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AUSLEY & MCMULLEN

ATTORNEYS AND COUNSELORS AT LAW

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September 3, 2021

VIA: ELECTRONIC FILING

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

Re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor; FPSC Docket No. 20210001-EI

Dear Mr. Teitzman:

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

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

Thank you for your assistance in connection with this matter.

Sincerely,

In n. Means

Malcolm N. Means

Attachments

cc: All Parties of Record (w/attachment)

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing Petition, Testimonies and Exhibits, filed on behalf of Tampa Electric Company, has been furnished by electronic mail on this 3rd day of September 2021, to the following:

Ms. Suzanne Brownless Stefanie-Jo Osborne Office of the General Counsel Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850 <u>sbrownle@psc.state.fl.us</u> <u>sosborn@psc.state.fl.us</u>

Richard Gentry Charles Rehwinkel Patricia A. Christensen Stephanie Morse Anastacia Pirrello Mary Wessling Office of Public Counsel 111 West Madison Street, Room 812 Tallahassee, FL 32399-1400 gentry.richard@leg.state.fl.us rehwinkel.charles@leg.state.fl.us christensen.patty@leg.state.fl.us morse.stephanie@leg.state.fl.us pirrello.anastacia@leg.state.fl.us wessling.mary@leg.state.fl.us

Ms. Dianne M. Triplett Duke Energy Florida 299 First Avenue North St. Petersburg, FL 33701 <u>Dianne.triplett@duke-energy.com</u> FLRegulatoryLegal@duke-energy.com

Mr. Matthew R. Bernier Mr. Robert Pickles Senior Counsel Duke Energy Florida 106 East College Avenue, Suite 800 Tallahassee, FL 32301-7740 Matthew.bernier@duke-energy.com Ms. Beth Keating Gunster, Yoakley & Stewart, P.A. 215 S. Monroe St., Suite 601 Tallahassee, FL 32301 <u>bkeating@gunster.com</u>

Maria Moncada David M. Lee Florida Power & Light Company 700 Universe Boulevard Juno Beach, FL 33408-0420 <u>maria.moncada@fpl.com</u> <u>david.lee@fpl.com</u>

Mr. Kenneth Hoffman Vice President, Regulatory Relations Florida Power & Light Company 215 South Monroe Street, Suite 810 Tallahassee, FL 32301-1859 <u>ken.hoffman@fpl.com</u>

Mr. Mike Cassel Regulatory and Governmental Affairs Florida Public Utilities Company Florida Division of Chesapeake Utilities Corp. 1750 SW 14th Street, Suite 200 Fernandina Beach, FL 32034 mcassel@fpuc.com

Mr. Russell A. Badders Vice President & Associate General Counsel Gulf Power Company One Energy Place Pensacola FL 32520 russell.badders@nexteranergy.com Mr. Jon C Moyle, Jr. Moyle Law Firm 118 North Gadsden Street Tallahassee, FL 32301 jmoyle@moylelaw.com

Mr. Peter J. Mattheis Mr. Michael K. Lavanga Stone Law Firm 1025 Thomas Jefferson St., NW Suite 800 West Washington, DC 20007-5201 pjm@smxblaw.com mkl@smxblaw.com Mr. James W. Brew Ms. Laura W. Baker Stone Mattheis Xenopoulos & Brew, PC 1025 Thomas Jefferson Street, NW Eighth Floor, West Tower Washington, D.C. 20007-5201 jbrew@smxblaw.com lwb@smxblaw.com

Im n. Means

ATTORNEY

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

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In re: Fuel and Purchased Power Cost Recovery Clause with Generating Performance Incentive Factor.

DOCKET NO. 20210001-EI FILED: September 3, 2021

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, and generating performance incentive factors set forth herein, and in support thereof, says:

Fuel and Purchased Power Factors

1. Tampa Electric projects its fuel and purchased power net true-up amount for the period January 1, 2021 through December 31, 2021 will be an under-recovery of \$ 325,418 (See Exhibit No. MAS-3, Document No. 2, Schedule E1-C).

2. The company's projected expenditures for the period January 1, 2022 through December 31, 2022, when adjusted for the proposed GPIF reward and true-up under-recovery amount and spread over projected kilowatt-hour sales for the period January 1, 2022 through December 31, 2022, produce a fuel and purchased power factor for the new period of 3.057 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

4. Tampa Electric estimates that its net true-up amount applicable for the period January 1, 2021 through December 31, 2021 will be an under-recovery of \$25,180, as shown in Exhibit No. MAS-3, Document No. 1, page 2 of 4.

5. The company's projected expenditures for the period January 1, 2022 through December 31, 2022, 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 0.0026 cents per kWh. For demand-measured customers, the factor Tampa Electric proposes to recover is \$0.09 per billed kW as set forth in Exhibit No. MAS-3, Document No. 1, page 3 of 4.

GPIF

6. Tampa Electric has calculated that it is subject to a GPIF reward of \$3,673,726 for performance during the period January 1, 2020 through December 31, 2020, included in Exhibit No. MAS-3, Document No. 2, Schedule E1-C.

7. The company is also proposing GPIF targets and ranges for the period January 1, 2022 through December 31, 2022 with such proposed targets and ranges being detailed in the testimony and exhibits of Tampa Electric witness Patrick A. Bokor filed herewith.

Optimization Mechanism

8. Tampa Electric has calculated that it is subject to an Optimization Mechanism sharing amount of \$1,285,228, 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 and GPIF be approved as they relate to prior period true-up calculations and projected cost recovery charges.

