent
14 Unplanned Outage Factor for Big Bend Unit 4 on page 11 of
15 Document No. 1. Except for the months of May and November,
16 the Equivalent Unplanned Outage Rate and Equivalent
17 Unplanned Outage Factor are equal. This is because no
18 planned outages are scheduled for these months. During
19 the months of May and November, the Equivalent Unplanned
20 Outage Rate exceeds the Equivalent Unplanned Outage
21 Factor due to the scheduled planned outages. Therefore,
22 the adjusted factors apply to the period hours after the
23 planned outage hours have been extracted.

24

25 Q. Does this mean that both rate and factor data are used in

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calculated data?

A. Yes. Rates provide a proper and accurate method of determining unit metrics, which are subsequently converted to factors. Therefore,

$$EFOF + EMOF + POF + EAF = 100\%$$

Since factors are additive, they are easier to work with and to understand.

Q. Has Tampa Electric prepared the necessary heat rate data required for the determination of the GPIF?

A. Yes. Target heat rates and ranges of potential operation have been developed as required and have been adjusted to reflect the afore mentioned agreed upon GPIF methodology.

Q. How were the targets determined?

A. Net heat rate data for the three most recent July through June annual periods formed the basis for the target development. The historical data and the target values are analyzed to assure applicability to current conditions of operation. This provides assurance that any

1 period of abnormal operations or equipment modifications
2 having material effect on heat rate can be taken into
3 consideration.

4
5 **Q.** How were the ranges of heat rate improvement and heat
6 rate degradation determined?

7
8 **A.** The ranges were determined through analysis of historical
9 net heat rate and net output factor data. This is the
10 same data from which the net heat rate versus net output
11 factor curves have been developed for each unit. This
12 information is shown on pages 22 through 25 of Document
13 No. 1.

14
15 **Q.** Please elaborate on the analysis used in the determination
16 of the ranges.

17
18 **A.** The net heat rate versus net output factor curves are the
19 result of a first order curve fit to historical data. The
20 standard error of the estimate of this data was
21 determined, and a factor was applied to produce a band of
22 potential improvement and degradation. Both the curve fit
23 and the standard error of the estimate were performed by
24 the computer program for each unit. These curves are also
25 used in post-period adjustments to actual heat rates to

1 account for unanticipated changes in unit dispatch and
2 fuel.

3

4 **Q.** Please summarize your heat rate projection (Btu/Net kWh)
5 and the range about each target to allow for potential
6 improvement or degradation for the 2023 period.

7

8 **A.** The heat rate target for Polk Unit 2 is 7,279 Btu/Net kWh
9 with a range of ± 191 Btu/Net kWh. The heat rate for
10 Bayside Unit 1 is 7,481 Btu/Net kWh with a range of ± 174
11 Btu/Net kWh. The heat rate target for Bayside Unit 2 is
12 8,280 Btu/Net kWh with a range of ± 302 Btu/Net kWh. The
13 heat rate target for Big Bend Unit 4 is 10,777 Btu/Net
14 kWh with a range of ± 720 Btu/Net kWh. A zone of tolerance
15 of ± 75 Btu/Net kWh is included within a range for each
16 target. This is shown on pages 7 through 10 of Document
17 No. 1.

18

19 **Q.** Do these heat rate targets and ranges meet the
20 Commission's requirements?

21

22 **A.** Yes.

23

24 **Q.** After determining the target values and ranges for average
25 net operating heat rate and equivalent availability, what

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is the next step in determining the GPIF targets?

A. The next step is to calculate the savings and weighting factor to be used for both average net operating heat rate and equivalent availability. This is shown in Document No. 1, pages 7 through 10. The baseline production costing analysis was performed to calculate the total system fuel cost if all units operated at target heat rate and target availability for the period. This total system fuel cost of \$831,414,630 is shown on Document No. 1, page 6, column 2. Multiple production cost simulations were performed to calculate total system fuel cost with each unit individually operating at maximum improvement in equivalent availability and each station operating at maximum improvement in average net operating heat rate. The respective savings are shown on page 6, column 4 of Document No. 1.

Column 4 totals \$17,848,884 which reflects the savings if all of the units operated at maximum improvement. A weighting factor for each metric is then calculated by dividing unit savings by the total. For Big Bend Unit 4, the weighting factor for average net operating heat rate is 26.52 percent as shown in the right-hand column on Document No. 1, page 6. Pages 7 through 10 of Document

1 No. 1 show the point table, the Fuel Savings/(Loss) and
2 the equivalent availability or heat rate value. The
3 individual weighting factor is also shown. For example,
4 as shown on page 7 of Document No. 1, if Big Bend Unit 4,
5 operates at 10,058 average net operating heat rate, fuel
6 savings would equal \$4,734,231 and +10 average net
7 operating heat rate points would be awarded.

8
9 The GPIF Reward/Penalty table on page 2 of Document No.
10 1 is a summary of the tables on pages 7 through 10. The
11 left-hand column of this document shows the incentive
12 points for Tampa Electric. The center column shows the
13 total fuel savings and is the same amount as shown on
14 page 6, column 4, or \$17,848,884. The right-hand column
15 of page 2 is the estimated reward or penalty based upon
16 performance.

17
18 **Q.** How was the maximum allowed incentive determined?

19
20 **A.** Referring to page 3, line 14, the estimated average common
21 equity for the period January 2023 through December 2023
22 is \$4,460,054,782. This produces the maximum allowed
23 jurisdictional incentive of \$14,976,288 shown on line 21.

24
25 **Q.** Are there any constraints set forth by the Commission

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regarding the magnitude of incentive dollars?

A. Yes. As Order No. PSC-2013-0665-FOF-EI, issued in Docket No. 20130001-EI on December 18, 2013 states, incentive dollars are not to exceed 50 percent of fuel savings. Page 2 of Document No. 1 demonstrates that this constraint is met, limiting total potential reward and penalty incentive dollars to \$8,924,442.

Q. Please summarize your direct testimony.

A. Tampa Electric has complied with the Commission's directions, philosophy, and methodology in its determination of the GPIF. The GPIF is determined by the following formula for calculating Generating Performance Incentive Points (GPIP).

$$\begin{aligned} \text{GPIP} = & (0.0787 \text{ EAP}_{\text{PK2}} + 0.0594 \text{ EAP}_{\text{BAY1}} \\ & + 0.0113 \text{ EAP}_{\text{BAY2}} + 0.0566 \text{ EAP}_{\text{BB4}} \\ & + 0.2852 \text{ HRP}_{\text{PK2}} + 0.1460 \text{ HRP}_{\text{BAY1}} \\ & + 0.0976 \text{ HRP}_{\text{BAY2}} + 0.2652 \text{ HRP}_{\text{BB4}}) \end{aligned}$$

Where:

GPIP = Generating Performance Incentive Points

EAP = Equivalent Availability Points awarded/deducted

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for Polk Unit 2, Bayside Units 1 and 2, and Big Bend Unit 4.

HRP = Average Net Heat Rate Points awarded/deducted for Polk Unit 2, Bayside Units 1 and 2, and Big Bend Unit 4.

Q. Have you prepared a document summarizing the GPIF targets for the January 2023 through December 2023 period?

A. Yes. Document No. 2 entitled "Summary of GPIF Targets" provides the availability and heat rate targets for each unit.

Q. Does this conclude your direct testimony?

A. Yes, it does.

DOCKET NO. 20220001-EI
GPIF 2023 PROJECTION
FILING EXHIBIT NO. PAB-2
DOCUMENT NO. 1

EXHIBIT TO THE TESTIMONY

OF

PATRICK A. BOKOR

DOCUMENT NO. 1

GPIF SCHEDULES

JANUARY 2023 - DECEMBER 2023

**TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE FACTOR
JANUARY 2023 - DECEMBER 2023
TARGETS
TABLE OF CONTENTS**

<u>SCHEDULE</u>	<u>PAGE</u>
GPIF REWARD / PENALTY TABLE	2
GPIF CALCULATION OF MAXIMUM ALLOWED INCENTIVE DOLLARS	3
GPIF TARGET AND RANGE SUMMARY	4
COMPARISON OF GPIF TARGETS VS PRIOR PERIOD ACTUAL PERFORMANCE	5
DERIVATION OF WEIGHTING FACTORS	6
GPIF TARGET AND RANGE SUMMARY	7 - 10
ESTIMATED UNIT PERFORMANCE DATA	11-14
ESTIMATED PLANNED OUTAGE SCHEDULE	15
CRITICAL PATH METHOD DIAGRAMS	16-17
FORCED & MAINTENANCE OUTAGE FACTOR GRAPHS	18-21
HEAT RATE VS NET OUTPUT FACTOR GRAPHS	22-25
GENERATING UNITS IN GPIF (TABLE 4.2 IN THE MANUAL)	26
UNIT RATINGS AS OF JULY 2021	27
PROJECTED PERCENT GENERATION BY UNIT	28

**TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE FACTOR
REWARD / PENALTY TABLE
JANUARY 2023 - DECEMBER 2023**

GENERATING PERFORMANCE INCENTIVE POINTS (GPIP)	FUEL SAVINGS / (LOSS) (\$000)	GENERATING PERFORMANCE INCENTIVE FACTOR (\$000)
+10	17,848.9	8,924.4
+9	16,064.0	8,032.0
+8	14,279.1	7,139.6
+7	12,494.2	6,247.1
+6	10,709.3	5,354.7
+5	8,924.4	4,462.2
+4	7,139.6	3,569.8
+3	5,354.7	2,677.3
+2	3,569.8	1,784.9
+1	1,784.9	892.4
0	0.0	0.0
-1	(2,384.8)	(892.4)
-2	(4,769.7)	(1,784.9)
-3	(7,154.5)	(2,677.3)
-4	(9,539.3)	(3,569.8)
-5	(11,924.1)	(4,462.2)
-6	(14,309.0)	(5,354.7)
-7	(16,693.8)	(6,247.1)
-8	(19,078.6)	(7,139.6)
-9	(21,463.4)	(8,032.0)
-10	(23,848.3)	(8,924.4)

**TAMPA ELECTRIC COMPANY
GENERATING PERFORMANCE INCENTIVE FACTOR
CALCULATION OF MAXIMUM ALLOWED INCENTIVE DOLLARS
JANUARY 2023 - DECEMBER 2023**

Line 1	Beginning of period balance of common equity:		\$	4,327,845,952	
	End of month common equity:				
Line 2	Month of January	2023	\$	4,387,740,892	
Line 3	Month of February	2023	\$	4,425,036,690	
Line 4	Month of March	2023	\$	4,462,649,502	
Line 5	Month of April	2023	\$	4,365,778,473	
Line 6	Month of May	2023	\$	4,402,887,590	
Line 7	Month of June	2023	\$	4,440,312,135	
Line 8	Month of July	2023	\$	4,500,392,155	
Line 9	Month of August	2023	\$	4,538,645,488	
Line 10	Month of September	2023	\$	4,577,223,975	
Line 11	Month of October	2023	\$	4,479,218,538	
Line 12	Month of November	2023	\$	4,517,291,896	
Line 13	Month of December	2023	\$	4,555,688,877	
Line 14	(Summation of line 1 through line 13 divided by 13)		\$	4,460,054,782	
Line 15	25 Basis points			0.0025	
Line 16	Revenue Expansion Factor			74.45%	
Line 17	Maximum Allowed Incentive Dollars (line 14 times line 15 divided by line 16)		\$	14,976,288	
Line 18	Jurisdictional Sales			19,953,481	MWH
Line 19	Total Sales			19,953,481	MWH
Line 20	Jurisdictional Separation Factor (line 18 divided by line 19)			100.00%	
Line 21	Maximum Allowed Jurisdictional Incentive Dollars (line 17 times line 20)		\$	14,976,288	
Line 22	Incentive Cap (50% of projected fuel savings at 10 GPIF-point level from Sheet No. 3.515)		\$	8,924,442	
Line 23	Maximum Allowed GPIF Reward (at 10 GPIF-point level) (the lesser of line 21 and line 22)		\$	8,924,442	

Note: Line 22 and 23 are as approved by Commission order PSC-13-0665-FOF-EI dated 12/18/13 effective 1/1/14.