DATED this 3rd day of September 2021.

Respectfully submitted,

Means D_ N.

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

ATTORNEYS FOR TAMPA ELECTRIC COMPANY

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true copy of the foregoing Petition, filed on behalf of Tampa

Electric Company, has been furnished by electronic mail on this 3rd day of September 2021.

Ms. Suzanne Brownless Stefanie-Jo Osborne Office of the General Counsel Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850 <u>sbrownle@psc.state.fl.us</u> <u>sosborn@psc.state.fl.us</u>

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In n. Means ATTORNEY



BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20210001-EI

FUEL & PURCHASED POWER COST RECOVERY

AND

CAPACITY COST RECOVERY

PROJECTIONS

JANUARY 2022 THROUGH DECEMBER 2022

TESTIMONY AND EXHIBIT

OF

M. ASHLEY SIZEMORE

FILED: SEPTEMBER 3, 2021

TAMPA ELECTRIC COMPANY DOCKET NO. 20210001-EI FILED: 09/03/2021

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. 20210001-EI?
17		
18	A.	Yes, I submitted direct testimony on April 2, 2021 and
19		July 27,2021. I submitted revisions to my April 2, 2021
20		testimony on July 23, 2021.
21		
22	Q.	Has your job description, education, or professional
23		experience changed since you last filed testimony in this
24		docket?
25		
	1	

1	A.	No, they have not.
2		
3	Q.	What is the purpose of your testimony?
4		
5	A.	The purpose of my testimony is to present, for Commission
6		review and approval, the proposed annual capacity cost
7		recovery factors, and the proposed annual levelized fuel
8		and purchased power cost recovery factors for January 2022
9		through December 2022. I also describe significant events
10		that affect the factors and provide an overview of the
11		composite effect on the residential bill of changes in
12		the various cost recovery factors for 2022.
13		
14	Q.	Have you prepared an exhibit to support your direct
15		testimony?
16		
17	A.	Yes. Exhibit No. MAS-3, consisting of three documents,
18		was prepared under my direction and supervision. Document
19		No. 1, consisting of four pages, is furnished as support
20		for the projected capacity cost recovery factors.
21		Document No. 2, which is furnished as support for the
22		proposed levelized fuel and purchased power cost recovery
23		factors, includes Schedules E1 through E10 for January
24		2022 through December 2022 as well as Schedule H1 for
25		2019 through 2022. Document No. 3 provides a comparison

of retail residential fuel revenues under the inverted or 1 tiered fuel rate, which demonstrates that the tiered rate 2 3 is revenue neutral. 4 5 Q. Are you requesting Commission approval of the projected fuel and capacity cost recovery factors for the company's 6 various rate schedules? 7 8 Yes, with one caveat. On August 6, 2021, Tampa Electric Α. 9 filed a 2021 Stipulation and Settlement Agreement ("2021 10 Agreement") in Docket No. 20210034-EI, Petition for rate 11 increase by Tampa Electric Company, which is currently 12 scheduled for hearing on October 21, 2021. Among other 13 14 things, the 2021 Agreement includes proposed changes to the company's existing rate design across rate classes. 15 16 The company plans to file revised fuel and capacity clause schedules that reflect the 2021 Agreement in the coming 17 weeks and request approval of those factors for the period 18 January through December 2022. However, if the settlement 19 20 agreement is not approved by the Commission, then the company requests approval of the factors provided in 21 Exhibit No. MAS-3, Document Nos. 1 and 2, for the period 22 23 January 2022 until the issues in Docket No. 20210034-EI resolved. These factors were prepared under my 24 are direction and supervision. 25

1	Q.	How were the fuel and capacity cost recovery clause
2		factors calculated?
3		
4	A.	The fuel and capacity cost recovery factors were
5		calculated as shown on Document Nos. 1 and 2. These
6		factors were calculated based on the current approved rate
7		design and schedules as set out in the 2017 Amended and
8		Restated Settlement Agreement approved by the Commission
9		in Docket No. 20170271-EI, which amended and extended the
10		2013 Stipulation that resolved the company's last base
11		rate case (Docket No. 20130040-EI).
12		
13	Capa	city Cost Recovery
14	Q.	Are you requesting Commission approval of the projected
15		capacity cost recovery factors for the company's various
16		rate schedules?
17		
18	A.	Yes. As previously stated, if the company's 2021 Agreement
19		is not approved, then Tampa Electric seeks approval of
20		the proposed capacity cost recovery factors, prepared
21		under my direction and supervision, that are provided in
22		Exhibit No. MAS-3, Document No. 1, page 3 of 4.
23		
24	Q.	What payments are included in Tampa Electric's capacity

	l												
1	A.	Tampa Electric is	requesting recov	very of capacity									
2		payments for power	purchased for	retail customers,									
3		excluding optional p	rovision purchases	for interruptible									
4		customers, through t	he capacity cost re	ecovery factors. As									
5		shown in Exhibit No. MAS-3, Document No. 1, page 2 of 4,											
6		Tampa Electric requests recovery of \$25,180 after											
7		jurisdictional sepa	ration, prior ye	ear true-up, and									
8		application of the	revenue tax fact	tor for estimated									
9		expenses in 2022.											
10													
11	Q.	Please summarize th	ne proposed capac:	ity cost recovery									
12		factors by metering	voltage level effe	ctive beginning in									
13		January 2022, if the	ne company's 2021	Agreement is not									
14		approved, for which	Tampa Electric is	seeking approval.									
15													
16	A.	Rate Class and	Capacity Cost	Recovery Factor									
17		Metering Voltage	<u>Cents per kWh</u>	\$ per k₩									
18		RS Secondary	0.031										
19		GS and CS Secondary	0.027										
20		GSD, SBF Standard											
21		Secondary		0.09									
22		Primary		0.09									
23		Transmission		0.09									
24		IS, IST, SBI											
25		Primary		0.07									

1		Transmission	0.07									
2		GSD Optional										
3		Secondary	0.021									
4		Primary	0.021									
5		Transmission	0.021									
6		LS1 Secondary	0.004									
7												
8		These factors are shown	n in Exhibit No. MAS-3, Document									
9		No. 1, page 3 of 4.										
10												
11	Q.	How does Tampa Electric	's proposed average capacity cost									
12		recovery factor of 0.0	26 cents per kWh compare to the									
13		factor for September 202	factor for September 2021 through December 2021?									
14												
15	A.	The proposed capacity co	ost recovery factor of 0.026 cents									
16		per kWh beginning in Ja	nuary 2022 is 0.118 cents per kWh									
17		(or \$1.18 per 1,000 kWh	n) less than the average capacity									
18		cost recovery factor cr	redit of 0.144 cents per kWh for									
19		the September 2021 through	ugh December 2021 period.									
20												
21	Fuel	and Purchased Power Cos	t Recovery Factor									
22	Q.	What is the appropriate	amount of the levelized fuel and									
23		purchased power cost	recovery factor for the period									
24		beginning in January 202	22?									
25												

	i	
1	A.	As I previously stated, approval of the company's pending
2		2021 Agreement would require modifications to the rate
3		schedules for these factors. If the Commission does not
4		approve the company's settlement agreement, then the
5		appropriate amount for the period beginning in January
6		2022 is 3.057 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 2022 through December
12		2022.
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 \$3,673,726, which is included in the
21		calculation of the total fuel and purchased power cost
22		recovery factors. In addition, Schedule E1-C indicates
23		the net true-up amount to be applied during the January
24		2022 through December 2022 period. The net true-up amount
25		is an under-recovery of \$325,418. Lastly, Schedule E1-C
	l	

1		indicates the Optimization Mechanism gain of \$1,285,228.
2		
3	Q.	Please describe the information provided on Schedule
4		E1-D.
5		
6	A.	Schedule E1-D presents Tampa Electric's on-peak and off-
7		peak fuel adjustment factors for January 2022 through
8		December 2022. The schedule also presents Tampa
9		Electric's levelized fuel cost factors at each metering
10		level.
11		
12	Q.	Please describe the information presented on Schedule
13		E1-E.
14		
15	A.	Schedule E1-E presents the standard, tiered, on-peak, and
16		off-peak fuel adjustment factors at each metering voltage
17		to be applied to customer bills.
18		
19	Q.	Please describe the information provided in Document
20		No. 3.
21		
22	A.	Exhibit No. MAS-3, Document No. 3 demonstrates that the
23		tiered rate structure is designed to be revenue neutral
24		so that the company will recover the same fuel costs as
25		it would under the levelized fuel approach.

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Please summarize the proposed fuel and purchased power Q. 1 cost recovery factors by metering voltage level for the 2 period beginning in January 2022. 3 4 5 Α. Metering Voltage Level Fuel Charge Factor (Cents per kWh) 6 Secondary 3.057 7 Tier I (Up to 1,000 kWh) 2.745 8 Tier II (Over 1,000 kWh) 3.745 9 Distribution Primary 3.026 10 Transmission 2.996 11 Lighting Service 3.008 12 Distribution Secondary 3.318 (on-peak) 13 14 2.944 (off-peak) Distribution Primary 3.285 (on-peak) 15 16 2.915 (off-peak) Transmission 3.252 (on-peak) 17 2.885(off-peak) 18 19 Tampa Electric's proposed levelized 20 Q. How does fuel adjustment factor of 3.057 cents per kWh compare to the 21 levelized fuel adjustment factor for the September 2021 22 through December 2021 period? 23 24 The proposed fuel charge factor of 3.057 cents per kWh is 25 Α.

1		1.198 cents per kWh (or \$11.98 per 1,000 kWh) lower than
2		the average fuel charge factor of 4.255 cents per kWh for
3		the September 2021 through December 2021 period.
4		
5	Whol	esale Incentive Benchmark and Optimization Mechanism
6	ο.	Will Tampa Electric project a 2022 wholesale incentive
	~	
7		benchmark that is derived in accordance with Order No.
8		PSC-2001-2371-FOF-EI issued in Docket No. 20010283-EI?
9		
10	A.	No. Effective January 1, 2018, as authorized by FPSC Order
11		No. PSC-2017-0456-S-EI, issued in Docket No. 20160160-EI
12		on November 27, 2017, the company's Optimization
13		Mechanism replaced the short-term wholesale sales
14		incentive mechanism, and as a result no wholesale
15		incentive benchmark is required for the 2022 projection.
16		However, if the settlement agreement is not approved by
17		the Commission, then Tampa Electric's projected 2022
18		benchmark for non-separated wholesale sales would be
19		\$767,628. The \$767,628 is the three-year average of
20		\$1,498,686, \$422,867 and \$381,332 in gains for 2019, 2020
21		and 2021 (actual/estimated).
22		
23	Cost	Recovery Factors
24	Q.	What is the composite effect of Tampa Electric's proposed

changes in its base, capacity, fuel and purchased power,

environmental, and energy conservation cost recovery 1 factors on a 1,000 kWh residential customer's bill if the 2 company's 2021 Agreement is not approved? 3 4 5 Α. The composite effect on a residential bill for 1,000 kWh is a decrease of \$12.47 in the period beginning January 6 2022, when compared to the September 2021 through December 7 2021 charges. These amounts are shown in Exhibit No. 8 MAS-3, Document No. 2, on Schedule E10. 9 10 When should the new rates take effect? 11 Q. 12 The new rates should take effect concurrent with meter Α. 13 14 readings for the first billing cycle for January 2022. 15 16 Q. Does this conclude your direct testimony? 17 Yes. 18 Α. 19 20 21 22 23 24 25