TAMPA ELECTRIC COMPANY
GPIF TARGET AND RANGE SUMMARY
JANUARY 2023 - DECEMBER 2023

EQUIVALENT AVAILABILITY

<u>PLANT / UNIT</u>	<u>WEIGHTING FACTOR (%)</u>	<u>EAF TARGET (%)</u>	<u>EAF RANGE</u>		<u>MAX. FUEL SAVINGS (\$000)</u>	<u>MAX. FUEL LOSS (\$000)</u>
			<u>MAX. (%)</u>	<u>MIN. (%)</u>		
BIG BEND 4	5.66%	61.2	66.1	51.4	1,009.8	(3,719.4)
POLK 2	7.87%	90.9	92.1	88.4	1,404.2	(699.6)
BAYSIDE 1	5.94%	90.0	91.2	87.6	1,059.4	(1,412.7)
BAYSIDE 2	1.13%	75.2	76.9	71.7	202.1	(3,843.1)
GPIF SYSTEM	20.59%					

AVERAGE NET OPERATING HEAT RATE

<u>PLANT / UNIT</u>	<u>WEIGHTING FACTOR (%)</u>	<u>ANOHR Btu/kwh</u>	<u>TARGET NOF</u>	<u>ANOHR RANGE</u>		<u>MAX. FUEL SAVINGS (\$000)</u>	<u>MAX. FUEL LOSS (\$000)</u>
				<u>MIN.</u>	<u>MAX.</u>		
BIG BEND 4	26.52%	10,777	67.0	10,058	11,497	4,734.2	(4,734.2)
POLK 2	28.52%	7,279	46.5	7,088	7,470	5,090.3	(5,090.3)
BAYSIDE 1	14.60%	7,481	43.7	7,307	7,655	2,605.9	(2,605.9)
BAYSIDE 2	9.76%	8,280	19.9	7,977	8,582	1,742.9	(1,742.9)
GPIF SYSTEM	79.41%						

**TAMPA ELECTRIC COMPANY
COMPARISON OF GPIF TARGETS VS PRIOR PERIOD ACTUAL PERFORMANCE**

EQUIVALENT AVAILABILITY (%)

PLANT / UNIT	WEIGHTING FACTOR (%)	NORMALIZED WEIGHTING FACTOR	TARGET PERIOD JAN 23 - DEC 23			ACTUAL PERFORMANCE JAN 21 - DEC 21			ACTUAL PERFORMANCE JAN 20 - DEC 20			ACTUAL PERFORMANCE JAN 19 - DEC 19		
			POF	EUOF	EUOR	POF	EUOF	EUOR	POF	EUOF	EUOR	POF	EUOF	EUOR
BIG BEND 4	5.66%	27.5%	18.9	19.9	24.5	18.7	12.8	15.8	37.1	25.1	39.9	16.5	28.0	39.8
POLK 2	7.87%	38.2%	3.8	5.3	5.5	11.0	3.7	4.1	2.8	7.7	8.0	4.5	2.9	3.0
BAYSIDE 1	5.94%	28.8%	5.3	4.7	5.0	5.4	5.8	6.2	7.7	2.9	3.1	11.1	3.7	4.1
BAYSIDE 2	1.13%	5.5%	21.8	3.1	4.0	5.5	1.9	2.0	4.3	5.0	5.2	11.4	3.2	3.6
GPIF SYSTEM	20.59%	100.0%	9.4	9.0	10.5	11.2	6.7	7.8	13.7	10.9	15.2	10.1	10.0	13.5
GPIF SYSTEM WEIGHTED EQUIVALENT AVAILABILITY (%)			81.6			82.1			75.3			79.9		
			3 PERIOD AVERAGE			3 PERIOD AVERAGE								
			POF	EUOF	EUOR	EAF								
			11.7	9.2	12.2	79.1								

AVERAGE NET OPERATING HEAT RATE (Btu/kWh)

PLANT / UNIT	WEIGHTING FACTOR (%)	NORMALIZED WEIGHTING FACTOR	TARGET	ADJUSTED	ADJUSTED	ADJUSTED
			HEAT RATE JAN 23 - DEC 23	ACTUAL PERFORMANCE HEAT RATE JAN 21 - DEC 21	ACTUAL PERFORMANCE HEAT RATE JAN 20 - DEC 20	ACTUAL PERFORMANCE HEAT RATE JAN 19 - DEC 19
BIG BEND 4	26.52%	33.4%	10,777	10,630	10,785	10,876
POLK 2	28.52%	35.9%	7,279	7,279	7,197	7,427
BAYSIDE 1	14.60%	18.4%	7,481	7,484	7,467	7,462
BAYSIDE 2	9.76%	12.3%	8,280	8,232	8,212	8,326
GPIF SYSTEM	79.41%	100.0%				
GPIF SYSTEM WEIGHTED AVERAGE HEAT RATE (Btu/kWh)			8,608	8,553	8,570	8,696

23

**TAMPA ELECTRIC COMPANY
DERIVATION OF WEIGHTING FACTORS
JANUARY 2023 - DECEMBER 2023
PRODUCTION COSTING SIMULATION
FUEL COST (\$000)**

UNIT PERFORMANCE INDICATOR	AT TARGET (1)	AT MAXIMUM IMPROVEMENT (2)	SAVINGS (3)	WEIGHTING FACTOR (% OF SAVINGS)
EQUIVALENT AVAILABILITY				
EA ₃ BIG BEND 4	831,414.63	830,404.81	1,009.82	5.66%
EA ₂ POLK 2	831,414.63	830,010.39	1,404.24	7.87%
EA ₃ BAYSIDE 1	831,414.63	830,355.26	1,059.37	5.94%
EA ₄ BAYSIDE 2	831,414.63	831,212.51	202.12	1.13%
AVERAGE HEAT RATE				
AHR ₃ BIG BEND 4	831,414.63	826,680.40	4,734.23	26.52%
AHR ₂ POLK 2	831,414.63	826,324.32	5,090.31	28.52%
AHR ₃ BAYSIDE 1	831,414.63	828,808.75	2,605.88	14.60%
AHR ₄ BAYSIDE 2	831,414.63	829,671.72	1,742.91	9.76%
TOTAL SAVINGS			17,848.88	100.00%

- (1) Fuel Adjustment Base Case - All unit performance indicators at target.
- (2) All other units performance indicators at target.
- (3) Expressed in replacement energy cost.

GPIF TARGET AND RANGE SUMMARY

JANUARY 2023 - DECEMBER 2023

BIG BEND 4

<u>EQUIVALENT AVAILABILITY POINTS</u>	<u>FUEL SAVINGS / (LOSS) (\$000)</u>	<u>ADJUSTED ACTUAL EQUIVALENT AVAILABILITY</u>	<u>AVERAGE HEAT RATE POINTS</u>	<u>FUEL SAVINGS / (LOSS) (\$000)</u>	<u>ADJUSTED ACTUAL AVERAGE HEAT RATE</u>
+10	1,009.8	66.1	+10	4,734.2	10,058
+9	908.8	65.6	+9	4,260.8	10,122
+8	807.9	65.1	+8	3,787.4	10,186
+7	706.9	64.6	+7	3,314.0	10,251
+6	605.9	64.2	+6	2,840.5	10,315
+5	504.9	63.7	+5	2,367.1	10,380
+4	403.9	63.2	+4	1,893.7	10,444
+3	302.9	62.7	+3	1,420.3	10,509
+2	202.0	62.2	+2	946.8	10,573
+1	101.0	61.7	+1	473.4	10,638
					10,702
0	0.0	61.2	0	0.0	10,777
					10,852
-1	(371.9)	60.2	-1	(473.4)	10,917
-2	(743.9)	59.2	-2	(946.8)	10,981
-3	(1,115.8)	58.2	-3	(1,420.3)	11,046
-4	(1,487.8)	57.3	-4	(1,893.7)	11,110
-5	(1,859.7)	56.3	-5	(2,367.1)	11,175
-6	(2,231.7)	55.3	-6	(2,840.5)	11,239
-7	(2,603.6)	54.3	-7	(3,314.0)	11,303
-8	(2,975.6)	53.3	-8	(3,787.4)	11,368
-9	(3,347.5)	52.3	-9	(4,260.8)	11,432
-10	(3,719.4)	51.4	-10	(4,734.2)	11,497
	Weighting Factor =	5.66%		Weighting Factor =	26.52%

TAMPA ELECTRIC COMPANY

GPIF TARGET AND RANGE SUMMARY

JANUARY 2023 - DECEMBER 2023

POLK 2

<u>EQUIVALENT AVAILABILITY POINTS</u>	<u>FUEL SAVINGS / (LOSS) (\$000)</u>	<u>ADJUSTED ACTUAL EQUIVALENT AVAILABILITY</u>	<u>AVERAGE HEAT RATE POINTS</u>	<u>FUEL SAVINGS / (LOSS) (\$000)</u>	<u>ADJUSTED ACTUAL AVERAGE HEAT RATE</u>
+10	1,404.2	92.1	+10	5,090.3	7,088
+9	1,263.8	92.0	+9	4,581.3	7,100
+8	1,123.4	91.9	+8	4,072.3	7,111
+7	983.0	91.8	+7	3,563.2	7,123
+6	842.5	91.6	+6	3,054.2	7,134
+5	702.1	91.5	+5	2,545.2	7,146
+4	561.7	91.4	+4	2,036.1	7,158
+3	421.3	91.3	+3	1,527.1	7,169
+2	280.8	91.1	+2	1,018.1	7,181
+1	140.4	91.0	+1	509.0	7,193
					7,204
0	0.0	90.9	0	0.0	7,279
					7,354
-1	(70.0)	90.6	-1	(509.0)	7,366
-2	(139.9)	90.4	-2	(1,018.1)	7,377
-3	(209.9)	90.1	-3	(1,527.1)	7,389
-4	(279.8)	89.9	-4	(2,036.1)	7,401
-5	(349.8)	89.6	-5	(2,545.2)	7,412
-6	(419.8)	89.4	-6	(3,054.2)	7,424
-7	(489.7)	89.1	-7	(3,563.2)	7,436
-8	(559.7)	88.9	-8	(4,072.3)	7,447
-9	(629.7)	88.6	-9	(4,581.3)	7,459
-10	(699.6)	88.4	-10	(5,090.3)	7,470

Weighting Factor =

7.87%

Weighting Factor =

28.52%

TAMPA ELECTRIC COMPANY

GPIF TARGET AND RANGE SUMMARY

JANUARY 2023 - DECEMBER 2023

BAYSIDE 1

EQUIVALENT AVAILABILITY POINTS	FUEL SAVINGS / (LOSS) (\$000)	ADJUSTED ACTUAL EQUIVALENT AVAILABILITY	AVERAGE HEAT RATE POINTS	FUEL SAVINGS / (LOSS) (\$000)	ADJUSTED ACTUAL AVERAGE HEAT RATE
+10	1,059.4	91.2	+10	2,605.9	7,307
+9	953.4	91.1	+9	2,345.3	7,316
+8	847.5	91.0	+8	2,084.7	7,326
+7	741.6	90.9	+7	1,824.1	7,336
+6	635.6	90.7	+6	1,563.5	7,346
+5	529.7	90.6	+5	1,302.9	7,356
+4	423.7	90.5	+4	1,042.4	7,366
+3	317.8	90.4	+3	781.8	7,376
+2	211.9	90.3	+2	521.2	7,386
+1	105.9	90.1	+1	260.6	7,396
					7,406
0	0.0	90.0	0	0.0	7,481
					7,556
-1	(141.3)	89.8	-1	(260.6)	7,566
-2	(282.5)	89.5	-2	(521.2)	7,576
-3	(423.8)	89.3	-3	(781.8)	7,586
-4	(565.1)	89.1	-4	(1,042.4)	7,596
-5	(706.4)	88.8	-5	(1,302.9)	7,606
-6	(847.6)	88.6	-6	(1,563.5)	7,616
-7	(988.9)	88.3	-7	(1,824.1)	7,626
-8	(1,130.2)	88.1	-8	(2,084.7)	7,636
-9	(1,271.5)	87.9	-9	(2,345.3)	7,645
-10	(1,412.7)	87.6	-10	(2,605.9)	7,655
	Weighting Factor =	5.94%		Weighting Factor =	14.60%

TAMPA ELECTRIC COMPANY

GPIF TARGET AND RANGE SUMMARY

JANUARY 2023 - DECEMBER 2023

BAYSIDE 2

<u>EQUIVALENT AVAILABILITY POINTS</u>	<u>FUEL SAVINGS / (LOSS) (\$000)</u>	<u>ADJUSTED ACTUAL EQUIVALENT AVAILABILITY</u>	<u>AVERAGE HEAT RATE POINTS</u>	<u>FUEL SAVINGS / (LOSS) (\$000)</u>	<u>ADJUSTED ACTUAL AVERAGE HEAT RATE</u>
+10	202.1	76.9	+10	1,742.9	7,977
+9	181.9	76.7	+9	1,568.6	8,000
+8	161.7	76.5	+8	1,394.3	8,023
+7	141.5	76.3	+7	1,220.0	8,046
+6	121.3	76.2	+6	1,045.7	8,068
+5	101.1	76.0	+5	871.5	8,091
+4	80.8	75.8	+4	697.2	8,114
+3	60.6	75.7	+3	522.9	8,137
+2	40.4	75.5	+2	348.6	8,159
+1	20.2	75.3	+1	174.3	8,182
					8,205
0	0.0	75.2	0	0.0	8,280
					8,355
-1	(384.3)	74.8	-1	(174.3)	8,378
-2	(768.6)	74.5	-2	(348.6)	8,400
-3	(1,152.9)	74.1	-3	(522.9)	8,423
-4	(1,537.2)	73.8	-4	(697.2)	8,446
-5	(1,921.6)	73.4	-5	(871.5)	8,469
-6	(2,305.9)	73.1	-6	(1,045.7)	8,491
-7	(2,690.2)	72.8	-7	(1,220.0)	8,514
-8	(3,074.5)	72.4	-8	(1,394.3)	8,537
-9	(3,458.8)	72.1	-9	(1,568.6)	8,560
-10	(3,843.1)	71.7	-10	(1,742.9)	8,582
	Weighting Factor =	1.13%		Weighting Factor =	9.76%

TAMPA ELECTRIC COMPANY
ESTIMATED UNIT PERFORMANCE DATA
JANUARY 2023 - DECEMBER 2023

PLANT/UNIT	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	PERIOD
BIG BEND 4	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	2023
1. EAF (%)	75.5	75.5	75.5	0.0	14.6	75.5	75.5	75.5	75.5	75.5	40.2	75.5	61.2
2. POF	0.0	0.0	0.0	100.0	80.6	0.0	0.0	0.0	0.0	0.0	46.7	0.0	18.9
3. EUOF	24.5	24.5	24.5	0.0	4.7	24.5	24.5	24.5	24.5	24.5	13.1	24.5	19.9
4. EUOR	24.5	24.5	24.5	0.0	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5	24.5
5. PH	744	672	744	720	744	720	744	744	720	744	720	744	8,760
6. SH	637	467	607	0	56	488	382	663	490	670	202	293	4,955
7. RSH	0	0	0	0	0	0	0	0	0	0	0	0	0
8. UH	107	205	137	720	688	232	362	81	230	74	518	451	3,805
9. POH	0	0	0	720	600	0	0	0	0	0	336	0	1,656
10. EFOH	110	99	110	0	21	106	110	110	106	110	57	110	1,049
11. EMOH	73	66	73	0	14	70	73	73	70	73	38	73	695
12. OPER BTU (GBTU)	2,372	1,788	1,999	0	150	1,334	1,055	1,826	1,406	1,883	550	808	15,223
13. NET GEN (MWH)	228,660	173,570	187,410	0	13,600	121,530	96,300	166,550	129,110	172,230	50,100	73,440	1,412,500
14. ANOHR (Btu/kwh)	10,373	10,299	10,665	12,463	11,015	10,979	10,960	10,966	10,893	10,931	10,985	11,004	10,777
15. NOF (%)	83.1	86.0	71.5	0.0	57.5	59.0	59.7	59.5	62.4	60.9	58.8	58.0	67.0
16. NPC (MW)	432	432	432	422	422	422	422	422	422	422	422	432	425
17. ANOHR EQUATION	ANOHR = NOF(-25.146) +								12,463