DOCKET NO. 20210001-EI CCR 2022 PROJECTION FILING EXHIBIT NO. MAS-3 DOCUMENT NO. 1

EXHIBIT TO THE TESTIMONY OF

M. ASHLEY SIZEMORE

DOCUMENT NO. 1

PROJECTED CAPACITY COST RECOVERY

JANUARY 2022 - DECEMBER 2022

AND

SCHEDULE E12

TAMPA ELECTRIC COMPANY CAPACITY COST RECOVERY CLAUSE CALCULATION OF ENERGY & DEMAND ALLOCATION BY RATE CLASS JANUARY 2022 THROUGH DECEMBER 2022 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	52.98%	9,728,165	2.096	1.07447	1.05324	10.246.140	2.252	49.26%	59,49%	58,70%
GS. CS	62.08%	953.392	175	1.07447	1.05323	1.004.139	188	4.83%	4.97%	4.96%
GSD Optional	4.10%	417,435	60	1.06971	1.04880	437,805	64	2.11%	1.69%	1.72%
GSD, SBF	75.51%	7,681,911	1,101	1.06971	1.04880	8,056,777	1,178	38.74%	31.11%	31.70%
IS,SBI	105.90%	920,157	99	1.03064	1.01680	935,613	102	4.50%	2.69%	2.83%
LS1	802.58%	110,703	2	1.07447	1.05324	116,598	2	0.56%	0.05%	0.09%
TOTAL		19,811,763	3,533			20,797,072	3,786	100.00%	100.00%	100.00%

(1) AVG 12 CP load factor based on 2021 projected calendar data.

(2) Projected MWH sales for the period January 2022 thru December 2022.

(3) Based on 12 months average CP at meter.

(4) Based on 2021 projected demand losses.

(5) Based on 2021 projected energy losses.

(6) Col (2) * Col (5).

(7) Col (3) * Col (4).

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(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 2022 THROUGH DECEMBER 2022 PROJECTED

		lanuary	February	Maroh	April	Mov	luno	lubz	August	Sontombor	Octobor	November	December	Total
_		January	rebiualy	March	Арпі	way	Julie	July	Augusi	September	October	November	December	TOLAI
1	UNIT POWER CAPACITY CHARGES	0	0	0	706,062	706,062	706,062	776,668	776,668	776,668	776,668	706,062	0	5,930,921
2	CAPACITY PAYMENTS TO COGENERATORS	0	0	0	0	0	0	0	0	0	0	0	0	0
3	(UNIT POWER CAPACITY REVENUES)	(62,176)	(62,176)	(62,176)	(62,176)	(62,176)	(62,176)	(62,176)	(62,176)	(62,176)	(62,176)	(62,176)	(62,178)	(746,114)
4	TOTAL CAPACITY DOLLARS	(\$62,176)	(\$62,176)	(\$62,176)	\$643,886	\$643,886	\$643,886	\$714,492	\$714,492	\$714,492	\$714,492	\$643,886	(\$62,178)	\$5,184,807
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	(\$62,176)	(\$62,176)	(\$62,176)	\$643,886	\$643,886	\$643,886	\$714,492	\$714,492	\$714,492	\$714,492	\$643,886	(\$62,178)	\$5,184,806
7	ACTUAL/ESTIMATED TRUE-UP FOR THE PERIOD JAN. 2021 - DEC. 2021													25,180
8	SOBRA 3 TRUE-UP												_	(85,648)
9	TOTAL													\$5,124,338
10	REVENUE TAX FACTOR													1.00072
11	TOTAL RECOVERABLE CAPACITY DOLLARS												=	\$5,128,028

TAMPA ELECTRIC COMPANY CAPACITY COST RECOVERY CLAUSE CALCULATION OF ENERGY & DEMAND ALLOCATION BY RATE CLASS JANUARY 2022 THROUGH DECEMBER 2022 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	49.26%	59.49%	194,254	2,816,068	3,010,322	9,728,165	9,728,165				0.00031
GS, CS	4.83%	4.97%	19,047	235,264	254,311	953,392	953,392				0.00027
GSD, SBF Secondary Primary Transmission						6,307,319 1,369,359 5,233	6,307,319 1,355,666 5,128			0.09 0.09 0.09	
GSD, SBF - Standard	38.74%	31.11%	152,769	1,472,649	1,625,418	7,681,911	7,668,113	58.83%	17,854,692		
GSD - Optional Secondary Primary Transmission	2.11%	1.69%	8,321	79,999	88,320	406,871 10,564 0	406,871 10,459 0				0.00021 0.00021 0.00021
IS, SBI Primary Transmission						189,417 730,740	187,523 716,125			0.07 0.07	
Total IS, SBI	4.50%	2.69%	17,746	127,336	145,082	920,157	903,648	63.63%	1,945,276		
LS1	0.56%	0.05%	2,208	2,367	4,575	110,703	110,703				0.00004
TOTAL	100.00%	100.00%	394,345	4,733,683	5,128,028	19,811,763	19,781,351				0.00026

(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 2022 through December 2022.
(7) Projected kWh sales at secondary for the period January 2022 through December 2022.

(8) Col 7 / (Col 9 * 730)*1000

(9) Projected kw demand for the period January 2022 through December 2022.
(10) Total Col (5) / Total Col (9).

(11) {Col (5) / Total Col (7)} / 1000.

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SCHEDULE E12

TAMPA ELECTRIC COMPANY

CAPACITY COSTS

ESTIMATED FOR THE PERIOD: JANUARY 2022 THROUGH DECEMBER 2022

		TER	М	CONTRACT									
CONTRACT	-	START	END	TYPE									
SEMINOLE ELECTRIC **		6/1/1992		LT				QF = QUALIF	YING FACILITY				
								LT = LONG T	ERM				
								ST = SHORT-	TERM				
							•	** THREE YEA	R NOTICE REQU	IRED FOR TEF	RMINATION.		
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
	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
VARIOUS													
SUBTOTAL CAPACITY PURCHASES													
SEMINOLE ELECTRIC - D													
VARIOUS MARKET BASED													
SUBTOTAL CAPACITY SALES													
TOTAL PURCHASES AND (SALES)	(62,176)	(62,176)	(62,176)	643,886	643,886	643,886	714,492	714,492	714,492	714,492	643,886	(62,178)	5,184,807
TOTAL CAPACITY	(\$62,176)	(\$62,176)	(\$62,176)	\$643,886	\$643,886	\$643,886	\$714,492	\$714,492	\$714,492	\$714,492	\$643,886	(\$62,178)	\$5,184,807

DOCKET NO. 20210001-EI FAC 2022 PROJECTION FILING EXHIBIT NO. MAS-3 DOCUMENT NO. 2

EXHIBIT TO THE TESTIMONY OF

M. ASHLEY SIZEMORE

DOCUMENT NO. 2

PROJECTED FUEL AND PURCHASED POWER COST RECOVERY

JANUARY 2022 - DECEMBER 2022

SCHEDULES E1 THROUGH E10 SCHEDULE H1

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TAMPA ELECTRIC COMPANY

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38 39 40 41 42	Schedule E7 Purchased Power Schedule E8 Energy Payment to Qualifying Facilities Schedule E9 Economy Energy Purchases Schedule E10 Residential Bill Comparison Schedule H1 Generating System Comparative Data	(") (") (") (JAN DEC. 2019-2022)

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SCHEDULE E1

TAMPA ELECTRIC COMPANY FUEL AND PURCHASED POWER COST RECOVERY CLAUSE CALCULATION ESTIMATED FOR THE PERIOD: JANUARY 2022 THROUGH DECEMBER 2022

		DOLLARS	MWH	CENTS/KWH
1.	Fuel Cost of System Net Generation (E3)	591,244,371	20,728,070	2.85239
2.	Nuclear Fuel Disposal Cost	0	0	0.00000
3.	Coal Car Investment	0	0 (1)	0.00000
4a.	Adjustment	0	20,728,070	0.00000
4b.	Adjustment	0	0	0.00000
5.	TOTAL COST OF GENERATED POWER (LINES 1 THROUGH 4b)	591,244,371	20,728,070	2.85239
6.	Fuel Cost of Purchased Power - System (Exclusive of Economy)(E7)	0	0	0.00000
7.	Energy Cost of Economy Purchases (E9)	6,737,130	104,970	6.41815
8. 9.	Energy Payments to Qualifying Facilities (E8)	1,866,220	68,840	2.71095
10.	TOTAL COST OF PURCHASED POWER (LINES 6 THROUGH 9)	8,603,350	173,810	4.94986
11.	TOTAL AVAILABLE MWH (LINE 5 + LINE 10)		20,901,880	
12.	Fuel Cost of Schedule D Sales - Jurisd. (E6)	980,190	35,040	2.79735
13.	Fuel Cost of Market Based Sales - Jurisd. (E6)	0	0	0.00000
14.	Gains on Sales	69,080	NA	NA
15.	TOTAL FUEL COST AND GAINS OF POWER SALES	1,049,270	35,040	2.99449
16.	Net Inadvertant Interchange		0	
17.	Wheeling Received Less Wheeling Delivered		0	
18.	Interchange and Wheeling Losses		1,198	
19.	TOTAL FUEL AND NET POWER TRANSACTIONS (LINE 5+10-15+16+17-18)	598,798,451	20,865,642	2.86978
20.	Net Unbilled	NA ^{(1)(a)}	NA ^(a)	NA
21.	Company Use	1,033,121 ⁽¹⁾	36,000	0.00522
22.	T & D Losses	29,337,798 ⁽¹⁾	1,022,301	0.14812
23.	System MWH Sales	598.798.451	19.807.340	3.02311
24.	Wholesale MWH Sales	0	0	0.00000
25.	Jurisdictional MWH Sales	598,798,451	19,807,340	3.02311
26.	Jurisdictional Loss Multiplier			1.00000
27.	Jurisdictional MWH Sales Adjusted for Line Loss	598,798,451	19,807,340	3.02311
28.	Optimization Mechanism{2}	1,285,228	19,807,340	0.00649
29.	True-up (2)	325,418	19,807,340	0.00164
30.	Total Jurisdictional Fuel Cost (Excl. GPIF)	600,409,097	19,807,340	3.03125
31.	Revenue Tax Factor			1.00072
32.	Fuel Factor (Excl. GPIF) Adjusted for Taxes	600,841,392	19,807,340	3.03343
33.	GPIF Adjusted for Taxes (2)	3,673,726	19,807,340	0.01855
34.	Fuel Factor Adjusted for Taxes Including GPIF	604,515,118	19,807,340	3.05198

35 Fuel Factor Rounded to Nearest .001 cents per KWH

^(a) Data not available at this time.