29

TAMPA ELECTRIC COMPANY
ESTIMATED UNIT PERFORMANCE DATA
JANUARY 2023 - DECEMBER 2023

PLANT/UNIT	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	PERIOD
POLK 2	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	2023
1. EAF (%)	94.5	94.5	74.7	91.3	94.5	94.5	94.5	94.5	94.5	94.5	87.9	81.4	90.9
2. POF	0.0	0.0	21.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	7.0	13.9	3.8
3. EUOF	5.5	5.5	4.4	5.3	5.5	5.5	5.5	5.5	5.5	5.5	5.1	4.7	5.3
4. EUOR	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
5. PH	744	672	744	720	744	720	744	744	720	744	720	744	8,760
6. SH	637	556	536	690	725	700	718	721	705	727	702	590	8,007
7. RSH	0	0	0	0	0	0	0	0	0	0	0	0	0
8. UH	107	116	208	30	19	20	26	23	15	17	18	154	753
9. POH	0	0	156	24	0	0	0	0	0	0	50	103	334
10. EFOH	21	19	16	19	21	20	21	21	20	21	18	18	232
11. EMOH	21	19	16	19	21	20	21	21	20	21	18	18	232
12. OPER BTU (GBTU)	1,390	1,265	1,232	2,296	2,970	3,212	3,457	3,518	3,479	2,975	2,238	1,763	30,000
13. NET GEN (MWH)	185,540	169,170	164,760	313,930	411,800	449,400	485,790	495,090	490,010	412,410	305,260	238,250	4,121,410
14. ANOHR (Btu/kwh)	7,490	7,480	7,477	7,313	7,212	7,146	7,115	7,106	7,099	7,213	7,331	7,401	7,279
15. NOF (%)	24.3	25.4	25.6	42.9	53.5	60.5	63.8	64.7	65.5	53.5	41.0	33.7	46.5
16. NPC (MW)	1,200	1,200	1,200	1,061	1,061	1,061	1,061	1,061	1,061	1,061	1,061	1,200	1,107
17. ANOHR EQUATION	ANOHR = NOF(-9.479) +								7,720

30

TAMPA ELECTRIC COMPANY
ESTIMATED UNIT PERFORMANCE DATA
JANUARY 2023 - DECEMBER 2023

PLANT/UNIT	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	PERIOD
BAYSIDE 1	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	2023
1. EAF (%)	95.0	95.0	94.4	78.9	95.0	95.0	95.0	95.0	95.0	95.0	82.4	64.4	90.0
2. POF	0.0	0.0	0.6	17.0	0.0	0.0	0.0	0.0	0.0	0.0	13.3	32.3	5.3
3. EUOF	5.0	5.0	4.9	4.1	5.0	5.0	5.0	5.0	5.0	5.0	4.3	3.4	4.7
4. EUOR	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
5. PH	744	672	744	720	744	720	744	744	720	744	720	744	8,760
6. SH	707	639	703	568	707	684	707	707	684	707	593	479	7,884
7. RSH	0	0	0	0	0	0	0	0	0	0	0	0	0
8. UH	37	33	41	152	37	36	37	37	36	37	127	265	875
9. POH	0	0	5	122	0	0	0	0	0	0	96	240	463
10. EFOH	17	15	17	14	17	16	17	17	16	17	14	11	188
11. EMOH	20	18	20	16	20	19	20	20	19	20	17	14	223
12. OPER BTU (GBTU)	1,015	879	1,506	1,353	1,798	2,002	2,214	2,137	2,158	1,745	1,006	986	18,840
13. NET GEN (MWH)	134,370	116,290	200,520	181,040	240,940	269,370	298,520	287,730	291,010	233,640	133,730	131,220	2,518,380
14. ANOHR (Btu/kwh)	7,556	7,560	7,510	7,474	7,462	7,433	7,418	7,426	7,416	7,468	7,525	7,516	7,481
15. NOF (%)	24.0	23.0	36.0	45.5	48.6	56.2	60.2	58.1	60.7	47.1	32.2	34.6	43.7
16. NPC (MW)	792	792	792	701	701	701	701	701	701	701	701	792	731
17. ANOHR EQUATION	ANOHR = NOF(-3.808) +								7,647

31

TAMPA ELECTRIC COMPANY
ESTIMATED UNIT PERFORMANCE DATA
JANUARY 2023 - DECEMBER 2023

PLANT/UNIT	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	MONTH OF:	PERIOD
BAYSIDE 2	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	2023
1. EAF (%)	96.0	96.0	96.0	91.2	84.0	96.0	96.0	96.0	22.4	0.0	32.0	96.0	75.2
2. POF	0.0	0.0	0.0	5.0	12.6	0.0	0.0	0.0	76.7	100.0	66.7	0.0	21.8
3. EUOF	4.0	4.0	4.0	3.8	3.5	4.0	4.0	4.0	0.9	0.0	1.3	4.0	3.1
4. EUOR	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	0.0	4.0	4.0	4.0
5. PH	744	672	744	720	744	720	744	744	720	744	720	744	8,760
6. SH	715	645	715	657	625	692	715	715	161	0	231	715	6,583
7. RSH	0	0	0	0	0	0	0	0	0	0	0	0	0
8. UH	29	27	29	63	119	28	29	29	559	744	489	29	2,176
9. POH	0	0	0	36	94	0	0	0	552	744	480	0	1,906
10. EFOH	5	5	5	5	5	5	5	5	1	0	2	5	50
11. EMOH	24	22	24	22	21	23	24	24	5	0	8	24	221
12. OPER BTU (GBTU)	939	807	1,108	968	1,146	1,141	1,403	1,386	261	0	313	1,024	10,513
13. NET GEN (MWH)	111,990	96,090	133,080	116,610	139,870	138,340	172,060	169,790	31,680	0	37,610	122,610	1,269,730
14. ANOHR (Btu/kwh)	8,384	8,400	8,325	8,297	8,192	8,246	8,154	8,161	8,253	0	8,330	8,354	8,280
15. NOF (%)	15.0	14.2	17.8	19.1	24.1	21.5	25.9	25.6	21.2	0.0	17.6	16.4	19.9
16. NPC (MW)	1,047	1,047	1,047	929	929	929	929	929	929	929	929	1,047	968
17. ANOHR EQUATION	ANOHR = NOF(-21.057) +	8,699							

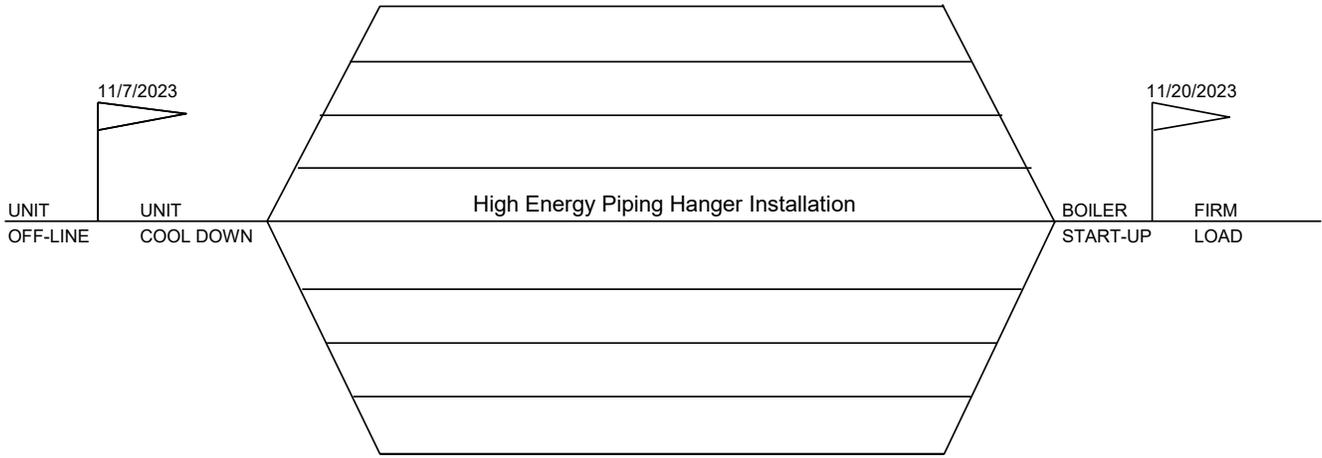
32

**TAMPA ELECTRIC COMPANY
ESTIMATED PLANNED OUTAGE SCHEDULE
GPIF UNITS
JANUARY 2023 - DECEMBER 2023**

<u>PLANT / UNIT</u>	<u>PLANNED OUTAGE DATES</u>	<u>OUTAGE DESCRIPTION</u>
+ BIG BEND 4	Apr 01 - May 25 Nov 07 - Nov 20	Waterwall, Penthouse headers, Pipe Hangers Cleanup Outage
POLK 2	Mar 06 - Mar 10 Dec 11 - Dec 15	Combined Cycle Planned Outage Combined Cycle Planned Outage
BAYSIDE 1	Nov 27 - Dec 10	Combined Cycle Planned Outage
+ BAYSIDE 2	Sep 08 - Nov 20	CT 2A Major and AGP upgrade CT 2B Major and AGP upgrade CT 2C Major and AGP upgrade CT 2C Major and AGP upgrade Mark Vie DCS and LCI Upgrades Steam Turbine valve overhauls Unit 2 CW Inlet structural refurbishment CW Tunnel liner replacement Steam Turbine 2 Exciter replacement

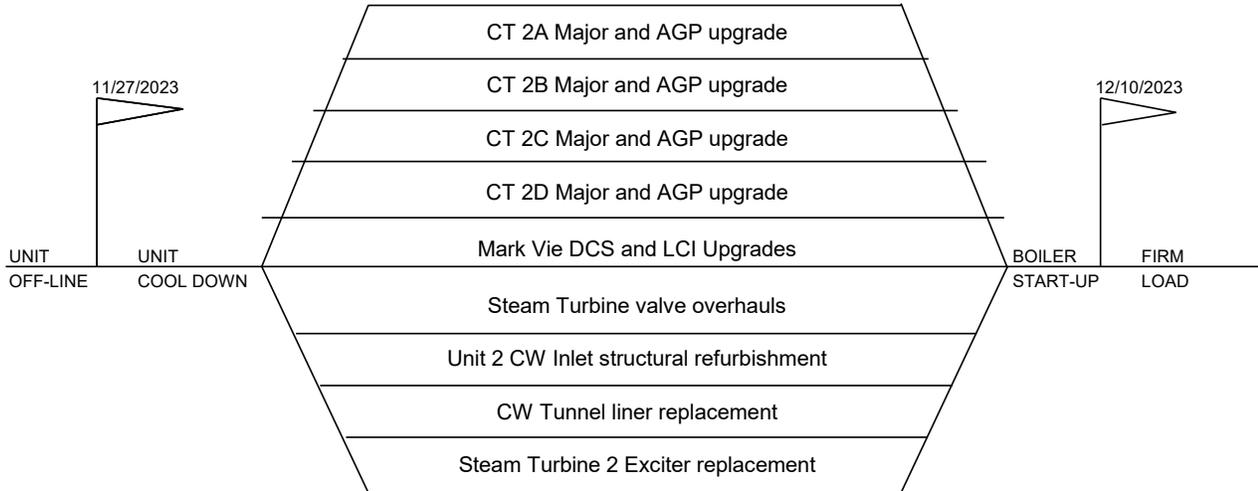
+ These units have CPM included. CPM for units with less than or equal to 4 weeks are not included.