(1) Included For Informational Purposes Only

⁽²⁾ Calculation Based on Jurisdictional MWH Sales

3.052

	TAMPA ELECTRIC COMPANY CALCULATION OF PROJECTED PERIOD TOTAL TRUE-UP FOR THE PERIOD: JANUARY 2022 THROUGH DECEMBER 2022	SCHEDULE E1-A
1.	ESTIMATED OVER/(UNDER) RECOVERY (SCH. E1-B) January 2021 - December 2021 (6 months actual, 6 months estimated)	(\$44,617,507)
2.	PROJECTED OVER/UNDER-RECOVERY TRUE-UP INCLUDED IN SEPTEMBER - DECEMBER 2021 RATES (Per Mid-Course correction Schedule E1-C, line 1B)	(\$49,015,848)
3.	DIFFERENCE IN 2020 ESTIMATED TRUE-UP AMOUNT PROJECTED IN ORIGINAL 2021 RATES AND AMOUNT COLLECTED IN 2021 (\$25,479,055 under-recovery less (\$2,123,255) refunded each month January through August 2021)	(\$8,493,015)
4.	ACTUAL-ESTIMATED 2021 OVER/(UNDER) RECOVERY (Line 1 - Line 2 + Line 3)	(\$4,094,674)
5.	FINAL TRUE-UP (January 2020 - December 2020) (Per True-Up filed April 2, 2021)	3,769,256
6.	TOTAL OVER/(UNDER) RECOVERY TO BE COLLECTED IN 2022 (Line 4 + Line 5) To be included in the 12-month projected period January 2022 through December 2022 (2022 Schedule E1, line 29)	(\$325,418)
7.	JURISDICTIONAL MWH SALES (Projected January 2022 through December 2022)	19,807,340
8.	TRUE-UP FACTOR - cents/kWh (Using Effective MWh Sales of 19,776,928)	0.0016

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		TAMPA ELECTRIC COMPANY INCENTIVE FACTOR AND TRUE-UP FACTOR FOR THE PERIOD: JANUARY 2022 THROUGH DECEMBER 2022	SCHEDULE E1-C	
1.	то	TAL AMOUNT OF ADJUSTMENTS		
	A.	GENERATING PERFORMANCE INCENTIVE REWARD / (PENALTY) (January 2022 through December 2022)	\$3,673,726	
	В.	TRUE-UP OVER / (UNDER) RECOVERED (January 2022 through December 2022)	(\$325,418)	
	C.	OPTIMIZATION MECHANISM GAIN / (LOSS) (January 2022 through December 2022)	\$1,285,228	
2.	то	TAL SALES (January 2022 through December 2022)	19,807,340	MWh
3.	AD	JUSTMENT FACTORS		
	A.	GENERATING PERFORMANCE INCENTIVE FACTOR (Using Effective MWh Sales of 19,776,928)	0.0186	Cents/kWh
	В.	TRUE-UP FACTOR (Using Effective MWh Sales of 19,776,928)	0.0016	Cents/kWh
	C.	OPTIMIZATION MECHANISM FACTOR (Using Effective MWh Sales of 19,776,928)	0.0065	Cents/kWh

DETERMINATION OF FUEL RECOVERY FACTOR TIME OF USE RATE SCHEDULES TAMPA ELECTRIC COMPANY ESTIMATED FOR THE PERIOD: JANUARY 2022 THROUGH DECEMBER 2022

SCHEDULE E1-D

FUEL COST (%)	\$22.07 \$19.58 1.1272	OFF PEAK	2.944 2.944					
NET ENERGY FOR LOAD (%)	30.09 69.91 100.00	ON PEAK	3.3184 3.318					Off-Peak 2.944 2.915 2.885
	Ι			25.60% 74.40% 100.00%	Secondary	17,502,027 1,553,647 721,254	19,776,928	On-Peak 3.318 3.285 3.252
	ON PEAK OFF PEAK	TOTAL \$598,798,451 19,807,340 19,776,928 3.0231 1.00000 \$325,418 \$325,418 \$325,418 \$325,418 \$325,418 \$325,418 \$325,418 \$3000072 3.0381 0.0186	3.0567 3.057		al Sales (MWH) Line Loss	66.0 86.0	I	Standard 3.057 3.026 2.299 2.745 3.745 3.008
		<pre>(Sch E1 line 25) (Sch E1 line 25) (line 1 / line 2) (Sch E1 line 29) (Sch E1 line 29) (Sch E1 line 28) (line 1 × line 4) + line 6 + line 7 (line 8 × line 9) / line 2a / 10 (Sch E1-C line 3A)</pre>	(line 10 + line 11)		Jurisdiction	17,502,027 1,569,341 735,973	19,807,340	Distribution Secondary Distribution Primary Transmission RS 1st Tier RS 2nt Tier Lighting
		Total Fuel & Net Power Trans (Jurisd) MWH Sales (Jurisd) Effective MWH Sales (Jurisd) Cost Per KWH Sold Jurisdictional Loss Factor Jurisdictional Fuel Factor True-Up Optimization Mechanism TOTAL Revenue Tax Factor Revenue Tax Factor GPIF Factor GPIF Factor	Recovery Factor Including GPIF Recovery Factor Rounded to the Nearest .001 cents/KWH	Hours: ON PEAK OFF PEAK	Metering Voltage:	Distribution Secondary Distribution Primary Transmission	Total	
		- 0 2 8 4 4 9 0 7 8 0 7 1 0 7 8 0 7 1 0 7 8 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7 1 0 7	1 2	15 15				

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SCHEDULE E1-E

TAMPA ELECTRIC COMPANY FUEL COST RECOVERY FACTORS ESTIMATED FOR THE PERIOD: JANUARY 2022 THROUGH DECEMBER 2022

METERING VOLTAGE LEVEL	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)		2.745	3.745
Distribution Secondary	3.057		
Distribution Primary	3.026		
Transmission	2.996		
Lighting Service ⁽¹⁾	3.008		
TIME-OF-USE			
Distribution Secondary - On-Peak	3.318		
Distribution Secondary - Off-Peak	2.944		
Distribution Primary - On-Peak	3.285		
Distribution Primary - Off-Peak	2.915		
Transmission - On-Peak	3.252		
Transmission - Off-Peak	2.885		

(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 2022 THROUGH DECEMBER 2022

		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(I)	(m)
		Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	PERIOD
1.	Fuel Cost of System Net Generation	50,628,655	43,712,330	45,704,776	43,168,114	49,710,665	56,554,931	58,231,044	59,752,774	53,251,426	47,781,768	39,999,180	42,748,708	591,244,371
2.	Nuclear Fuel Disposal	0	0	0	0	0	0	0	0	0	0	0	0	0
3.	Fuel Cost of Power Sold ^{1}	96,568	87,586	92,414	81,142	86,998	94,887	87,362	91,825	86,173	87,051	73,242	84,022	1,049,270
4.	Fuel Cost of Purchased Power	0	0	0	0	0	0	0	0	0	0	0	0	0
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	149,230	139,130	164,470	141,730	130,060	169,370	150,520	173,790	184,140	165,380	154,990	143,410	1,866,220
7.	Energy Cost of Economy Purchases	14,270	10,250	5,180	1,700	26,170	480,100	609,210	364,870	4,111,460	1,108,180	1,320	4,420	6,737,130
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	50,695,587	43,774,124	45,782,012	43,230,402	49,779,897	57,109,514	58,903,412	60,199,609	57,460,853	48,968,277	40,082,248	42,812,516	598,798,451
11.	Jurisdictional MWH Sold	1,484,835	1,360,586	1,350,140	1,437,866	1,599,548	1,857,040	1,948,278	1,942,542	2,005,956	1,835,903	1,536,267	1,448,380	19,807,340
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	
13.	Jurisdictional Total Fuel & Net Power Transactions (Line 10 * Line 12)	50,695,587	43,774,124	45,782,012	43,230,402	49,779,897	57,109,514	58,903,412	60,199,609	57,460,853	48,968,277	40,082,248	42,812,516	598,798,451
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	
15.	JURISD. TOTAL FUEL & NET PWR. TRANS. Adjusted for Line Losses (Line 13 * Line 14)	50,695,587	43,774,124	45,782,012	43,230,402	49,779,897	57,109,514	58,903,412	60,199,609	57,460,853	48,968,277	40,082,248	42,812,516	598,798,451
16.	Cost Per kWh Sold (Cents/kWh)	3.4142	3.2173	3.3909	3.0066	3.1121	3.0753	3.0234	3.0990	2.8645	2.6673	2.6091	2.9559	3.0231
17.	Optimization Mechanism (Cents/kWh) ^[2]	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065	0.0065
18.	True-up (Cents/kWh) ⁽²⁾	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016	0.0016
19.	Total (Cents/kWh) (Line 16+17+18)	3.4223	3.2254	3.3990	3.0147	3.1202	3.0834	3.0315	3.1071	2.8726	2.6754	2.6172	2.9640	3.0312
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)	3.4248	3.2277	3.4014	3.0169	3.1224	3.0856	3.0337	3.1093	2.8747	2.6773	2.6191	2.9661	3.0334
22.	GPIF Adjusted for Taxes (Cents/kWh) (2)	0.0186	0.0186	0.0186	0.0186	0.0186	0.0186	0.0186	0.0186	0.0186	0.0186	0.0186	0.0186	0.0186
23.	TOTAL RECOVERY FACTOR (LINE 21+22)	3.4434	3.2463	3.4200	3.0355	3.1410	3.1042	3.0523	3.1279	2.8933	2.6959	2.6377	2.9847	3.0520
24.	RECOVERY FACTOR ROUNDED TO NEAREST 0.001 CENTS/KWH	3.443	3.246	3.420	3.036	3.141	3.104	3.052	3.128	2.893	2.696	2.638	2.985	3.052

^{1} Includes Gains

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

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TAMPA ELECTRIC COMPANY GENERATING SYSTEM COMPARATIVE DATA BY FUEL TYPE