**TAMPA ELECTRIC COMPANY
CRITICAL PATH METHOD DIAGRAMS
GPIF UNITS > FOUR WEEKS
JANUARY 2023 - DECEMBER 2023**



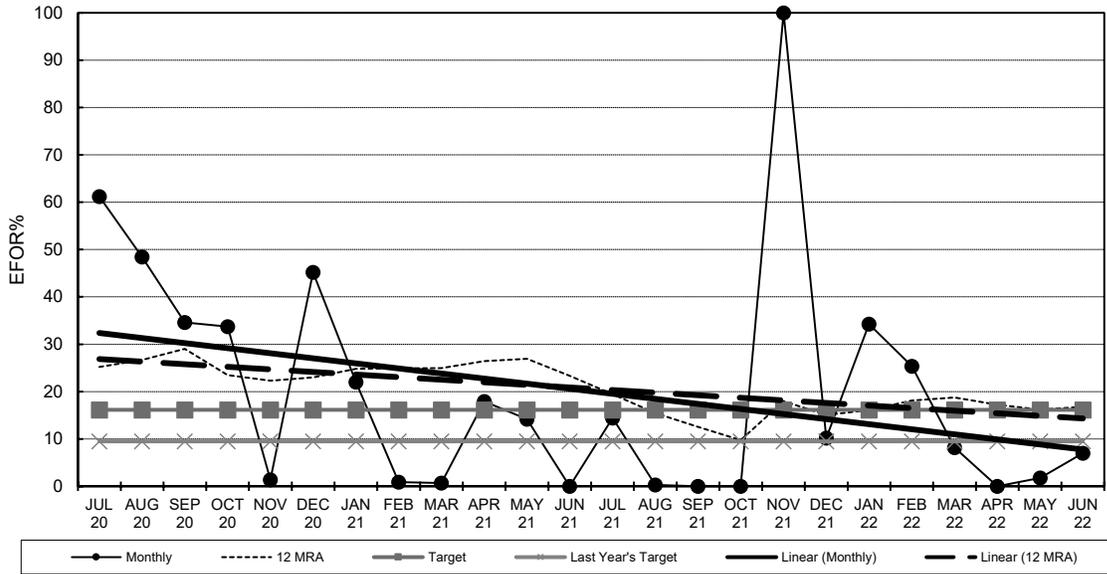
TAMPA ELECTRIC COMPANY
BIG BEND 4
PLANNED OUTAGE 2023
PROJECTED CPM

TAMPA ELECTRIC COMPANY
CRITICAL PATH METHOD DIAGRAMS
GPIF UNITS > FOUR WEEKS
JANUARY 2023 - DECEMBER 2023

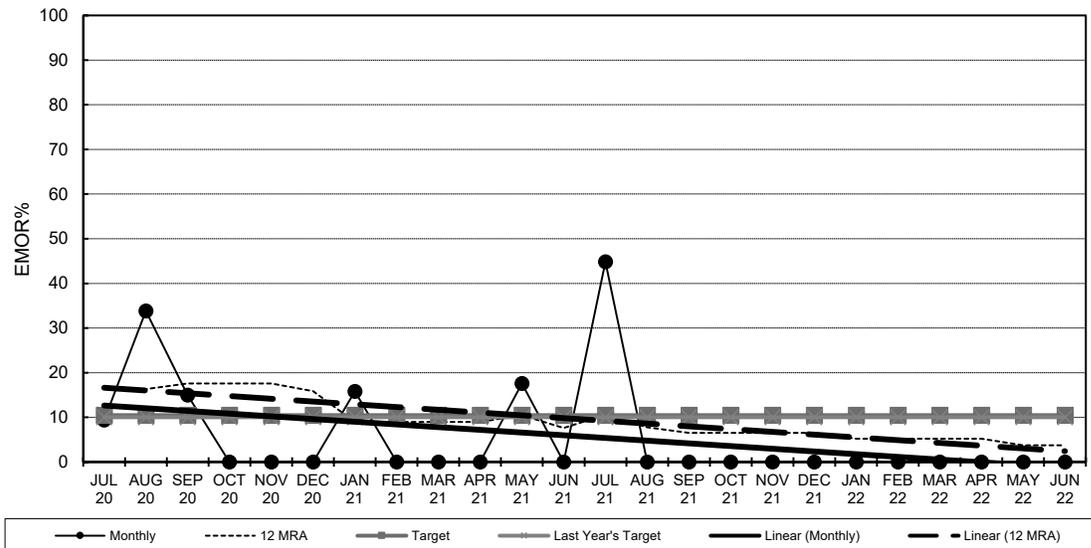


TAMPA ELECTRIC COMPANY
BAYSIDE 2
PLANNED OUTAGE 2023
PROJECTED CPM

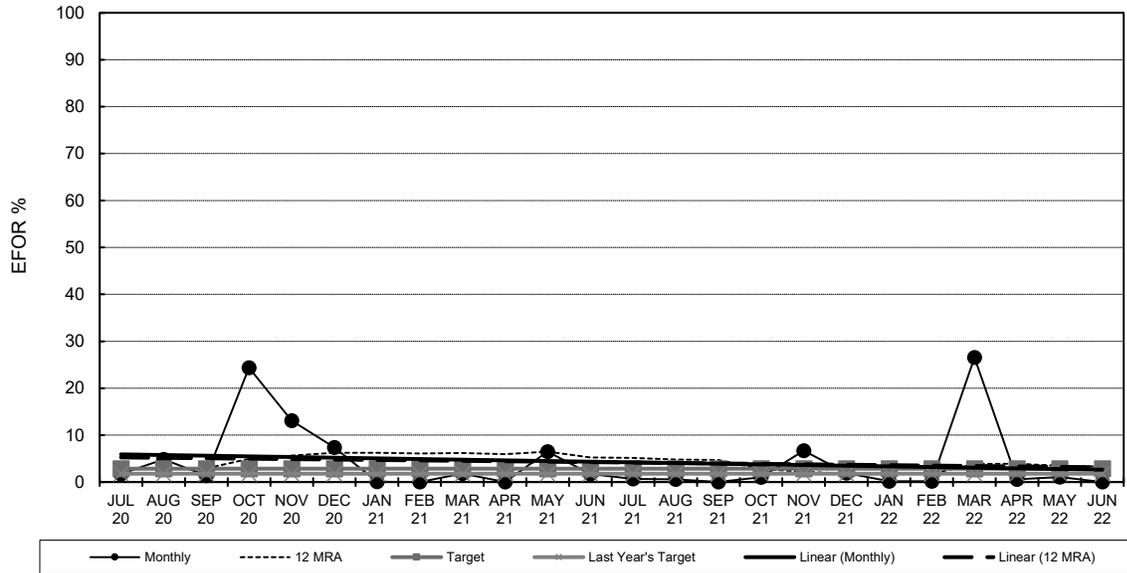
Big Bend Unit 4
EFOR



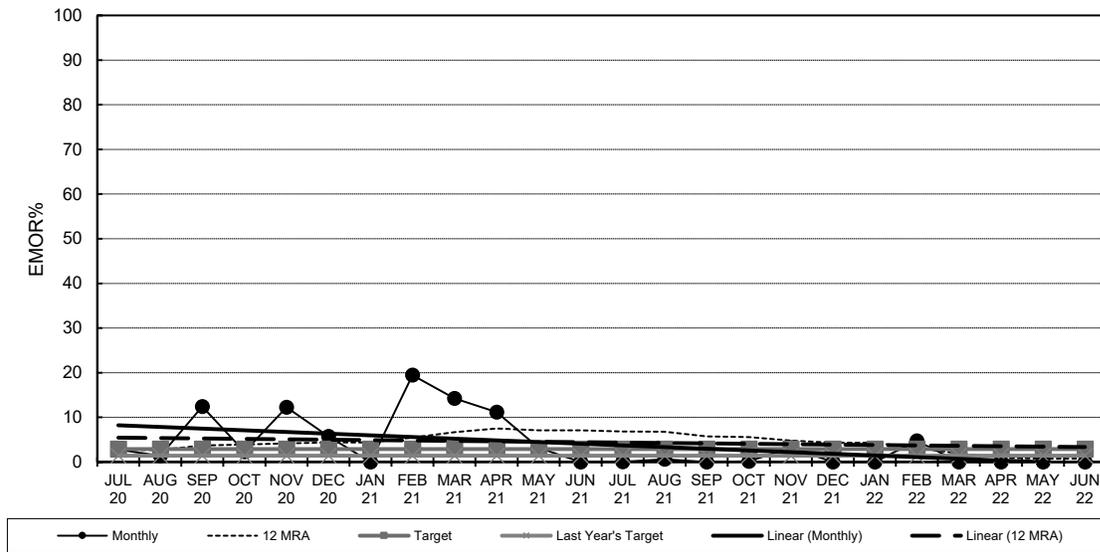
Big Bend Unit 4
EMOR



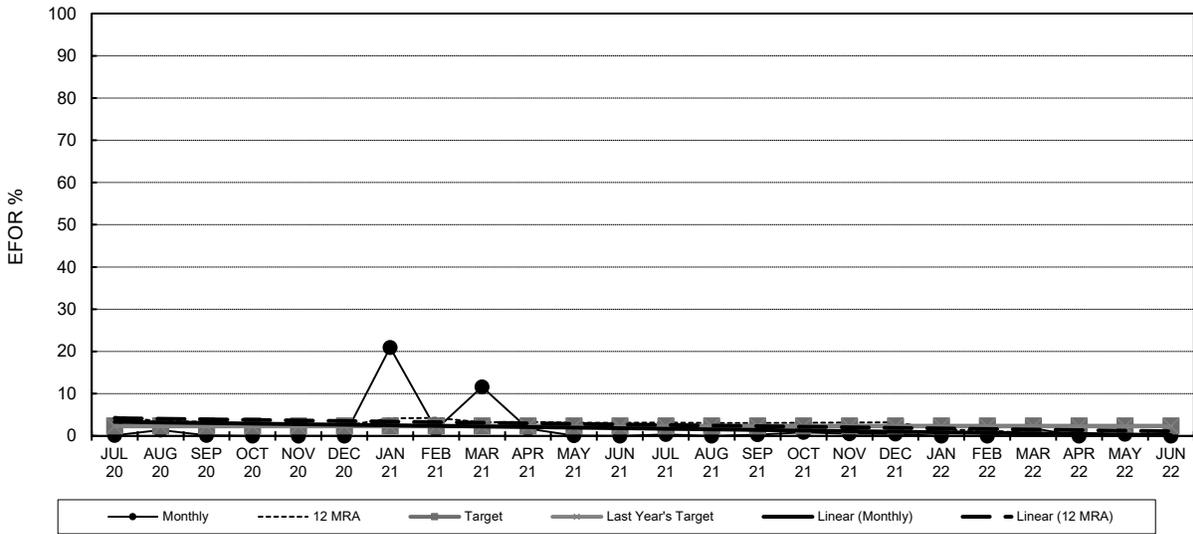
Polk Unit 2
 EFOR



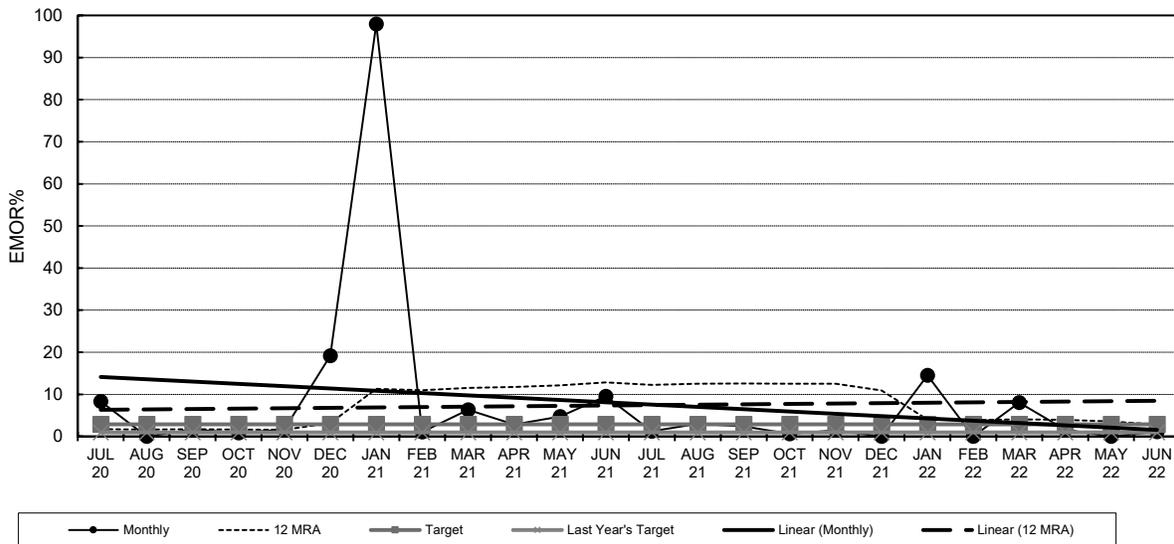
Polk Unit 2
 EMOR



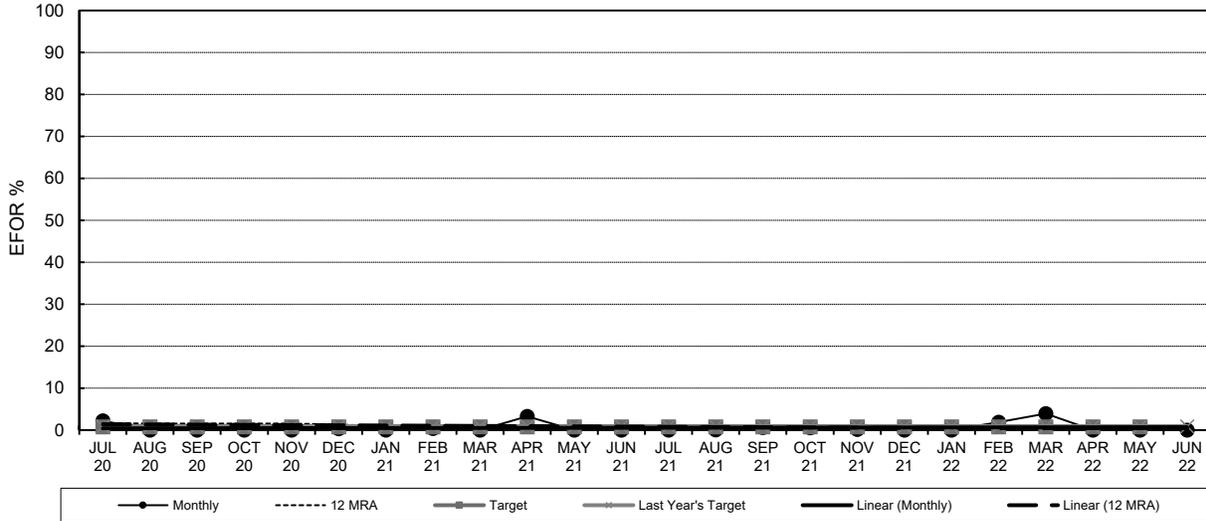
Bayside Unit 1
 EFOR



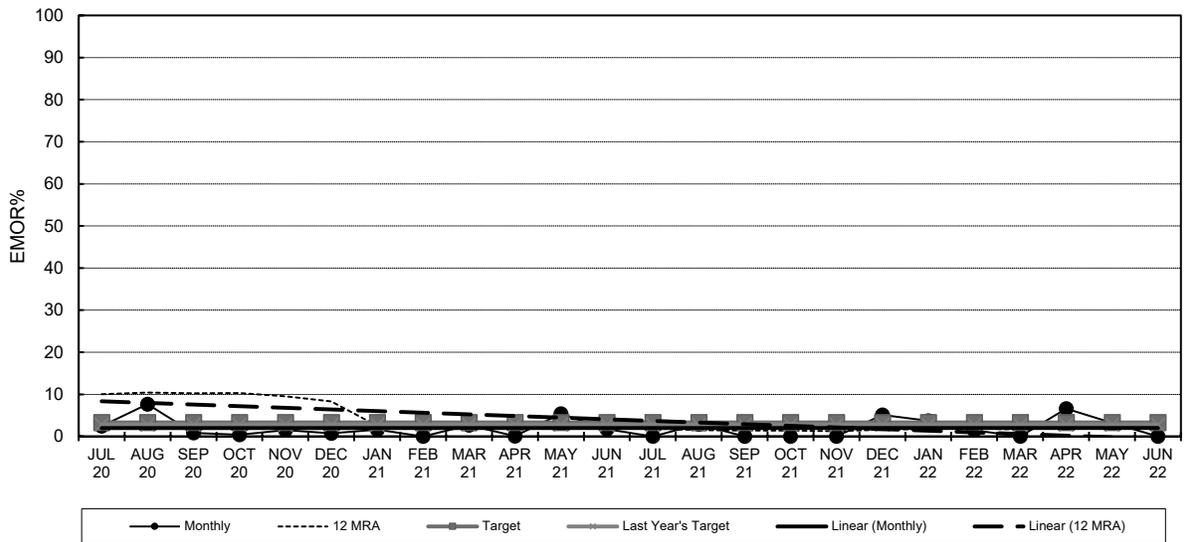
Bayside Unit 1
 EMOR



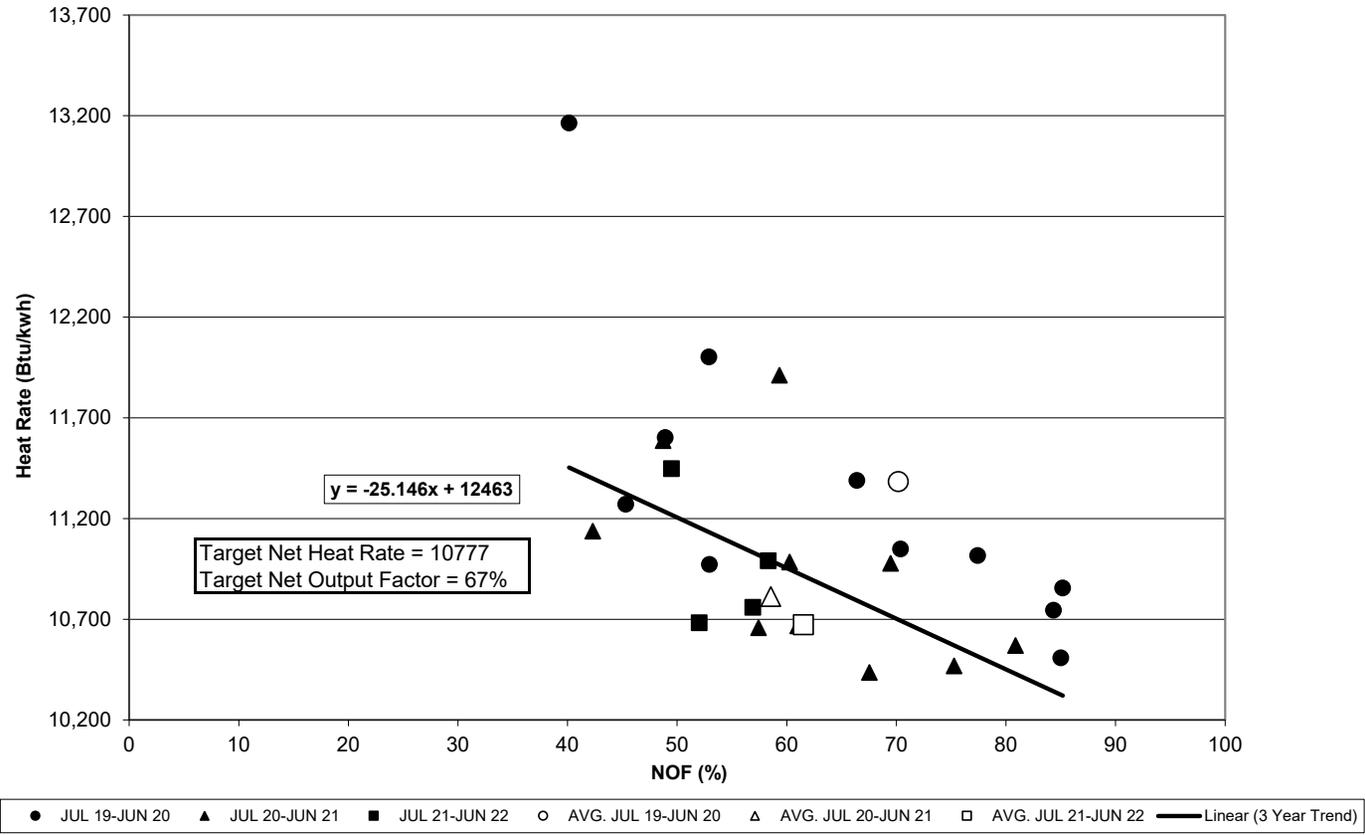
Bayside Unit 2
 EFOR



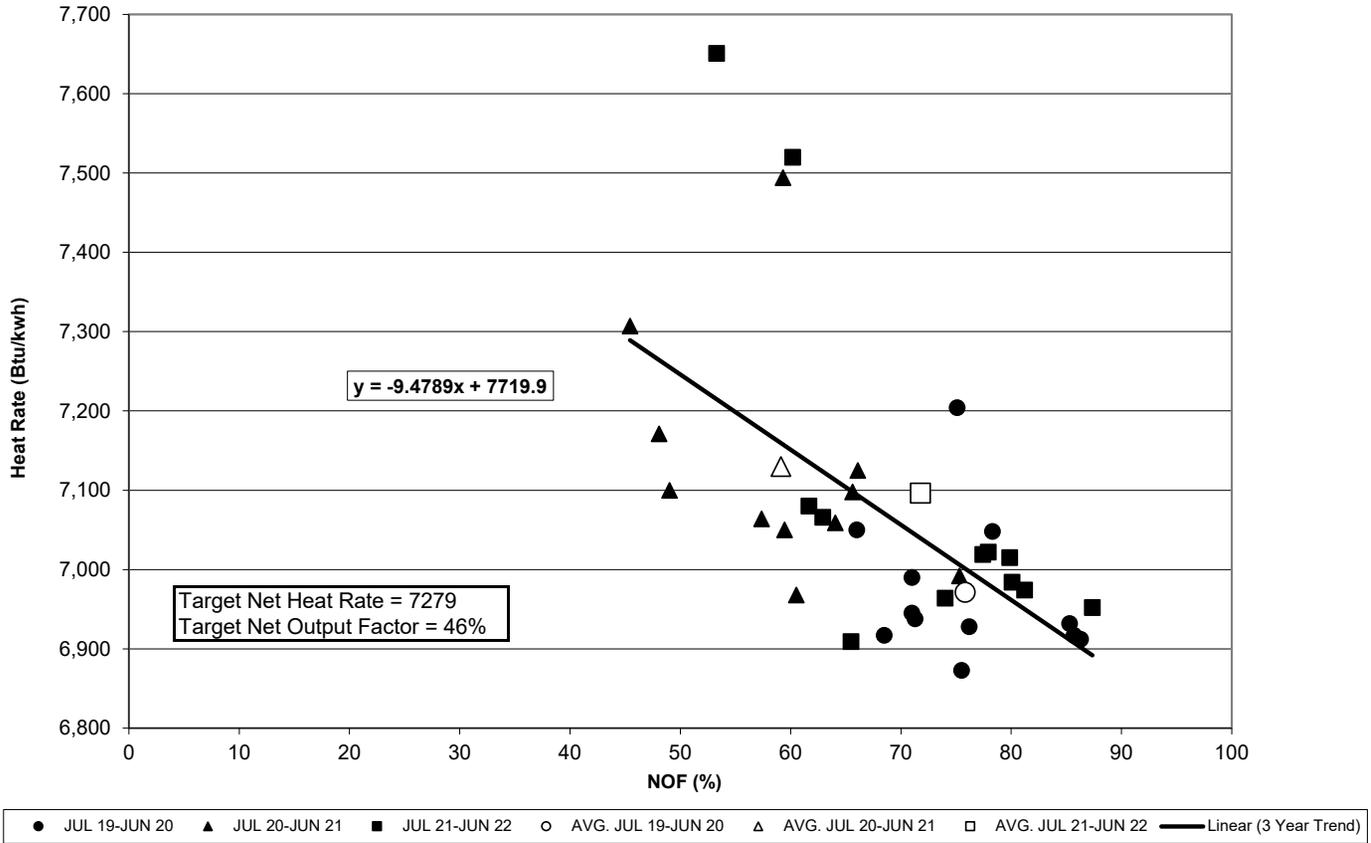
Bayside Unit 2
 EMOR



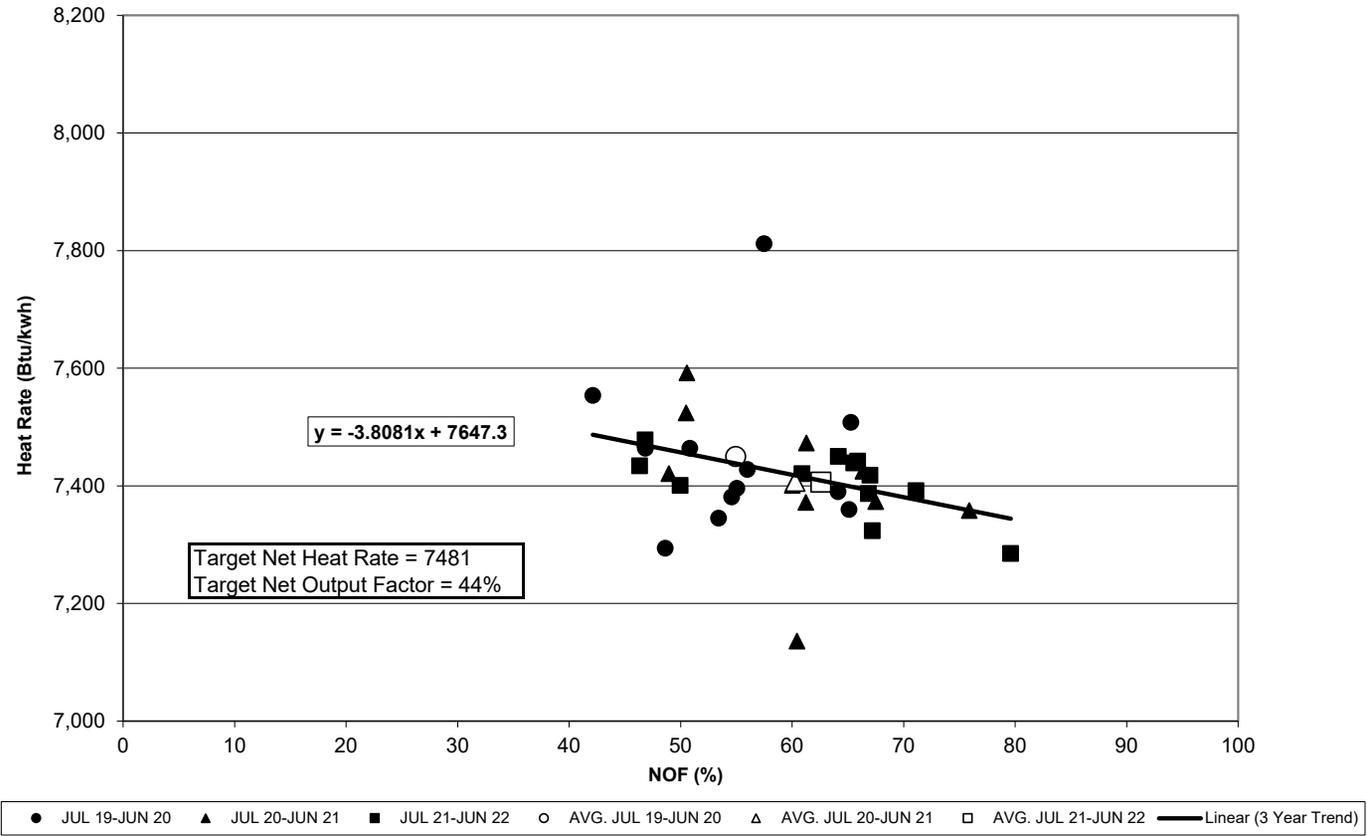
Tampa Electric Company Heat Rate vs Net Output Factor Big Bend Unit 4



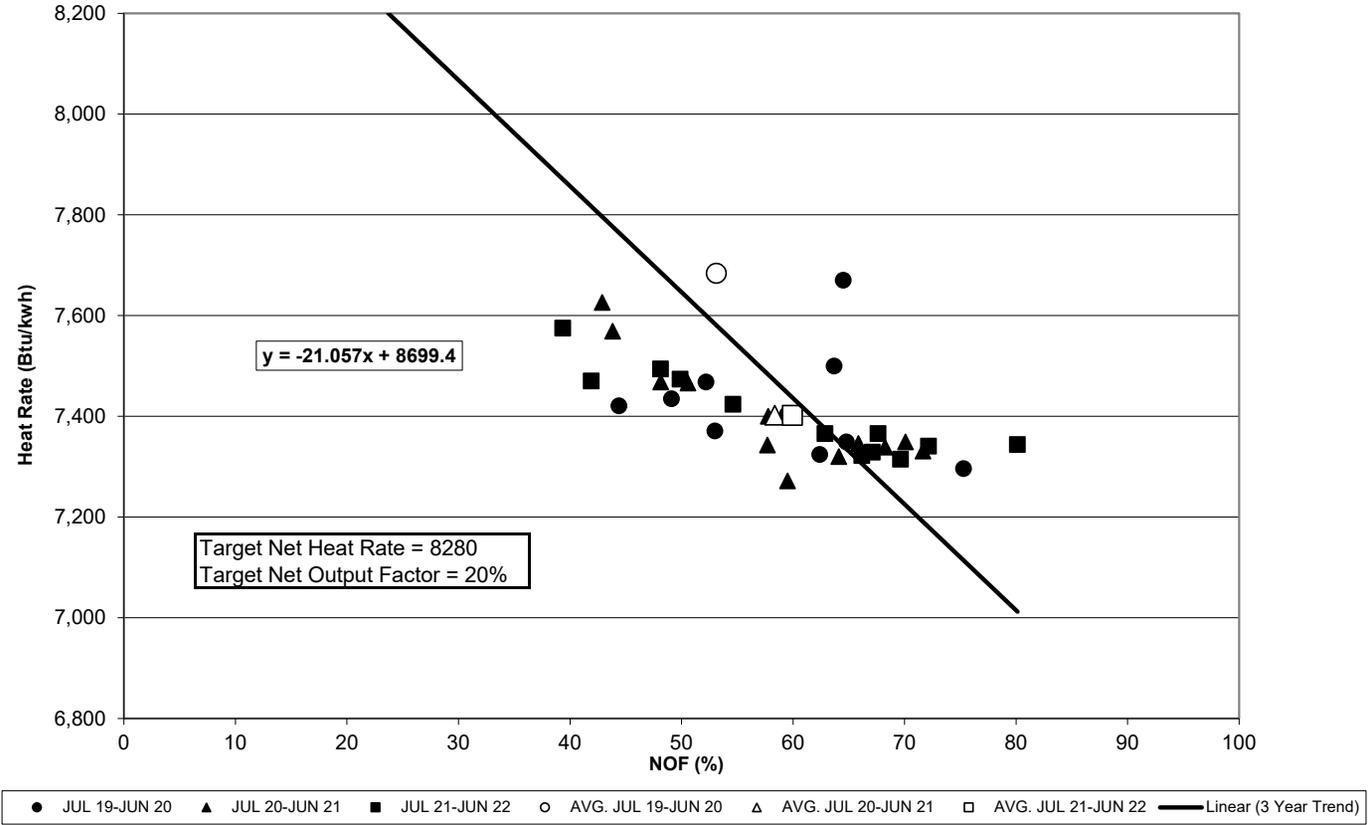
Tampa Electric Company Heat Rate vs Net Output Factor Polk Unit 2



Tampa Electric Company Heat Rate vs Net Output Factor Bayside Unit 1



Tampa Electric Company Heat Rate vs Net Output Factor Bayside Unit 2



**TAMPA ELECTRIC COMPANY
GENERATING UNITS IN GPIF
TABLE 4.2
JANUARY 2023 - DECEMBER 2023**

<u>PLANT / UNIT</u>	<u>ANNUAL GROSS MDC (MW)</u>	<u>ANNUAL NET NDC (MW)</u>
BIG BEND 4	458	425
POLK 2	1,130	1,107
BAYSIDE 1	740	731
BAYSIDE 2	979	968
GPIF TOTAL	<u>3,308</u>	<u>3,232</u>
SYSTEM TOTAL	6,386	6,243
% OF SYSTEM TOTAL	51.8%	51.8%

**TAMPA ELECTRIC COMPANY
UNIT RATINGS
JANUARY 2023 - DECEMBER 2023**

<u>PLANT / UNIT</u>	<u>ANNUAL GROSS MDC (MW)</u>	<u>ANNUAL NET NDC (MW)</u>
BAYSIDE 1	740	731
BAYSIDE 2	979	968
BAYSIDE 3	59	58
BAYSIDE 4	59	58
BAYSIDE 5	59	58
BAYSIDE 6	59	58
BAYSIDE TOTAL	<u>1,954</u>	<u>1,930</u>
BIG BEND 1	1,101	1,076
BIG BEND 3	368	348
BIG BEND 4	458	425
BIG BEND CT4	59	58
BIG BEND TOTAL	<u>1,987</u>	<u>1,908</u>
POLK 1	225	210
POLK 2	1,130	1,107
POLK TOTAL	<u>1,355</u>	<u>1,317</u>
SOLAR	1,091	1,087
SOLAR TOTAL	<u>1,091</u>	<u>1,087</u>
SYSTEM TOTAL	<u>6,386</u>	<u>6,243</u>

**TAMPA ELECTRIC COMPANY
PERCENT GENERATION BY UNIT
JANUARY 2023 - DECEMBER 2023**

<u>PLANT</u>	<u>UNIT</u>	<u>NET OUTPUT MWH</u>	<u>PERCENT OF PROJECTED OUTPUT</u>	<u>PERCENT CUMULATIVE PROJECTED OUTPUT</u>
BIG BEND	1 (new CC without history)	8,708,240	41.60%	41.60%
POLK	2	4,121,410	19.69%	61.28%
BAYSIDE	1	2,518,380	12.03%	73.31%
SOLAR		2,355,720	11.25%	84.56%
BIG BEND	4	1,412,500	6.75%	91.31%
BAYSIDE	2	1,269,730	6.06%	97.37%
POLK	1	437,640	2.09%	99.46%
BIG BEND	3	50,320	0.24%	99.71%
BAYSIDE	6	13,000	0.06%	99.77%
BAYSIDE	5	12,440	0.06%	99.83%
BAYSIDE	3	12,380	0.06%	99.89%
BIG BEND CT	4	12,260	0.06%	99.94%
BAYSIDE	4	11,660	0.06%	100.00%

TOTAL GENERATION 20,935,680 100.00%

GENERATION BY COAL UNITS: 1,412,500 MWH GENERATION BY NATURAL GAS UNITS: 17,167,460 MWH

% GENERATION BY COAL UNITS 6.75% % GENERATION BY NATURAL GAS UNITS: 82.00%

GENERATION BY SOLAR UNITS: 2,355,720 MWH GENERATION BY GPIF UNITS: 9,322,020 MWH

% GENERATION BY SOLAR UNIT 11.25% % GENERATION BY GPIF UNITS: 44.53%

EXHIBIT TO THE TESTIMONY

OF

PATRICK A. BOKOR

DOCUMENT NO. 2

SUMMARY OF GPIF TARGETS
JANUARY 2023 - DECEMBER 2023

TAMPA ELECTRIC COMPANY
SUMMARY OF GPIF TARGETS
JANUARY 2023 - DECEMBER 2023

Unit	Availability			Net Heat Rate
	EAF	POF	EUOF	
Big Bend 4¹	61.2	18.9	19.9	10,777
Polk 2²	90.9	3.8	5.3	7,279
Bayside 1³	90.0	5.3	4.7	7,481
Bayside 2⁴	75.2	21.8	3.1	8,280

1 Original Sheet 8.401.20E, Page 12

2 Original Sheet 8.401.20E, Page 13

3 Original Sheet 8.401.20E, Page 14

4 Original Sheet 8.401.20E, Page 15



**BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION**

**DOCKET NO. 20220001-EI
FUEL & PURCHASED POWER COST RECOVERY
AND
CAPACITY COST RECOVERY**

**PROJECTIONS
JANUARY 2023 THROUGH DECEMBER 2023**

**TESTIMONY
OF
JOHN C. HEISEY**

FILED: SEPTEMBER 2, 2022

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
7 employer.

8
9 **A.** My name is John C. Heisey. My business address is 702 N.
10 Franklin Street, Tampa, Florida 33602. I am employed by
11 Tampa Electric Company ("Tampa Electric" or "company") as
12 Director, Origination and Trading.

13
14 **Q.** Have you previously filed testimony in Docket No.
15 20220001-EI?

16
17 **A.** Yes, I submitted direct testimony on April 1, 2022 and
18 July 27, 2022.

19
20 **Q.** Has your job description, education, or professional
21 experience changed since your most recent testimony?

22
23 **A.** No, they have not.

24
25 **Q.** Please describe your duties and responsibilities in that

1 position.

2

3 **A.** I am responsible for directing all activities associated
4 with the procurement and delivery of energy commodities
5 for Tampa Electric's generation fleet. Such activities
6 include the trading, optimization, strategy, planning,
7 origination, compliance and regulatory oversight of
8 natural gas, power, coal, oil, byproducts, and associated
9 delivery. I am also responsible for all aspects of the
10 Optimization Mechanism.

11

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

13

14 **A.** The purpose of my testimony is to discuss Tampa Electric's
15 fuel mix, fuel price forecasts, potential impacts to fuel
16 prices, and the company's fuel procurement strategies.

17

18 **Fuel Mix and Procurement Strategies**

19 **Q.** What fuels do Tampa Electric's generating stations use?

20

21 **A.** Tampa Electric's generation portfolio includes natural
22 gas, solar, coal, and, as a backup fuel, oil powered
23 units. Big Bend Unit 3 operates on natural gas, and Big
24 Bend Unit 4 can operate on coal or natural gas. Big Bend
25 Modernization project's first phase, Big Bend combustion

1 turbine Units 5 and 6, operate on natural gas. The second
2 phase of the Big Bend Modernization project includes the
3 addition of the Heat Recovery Steam Generator ("HRSG") in
4 December 2022 and will result in the unit's operation in
5 combined cycle mode. Polk Unit 1 can operate on natural
6 gas or a blend of petroleum coke and coal. Currently, the
7 company is operating Polk Unit 1 on natural gas and Big
8 Bend Unit 4 on coal. Polk Unit 2 combined cycle uses
9 natural gas as a primary fuel and oil as a secondary fuel;
10 and Bayside Station combined cycle units and the company's
11 collection of peakers (*i.e.*, aero-derivative combustion
12 turbines) all utilize natural gas. Since it serves as a
13 backup fuel, oil consumption is primarily for testing,
14 and oil is a negligible percentage of system generation.
15 Based upon the 2022 actual-estimate projections, the
16 company expects 2022 total system generation, excluding
17 purchased power, to be 85 percent natural gas, 9 percent
18 solar, and 6 percent coal.

19
20 Likewise, in 2023, natural gas-fired and solar generation
21 are expected to be 84 percent and 11 percent of total
22 generation, respectively, with coal-fired generation
23 making up 5 percent of total generation.

24
25 **Q.** Please describe Tampa Electric's fuel supply procurement

1 strategy.

2
3 **A.** Tampa Electric emphasizes flexibility and options in its
4 fuel procurement strategy for all its fuel needs. The
5 company strives to maintain many creditworthy and viable
6 suppliers. Similarly, the company endeavors to maintain
7 multiple delivery path options. Tampa Electric also
8 attempts to diversify the locations from which its supply
9 is sourced. Having a greater number of fuel supply and
10 delivery options provides increased reliability and
11 flexibility to pursue lower cost options for Tampa
12 Electric customers.

13
14 **Natural Gas Supply Strategy**

15 **Q.** How does Tampa Electric's natural gas procurement and
16 transportation strategy achieve competitive natural gas
17 purchase prices for long- and short-term deliveries?

18
19 **A.** Tampa Electric uses a portfolio approach to natural gas
20 procurement. This approach consists of a blend of pre-
21 arranged base, intermediate, and swing natural gas supply
22 contracts complemented with shorter term spot and
23 seasonal purchases. The contracts have various time
24 lengths to help secure needed supply at competitive prices
25 while maintaining the flexibility to adapt to any changing

1 fuel needs. Tampa Electric purchases its physical natural
2 gas supply from creditworthy counterparties, enhancing
3 the liquidity and diversification of its natural gas
4 supply portfolio. Tampa Electric targets natural gas
5 supply that is reliable and resistant to the impacts of
6 extreme weather. The natural gas prices are based on
7 monthly and daily price indices, further increasing
8 pricing diversification.

9
10 Tampa Electric diversifies its pipeline transportation
11 assets, including receipt points. The company also
12 utilizes pipeline and storage services to enhance access
13 to natural gas supply during hurricanes, extreme weather
14 or other events that constrain supply. Such actions
15 improve the reliability and cost-effectiveness of the
16 physical delivery of natural gas to the company's power
17 plants. Furthermore, Tampa Electric strives daily to
18 obtain reliable supplies of natural gas at favorable
19 prices to mitigate costs for its customers.

20
21 **Q.** Please describe Tampa Electric's diversified natural gas
22 transportation agreements.

23
24 **A.** Tampa Electric currently receives natural gas directly
25 via the Florida Gas Transmission ("FGT") and Gulfstream

1 Natural Gas System, LLC ("Gulfstream") pipelines. Tampa
2 Electric also receives a portion of its gas via the
3 recently constructed Sabal Trail Transmission ("Sabal
4 Trail") gas pipeline (via Gulfstream backhaul). The
5 ability to deliver natural gas from three pipelines
6 increases the fuel delivery reliability for Bayside Power
7 Station, which is composed of two large natural gas
8 combined-cycle units and four aero-derivative combustion
9 turbines. Natural gas can also be delivered to Big Bend
10 Station from Gulfstream and Sabal Trail to support the
11 station's steam generating units, aero-derivative
12 combustion turbine, and upcoming Big Bend Modernization
13 project. Later this year, the second and final phase of
14 a new gas pipeline lateral will be completed that allows
15 natural gas to be delivered to the Big Bend Station from
16 FGT. This lateral increases the fuel delivery reliability
17 for Big Bend Station. Polk Station receives natural gas
18 from FGT to support natural gas consumption in Polk Units
19 1 and 2.

20
21 **Q.** Are there any significant changes to Tampa Electric's
22 expected natural gas usage?

23
24 **A.** Tampa Electric's natural gas usage is expected to slightly
25 decrease in 2023 when compared to 2022. Additional solar

1 generation, the retirement of Big Bend Unit 3, and the
2 combined cycle operation at the efficient Big Bend
3 Modernization project will result in a reduction in
4 natural gas usage in the period.

5
6 **Q.** What actions does Tampa Electric take to enhance the
7 reliability of its natural gas supply?

8
9 **A.** Tampa Electric maintains natural gas storage capacity
10 with Bay Gas Storage near Mobile, Alabama, and Southern
11 Pines Energy Center in Eastern Mississippi to provide
12 operational flexibility and reliability of natural gas
13 supply. The company reserves 2,000,000 MMBtu of long-term
14 storage capacity in these two locations. This storage was
15 used during Storm Uri in February 2021 to replace
16 interrupted supply and to mitigate costs for our
17 customers. Storage was also utilized this summer to help
18 mitigate the risk of southeast gas basis premiums.

19
20 In addition to storage, Tampa Electric maintains
21 diversified natural gas supply receipt points in FGT Zones
22 1, 2, and 3. Diverse receipt points reduce the company's
23 vulnerability to hurricane impacts and provide access to
24 potentially lower priced gas supply.

25

1 Tampa Electric also reserves capacity on the Southeast
2 Supply Header ("SESH"), Gulf South pipeline ("Gulf
3 South"), and Transco's Mobile Bay Lateral ("Transco").
4 SESH, Gulf South, and Transco connect the receipt points
5 of FGT, Gulfstream, and other Mobile Bay area pipelines
6 with natural gas supply in the mid-continent and
7 northeast. Mid-continent and northeast natural gas
8 production, specifically shale production, has grown and
9 continues to increase. Thus, SESH, Gulf South, and Transco
10 capacity give Tampa Electric access to secure,
11 competitively priced onshore gas supply for a portion of
12 its portfolio. Tampa Electric continuously evaluates its
13 gas transportation portfolio based on changing market
14 conditions to ensure access to reliable natural gas
15 supply. All receipt points in the portfolio are reviewed
16 annually to ensure access to reliable supply basins.

17
18 **Q.** Has Tampa Electric acquired additional natural gas
19 transportation for 2022 and 2023 due to greater use of
20 natural gas?

21
22 **A.** Yes. In 2022, Tampa Electric acquired short-term capacity
23 on FGT in January and February to increase the reliability
24 of the portfolio for its projected winter peak. In
25 addition, power purchases were executed for January and

1 February as a lower cost solution compared to acquiring
2 additional short-term pipeline capacity, as mentioned in
3 the testimony of Tampa Electric witness Benjamin F. Smith,
4 II. In the summer of 2022, Tampa Electric acquired
5 additional short-term pipeline capacity on FGT. This
6 capacity provides additional transportation for the
7 portfolio to support higher gas burns over the summer as
8 well as increasing the reliability of the portfolio for
9 its projected winter peak in 2023. At the end of 2022,
10 Tampa Electric will replace its Sabal Trail capacity with
11 Gulfstream capacity to supply the Big Bend Modernization
12 project and other portfolio gas requirements. For 2023,
13 Tampa Electric has acquired additional capacity on FGT.
14 This capacity provides additional transportation for the
15 portfolio as Tampa Electric continues to transition from
16 coal-fired generation to cleaner burning natural gas-
17 fired generation.

18
19 **Coal Supply Strategy**

20 **Q.** Please describe Tampa Electric's solid fuel usage and
21 procurement strategy.

22
23 **A.** As with its natural gas strategy, Tampa Electric uses a
24 portfolio approach to coal procurement. Big Bend Unit 4
25 is designed to burn high-sulfur Illinois Basin coal and

1 is fully scrubbed for sulfur dioxide and nitrogen oxides,
2 and the unit has been upgraded to operate on natural gas.
3 Polk Unit 1 can burn a blend of petroleum coke and low
4 sulfur coal, or natural gas. Each plant has varying
5 operational and environmental restrictions and requires
6 solid fuel with custom quality characteristics such as
7 ash content, fusion temperature, sulfur content, heat
8 content, and chlorine content.

9
10 Coal is not a homogenous product. The fuel's chemistry
11 and contents vary based on many factors, including
12 geography. The variability of the product dictates that
13 Tampa Electric select its fuel based on multiple
14 parameters. Those parameters include unique coal quality
15 characteristics, price, availability, deliverability, and
16 creditworthiness of the supplier.

17
18 To minimize costs, maintain operational flexibility, and
19 ensure reliable supply, Tampa Electric typically
20 maintains a portfolio of bilateral coal supply contracts
21 with varying term lengths. Tampa Electric monitors the
22 market to obtain the most favorable prices from sources
23 that meet the needs of the generation stations. The use
24 of daily and weekly publications, independent research
25 analyses from industry experts, discussions with

1 suppliers, and coal solicitations aid the company in
2 monitoring the coal market. This market intelligence also
3 helps shape the company's coal procurement strategy to
4 reflect short- and long-term market conditions. Tampa
5 Electric's strategy provides a stable supply of reliable
6 fuel sources. In addition, this strategy allows the
7 company the flexibility to take advantage of favorable
8 spot market opportunities and address operational needs.
9

10 **Q.** Please summarize how Tampa Electric will manage its solid
11 fuel supply contracts through 2023.
12

13 **A.** Due to an event at an Illinois Basin mine last year that
14 suspended mining operations for approximately six months,
15 Tampa Electric has been managing supply interruptions and
16 lower than projected solid fuel inventories for the last
17 year. As domestic and international demand for coal has
18 increased over the same period, we expect tight supply
19 conditions to continue for the balance of the year and
20 into 2023. Tampa Electric will supply the Big Bend and
21 Polk Stations with solid fuel through a combination of
22 existing inventory, short-term contracts, and, as
23 necessary, spot purchases in support of the most economic
24 commitment and dispatch for the generation fleet. Short-
25 term and spot purchases allow the company to adjust supply

1 to reflect changing coal quality and quantity needs,
2 operational changes, and pricing opportunities.
3

4 **Coal Transportation**

5 **Q.** Please describe Tampa Electric's solid fuel
6 transportation arrangements.
7

8 **A.** Tampa Electric can receive coal at its Big Bend Station
9 via waterborne or rail delivery. Once delivered to Big
10 Bend Station, solid fuel is consumed onsite, or blended
11 and trucked to Polk Station for consumption in Polk Unit
12 1. As a result of declining solid fuel burns over the
13 last few years, Tampa Electric now purchases delivered
14 coal, where waterborne coal supply and transportation are
15 arranged by the supplier. Procuring delivered waterborne
16 coal continues to provide customers with competitive coal
17 prices through a simplified process. Commodity and
18 transportation of coal by rail is still being arranged
19 separately, as necessary.

20 **Q.** Why does the company maintain multiple coal
21 transportation options in its portfolio?
22

23 **A.** Bimodal solid fuel transportation to Big Bend Station
24 affords the company and its customers various benefits.
25 Those benefits include 1) access to more potential coal

1 suppliers, which results in a more competitively priced,
2 and diverse, delivered coal portfolio; 2) the opportunity
3 to switch to either water or rail in the event of a
4 transportation breakdown or interruption on the other
5 mode; and 3) competition among transporters for future
6 solid fuel transportation contracts. The benefits of
7 bimodal solid fuel transportation were apparent in 2022
8 as coal deliveries by rail were not reliable due to labor
9 shortages in the rail industry.

10
11 **Q.** Will Tampa Electric continue to receive coal deliveries
12 via rail in 2022 and 2023?

13
14 **A.** Yes. Although we experienced supply and transport
15 challenges this year, Tampa Electric expects to receive
16 coal for use at Big Bend Station through the Big Bend
17 rail facility during 2022 and is evaluating how much coal
18 to receive by rail in 2023.

19
20 **Q.** Please describe Tampa Electric's expectations regarding
21 waterborne coal deliveries.

22
23 **A.** Tampa Electric expects to receive the majority of its
24 solid fuel supply in 2023 from waterborne deliveries to
25 its unloading facilities at Big Bend Station. These

1 deliveries come via the Mississippi River System or from
2 foreign sources. The ultimate supply source is dependent
3 upon quality, operational needs, and lowest overall
4 delivered cost.

5
6 **Q.** Do you have any other updates to provide regarding Tampa
7 Electric's solid fuel transportation portfolio?

8
9 **A.** Yes. Tampa Electric continues to burn natural gas as the
10 economic fuel in Polk Unit 1. Big Bend Unit 4 is projected
11 to burn coal in 2023. Although coal consumption has
12 decreased relative to previous years, the expected coal
13 burn in 2023 will be similar to 2022.

14
15 **Q.** Has Tampa Electric reasonably managed its fuel
16 procurement practices for the benefit of its retail
17 customers?

18
19 **A.** Yes. Tampa Electric diligently manages its mix of long-
20 term, intermediate, and short-term purchases of fuel in
21 a manner designed to reduce overall fuel costs while
22 maintaining electric service reliability. The company's
23 fuel activities and transactions are reviewed and audited
24 on a recurring basis by the Commission. In addition, the
25 company monitors its rights under contracts with fuel

1 suppliers to detect and prevent any breach of those
2 rights. Tampa Electric continually strives to improve its
3 knowledge of fuel markets and to take advantage of
4 opportunities to minimize the costs of fuel.

5
6 **Q.** Are there any other pertinent aspects of how Tampa
7 Electric manages its fuel supply portfolio?

8
9 **A.** Yes. As part of Tampa Electric's 2017 Amended and Restated
10 Stipulation and Settlement Agreement approved by
11 Commission Order No. PSC-2017-0456-S-EI, issued on
12 November 27, 2017 in Docket No. 20170210-EI, and extended
13 by the 2021 Stipulation and Settlement Agreement approved
14 by Order No. PSC-2021-0423-S-EI issued on November 10,
15 2021 in Docket No. 20210034-EI, Tampa Electric has been
16 operating under an Asset Optimization Mechanism since
17 January 1, 2018. This Optimization Mechanism encourages
18 Tampa Electric to market temporarily unused fuel supply
19 assets to capture cost mitigation benefits for customers.
20 These benefits have come through economic power
21 purchases, economic power sales, resale of unneeded fuel
22 supply, an asset management agreement for natural gas
23 storage, and utilization of natural gas and solid fuel
24 storage and transportation assets.

25

1 **Projected 2023 Fuel Prices**

2 **Q.** How does Tampa Electric project fuel prices?

3
4 **A.** Tampa Electric reviews fuel price forecasts from sources
5 widely used in the industry, including the New York
6 Mercantile Exchange ("NYMEX"), S&P Scenario Planning
7 Service Annual Guidebook (originally produced by PIRA
8 Energy Group), the Energy Information Administration, and
9 other energy market information sources. Future prices
10 for energy commodities as traded on NYMEX, averaged over
11 five consecutive business days ending August 1, 2022, form
12 the basis of the natural gas and No. 2 oil market
13 commodity price forecasts. The price projections for
14 these two commodities are then adjusted to incorporate
15 expected transportation costs and location differences.

16
17 Coal commodity and transportation prices are projected
18 using contracted pricing and information from industry
19 recognized consultants and published indices, such as IHS
20 Markit and Argus *Coal Daily*. Also, the price projections
21 are specific to the quality and mined location of coal
22 utilized by Tampa Electric's Big Bend Unit 4 and Polk
23 Unit 1. Final as-burned prices are derived using expected
24 commodity prices and associated transportation costs.

25

1 **Q.** How do the 2023 projected fuel prices compare to the fuel
2 prices projected for 2022 in the company's mid-course
3 correction filing?
4

5 **A.** Demand for natural gas in 2022 continued to outpace
6 supply. Forward prices remain elevated through March 2023
7 and then decline as production is expected to increase
8 into 2023 to balance the market. Higher gas demand is
9 driven by LNG exports, low coal inventories, extreme
10 summer weather, and low storage inventories. Production
11 growth has been very slow as producers exercise capital
12 discipline despite rising gas prices. In addition, the
13 Ukraine invasion continues to impact the energy markets
14 through increased volatility and uncertainty, which is
15 expected to continue into 2023.
16

17 The commodity price for natural gas during 2023 is
18 projected to be higher (\$5.74 per MMBtu) than the 2022
19 price (\$3.73 per MMBtu) projected in the company's mid-
20 course correction fuel filing. The 2023 delivered coal
21 price projection is higher (\$90.57 per ton) than the price
22 projected for 2022 (\$84.55 per ton) during preparation of
23 the 2022 mid-course correction fuel clause factors.
24

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

1 **A.** Yes.

2

3

4

5

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**BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION**

**DOCKET NO. 20220001-EI
FUEL & PURCHASED POWER COST RECOVERY
AND
CAPACITY COST RECOVERY**

**PROJECTIONS
JANUARY 2023 THROUGH DECEMBER 2023**

**TESTIMONY
OF
BENJAMIN F. SMITH II**

FILED: SEPTEMBER 2, 2022

1 **BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

2 **PREPARED DIRECT TESTIMONY**

3 **OF**

4 **BENJAMIN F. SMITH II**

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

8
9 **A.** My name is Benjamin F. Smith II. My business address is
10 702 North Franklin Street, Tampa, Florida 33602. I am
11 employed by Tampa Electric Company ("Tampa Electric" or
12 "company") as Manager, Gas and Power Origination within
13 the Fuel and Planning Services Department.

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

17
18 **A.** I received a Bachelor of Science degree in Electric
19 Engineering in 1991 from the University of South Florida
20 in Tampa, Florida, and a Master of Business Administration
21 degree in 2015 from Saint Leo University in Saint Leo,
22 Florida. I am also a registered Professional Engineer
23 within the State of Florida and a Certified Energy Manager
24 through the Association of Energy Engineers. I joined
25 Tampa Electric in 1990 as a cooperative education student.

1 During my years with the company, I have worked in the
2 areas of transmission engineering, distribution
3 engineering, resource planning, retail marketing, and
4 wholesale power marketing. I am currently the Manager,
5 Gas and Power Origination within the Origination and
6 Trading Department. My responsibilities are to evaluate
7 short and long-term power purchase and sale opportunities
8 within the wholesale power market, assist in wholesale
9 power and gas transportation origination and contract
10 structures, and assist in combustion byproduct contract
11 administration and market opportunities. In this
12 capacity, I interact with wholesale power market
13 participants such as utilities, municipalities, electric
14 cooperatives, power marketers, other wholesale developers
15 and independent power producers, as well as with natural
16 gas pipeline owners and transporters.

17
18 **Q.** Have you previously testified before the Florida Public
19 Service Commission ("Commission")?

20
21 **A.** Yes. I have submitted written testimony in the annual
22 fuel docket since 2003, and I have testified before this
23 Commission in Docket Nos. 20030001-EI, 20040001-EI, and
24 20080001-EI regarding the appropriateness and prudence of
25 Tampa Electric's wholesale purchases and sales.

1 Q. What is the purpose of your testimony in this proceeding?

2

3 A. The purpose of my testimony is to provide a description
4 of Tampa Electric's purchased power agreements that the
5 company has entered and for which it is seeking cost
6 recovery through the Fuel and Purchased Power Cost
7 Recovery Clause ("fuel clause") and the Capacity Cost
8 Recovery Clause. I also describe Tampa Electric's
9 purchased power strategy for mitigating price and supply-
10 side risk, while providing customers with a reliable
11 supply of economically priced purchased power.

12

13 Q. Please describe the efforts Tampa Electric makes to ensure
14 that its wholesale purchases and sales activities are
15 conducted in a reasonable and prudent manner.

16

17 A. Tampa Electric evaluates potential purchase and sale
18 opportunities by analyzing the expected available amounts
19 of generation and power required to meet the projected
20 demand and energy of its customers. Purchases are made to
21 achieve reserve margin requirements, meet customers'
22 demand and energy needs, meet operating reserve
23 requirements, supplement generation during unit outages,
24 and for economical purposes. When Tampa Electric
25 considers making a power purchase, the company diligently

1 searches for available supplies of wholesale capacity or
2 energy from creditworthy counterparties. The objective is
3 to secure reliable quantities of purchased power for
4 customers at the best possible price.

5
6 Conversely, when there is a sales opportunity, the company
7 offers profitable wholesale capacity or energy products
8 to creditworthy counterparties. The company has wholesale
9 power purchase and sale transaction enabling agreements
10 with numerous counterparties. This process helps to
11 ensure that the company's wholesale purchase and sale
12 activities are conducted in a reasonable and prudent
13 manner.

14
15 **Q.** Has Tampa Electric reasonably managed its wholesale power
16 purchases and sales for the benefit of its retail
17 customers?

18
19 **A.** Yes, it has. Tampa Electric has fully complied with, and
20 continues to fully comply with, the Commission's Order
21 No. PSC-1997-0262-FOF-EI, approved on March 11, 1997 and
22 issued in Docket No. 19970001-EI, which governs the
23 treatment of separated and non-separated wholesale sales.
24 The company's wholesale purchase and sale activities and
25 transactions are also reviewed and audited on a recurring

1 basis by the Commission.

2

3 In addition, Tampa Electric actively manages its
4 wholesale purchases and sales with the goal of
5 capitalizing on opportunities to reduce customer costs
6 and improve reliability. The company monitors its
7 contractual rights with purchased power suppliers, as
8 well as with entities to which wholesale power is sold,
9 to detect and prevent any breach of the company's
10 contractual rights. Tampa Electric continually strives to
11 improve its knowledge of wholesale power markets and
12 available opportunities within the marketplace. The
13 company uses this knowledge to minimize the costs of
14 purchased power and to maximize the savings the company
15 provides retail customers by making wholesale sales when
16 excess power is available on Tampa Electric's system and
17 market conditions allow.

18

19 **Q.** Please describe Tampa Electric's 2022 wholesale power
20 purchases.

21

22 **A.** Tampa Electric assessed the wholesale power market and
23 entered into short- and long-term purchases based on price
24 and availability of supply. Approximately 7 percent of
25 the company's expected needs for 2022 will be met using

1 purchased power. This includes economy energy purchases,
2 reliability purchases, as-available purchases from
3 qualifying facilities, and forward purchases from Duke
4 Energy Florida ("DEF"), the Florida Municipal Power
5 Agency ("FMPA"), and Florida Power & Light ("FPL").

6
7 Presently, Tampa Electric has four forward purchases
8 applicable to the year 2022, and those purchases are
9 summarized below.

- 10 • A non-firm purchase from DEF, which was an extension
11 of Tampa Electric's previous contract to purchase non-
12 firm energy from DEF. In November 2021, Tampa Electric
13 and DEF extended this contract to cover the period
14 December 2021 through October 2022. The energy volume
15 available under the contract remains at a maximum of
16 515 MW per hour. The DEF extension does not have a
17 must-take obligation and provides Tampa Electric the
18 flexibility to schedule the energy when beneficial to
19 customers. As an added component to this latest
20 extension, 250 MW of the contract was available as a
21 firm call option for the months of January and February
22 2022. The firm portion of the purchase was for
23 reliability to ensure energy service to customers in
24 the event Tampa Electric experienced cold weather. The
25 purchase supported the company's plan to lower exposure

1 to natural gas risk during its winter peak. The
2 company's plan to minimize its natural gas risk is
3 addressed in the testimony of witness John Heisey.
4 Since the contract extension, the purchase has provided
5 \$6.7 million in projected savings to customers, which
6 flow through the optimization mechanism. These savings
7 to customers include only the utilization of the
8 purchase as non-firm, economy (i.e., excludes the 250
9 MW firm call option portion). These savings flow
10 through the company's optimization mechanism and
11 benefit customers in accordance with the methodology
12 approved by the Commission in Order No. 2017-0456-S-
13 EI, issued on November 27, 2017 and extended through
14 December 31, 2024 as approved by the Commission in
15 Order No. PSC-2021-0423-S-EI issued on November 10,
16 2021, in Docket No. 20210034-EI.

- 17 • A 50 MW firm peaking call option from FMPA executed
18 November 2021 for the period January through February
19 2022. The firm purchase from FMPA was for reliability
20 to ensure energy service to customers in the event
21 Tampa Electric experienced unusually cold weather.

22
23 The company's remaining two forward purchases are from
24 FPL, executed in February 2022. A description of the
25 purchases follows.

- 1 • The two FPL purchases are non-firm, economy, must-take
2 energy purchases. Each purchase is for 150 MW. One
3 covers the period May through October 2022. The other
4 covers the period May through September 2022. The
5 purchases provide a projected \$4.6 million in savings
6 to customers, which flow through the optimization
7 mechanism.

8
9 At the time of the 2022 Projection filing, Tampa Electric
10 did not expect forward purchases for 2022. However, the
11 company did expect to incur capacity costs to be recovered
12 through its 2022 Capacity Cost Recovery Clause in the
13 form of projected firm transmission services. The
14 projected capacity clause costs for firm transmission
15 totaled \$5.9 million and would be in support of firm
16 purchases for the Big Bend Modernization project
17 ("Modernization Project") testing, if needed, as well as
18 economic forward purchases. Although the company did not
19 make firm purchases in support of testing at Big Bend, it
20 did make the previously mentioned must-take economy
21 purchases from FPL, which required the purchase of firm
22 transmission. Currently, the projected 2022 transmission
23 costs to be recovered through the 2022 Capacity Cost
24 Recovery Clause is about \$5.1 million.

1 Tampa Electric has not secured other forward purchases
2 for 2022 at this time. However, the company constantly
3 searches for economic purchase opportunities that benefit
4 customers. As other purchase opportunities materialize,
5 the company evaluates each product to determine the
6 viability of making it part of the supply portfolio Tampa
7 Electric uses to serve customers.

8
9 **Q.** Does Tampa Electric anticipate entering into new
10 wholesale power purchases for 2023 and beyond?

11
12 **A.** Tampa Electric currently has no forward purchases for 2023
13 and, at this time, projects approximately 1 percent of
14 the company's expected needs for 2023 will be met using
15 purchased power. However, the company will search for
16 forward economy purchase opportunities, which could
17 result in capacity costs from the purchase of firm
18 transmission services. Thus, the company has included a
19 forecast of these transmission costs in its 2023 Capacity
20 Cost Recovery Clause projection. The projected capacity
21 clause costs total \$1.7 million and support economic
22 forward purchases. A further explanation of these
23 transmission costs is below.

24
25 Over the past several years, as noted previously with the

1 economic purchases from FPL in 2022, Tampa Electric has
2 identified forward, season-long economy energy purchases
3 that produced savings for customers, and it will seek out
4 such beneficial purchases again in 2023. However, with
5 the operation of the highly efficient Modernization
6 Project, the company anticipates a lower volume of forward
7 economy purchases than in previous years. Hence, the
8 projected transmission costs for 2023 are lower than the
9 projection for 2022. The company's projected transmission
10 costs are based on its expected system energy costs with
11 the Modernization Project in service and market
12 expectations. While Tampa Electric has yet to identify
13 and secure economic purchase opportunities for 2023, the
14 company included in its projection the dollars associated
15 with these transmission costs. The terms of the company's
16 recent forward economy purchases were generally in the
17 April through November timeframe and for about 300 MW. In
18 2023, the company's transmission cost projection is for
19 100 MW over the May through October timeframe.

20
21 **Q.** How does Tampa Electric mitigate the risk of disruptions
22 to its purchased power supplies during major weather-
23 related events, such as hurricanes?

24
25 **A.** During hurricane season, Tampa Electric continues to

1 utilize a purchased power risk management strategy to
2 minimize potential power supply disruptions. The strategy
3 includes monitoring storm activity; evaluating the impact
4 of storms on existing forward purchases and the rest of
5 the wholesale power market; communicating with suppliers
6 about their storm preparations and potential impacts to
7 existing transactions, purchasing additional power on the
8 forward market, if appropriate, for reliability and
9 economics; evaluating transmission availability and the
10 geographic location of electric resources; reviewing
11 sellers' fuel sources and dual-fuel capabilities; and
12 focusing on fuel-diversified purchases. Absent the threat
13 of a hurricane, and for all other months of the year, the
14 company evaluates economic combinations of short- and
15 long-term purchase opportunities in the marketplace.

16
17 **Q.** Please describe Tampa Electric's wholesale energy sales
18 for 2022 and 2023.

19
20 **A.** Tampa Electric entered into various non-separated (e.g.,
21 next-hour and next-day sales) wholesale sales in 2022,
22 and the company anticipates making additional non-
23 separated sales during the balance of 2022 and 2023. The
24 gains from these sales are shared between Tampa Electric
25 and its customers through the company's optimization

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mechanism.

Q. Please summarize your direct testimony.

A. Tampa Electric monitors and assesses the wholesale power market to identify and take advantage of opportunities in the marketplace, and these efforts benefit the company's customers. Tampa Electric's energy supply strategy includes self-generation and short- and long-term power purchases. The company purchases in both physical forward and spot wholesale power markets to provide customers with a reliable supply at the lowest possible cost. In addition to the cost benefits, this purchased power approach employs a diversified physical power supply strategy that enhances reliability. The company also enters wholesale sales that benefit customers when market conditions allow.

Q. Does this conclude your direct testimony?

A. Yes.



BEFORE THE
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20220001-EI
FUEL & PURCHASED POWER COST RECOVERY
AND
CAPACITY COST RECOVERY

PROJECTIONS
JANUARY 2023 THROUGH DECEMBER 2023

TESTIMONY
OF
PENELOPE A. RUSK

FILED: SEPTEMBER 2, 2022

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
7 employer.

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

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

17
18 **A.** I hold bachelor's and master's degrees in Economics, and
19 I have over 20 years of electric utility experience.
20 Currently, I oversee and am responsible for Tampa
21 Electric's Regulatory Affairs department activities,
22 including the areas of cost recovery clauses, base rate
23 cases, rate design, cost of service, demand and energy
24 forecasting, and other analyses. I have regulatory
25 experience in a variety of areas, and I have appeared

1 before this Commission to answer questions in a number of
2 dockets. I also oversee the coordination and submission
3 of the Tampa Electric and Peoples Gas filings with federal
4 and state regulatory agencies. I am a member of the
5 Southeastern Electric Exchange Rates and Regulation
6 Committee.

7
8 **Q.** What is the purpose of your testimony?

9
10 **A.** The purpose of my testimony is to discuss Tampa Electric's
11 2022 fuel and purchased power cost under-recovery and the
12 company's proposed treatment of that amount.

13
14 **Q.** What is Tampa Electric's projection of the 2022 fuel cost
15 under-recovery?

16
17 **A.** In Tampa Electric's actual/estimated true-up filing
18 submitted to the Commission on July 27, 2022, Tampa
19 Electric estimated its 2022 fuel cost under-recovery to
20 be \$411,964,625.

21
22 **Q.** Has Tampa Electric since revised its expectations
23 regarding the projected 2022 under-recovery?

24
25 **A.** Yes. Based on current natural gas pricing, the company

1 now expects the 2022 fuel under-recovery to be
2 significantly higher than shown in the July 27, 2022
3 filing. The primary driver of the projected under-
4 recovery is rising natural gas prices. During 2022, the
5 natural gas market has been and continues to be extremely
6 volatile.

7
8 **Q.** Did Tampa Electric include the projected under-recovery
9 in its proposed 2023 fuel cost recovery factors?

10
11 **A.** No. Due to the extreme volatility of the natural gas
12 market, Tampa Electric has not included the 2022 projected
13 under-recovery in its 2023 fuel and purchased power cost
14 recovery factors at this time.

15
16 **Q.** How does Tampa Electric intend to recover the costs
17 associated with its 2022 under-recovery?

18
19 **A.** Tampa Electric proposes to continue to monitor natural
20 gas prices until the amount of the fuel cost under-
21 recovery is more certain and will make a request to
22 recover the 2022 under-recovery.

23
24 **Q.** Does this conclude your direct testimony?

25

1 **A.** Yes.

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