SCHEDULE E3

	ESTIMATE	D FOR THE PERIOD:	JANUARY 2022 THRO	DUGH JUNE 2022		
	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22
FUEL COST OF SYSTEM NET GENER	ATION (\$)					
1. HEAVY OIL	0	0	0	0	0	0
2. LIGHT OIL	91,149	90,787	90,425	90,061	89,697	89,332
4 NATURAL GAS	4,505,889	3,989,914	3,561,514	3,175,693	4,571,140	4,730,807
5. SOLAR	0	000,001,020	42,002,007	00,002,000	40,040,020	01,704,702
6. OTHER	0	0	0	0	0	0
7. TOTAL (\$)	50,628,655	43,712,330	45,704,776	43,168,114	49,710,665	56,554,931
SYSTEM NET GENERATION (MWH)		_	_	_	_	
8. HEAVY OIL	0	0	0	0	0	0
10 COAL	136 740	118 250	106 710	92 550	136 640	300 144 780
11. NATURAL GAS	1,242,630	1,086,820	1,214,550	1,278,940	1,470,280	1,643,510
12. SOLAR	127,340	142,060	175,360	218,220	240,250	206,030
13. OTHER 14. TOTAL (MWH)	0	0 1.347.430	0 1.496.920	0 1.590.010	0 1.847.470	0 1.994.620
	-,,	.,,	-,	-,,	.,,	.,,
15. HEAVY OIL (BBL)	0	0	0	0	0	0
16. LIGHT OIL (BBL)	665	665	665	665	665	665
17. COAL (TON)	72,550	63,500	57,140	50,210	73,110	75,560
18. NATURAL GAS (MCF)	8,871,535	7,779,965	8,734,935	9,187,705	10,533,255	12,412,825
20. OTHER	0	0	0	0	0	0
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	1,632,410	1,428,790	1,285,690	1,129,690	1,644,990	1,700,000
24. NATURAL GAS	9,112,610	7,990,500	8,973,090	9,437,680	10,826,040	12,738,500
25. SOLAR	0	0	0	0	0	0
27. TOTAL (MMBTU)	10,748,920	9,423,190	10,262,680	10,571,270	12,474,930	14,442,400
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	9.07	8.78	7.13	5.82	7.40	7.25
31. NATURAL GAS	82.46	80.66	81.14	80.44	79.58	82.40
32. SOLAR 33. OTHER	8.45	10.54	0.00	13.72	13.00	10.33
34. TOTAL (%)	100.00	100.00	100.00	100.00	100.00	100.00
35. HEAVY OIL (\$/BBL)	0.00	0.00	0.00	0.00	0.00	0.00
36. LIGHT OIL (\$/BBL)	137.07	136.52	135.98	135.43	134.88	134.33
37. COAL (\$/TON)	62.11	62.83	62.33	63.25	62.52	62.61
38. NATURAL GAS (\$/MCF)	5.19	5.09	4.81	4.34	4.28	4.17
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)	0.00	0.00	0.00	0.00	0.00	0.00
41. HEAVY OIL 42. LIGHT OIL	23.37	23.28	23 19	23.09	23.00	22.91
43. COAL	2.76	2.79	2.77	2.81	2.78	2.78
44. NATURAL GAS	5.05	4.96	4.69	4.23	4.16	4.06
45. SOLAR	0.00	0.00	0.00	0.00	0.00	0.00
46. OTHER 47. TOTAL (\$/MMBTU)	0.00 4.71	0.00 4.64	0.00 4.45	0.00 4.08	0.00 3.98	0.00
48 HEAVY OIL	0	٥	٥	Ο	٥	٥
49. LIGHT OIL	13,000	13,000	13,000	13,000	13,000	13,000
50. COAL	11,938	12,083	12,048	12,206	12,039	11,742
51. NATURAL GAS	7,333	7,352	7,388	7,379	7,363	7,751
52. SOLAR	0	0	0	0	0	0
53. OTHER 54. TOTAL (BTU/KWH)	7,133	6,993	6,856	6,649	6,752	7,241
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	30.38	30.26	30.14	30.02	29.90	29.78
57. COAL	3.30	3.37	3.34	3.43	3.35	3.27
58. NATURAL GAS	3.70	3.65	3.46	3.12	3.06	3.15
59. SOLAR	0.00	0.00	0.00	0.00	0.00	0.00
61. TOTAL (CENTS/KWH)	3.36	0.00 3.24	3.05	0.00 2.71	2.69	2.84
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TAMPA ELECTRIC COMPANY GENERATING SYSTEM COMPARATIVE DATA BY FUEL TYPE ESTIMATED FOR THE PERIOD: JULY 2022 THROUGH DECEMBER 2022

SCHEDULE E3

		Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	TOTAL
FUE	L COST OF SYSTEM NET GENE	ERATION (\$)						
1.	HEAVY OIL	0	0	0	0	0	0	0
2.	LIGHT OIL	88,973	88,618	88,267	87,922	87,582	87,246	1,070,059
3.	COAL	5,010,894	5,123,910	4,979,203	509,008	3,930,668	4,423,948	48,512,588
4. 5	NATURAL GAS	53,131,177	54,540,246	48,183,956	47,184,838	35,980,930	38,237,514	541,661,724
5. 6	OTHER	0	0	0	0	0	0	0
7.	TOTAL (\$)	58,231,044	59,752,774	53,251,426	47,781,768	39,999,180	42,748,708	591,244,371
SYS	TEM 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	154,270	158,760	154,310	15,880	114,030	130,860	1,463,780
11.	NATURAL GAS	1,719,190	1,762,600	1,604,070	1,634,990	1,232,580	1,265,350	17,155,510
12. 13	OTHER	200,630	193,910	167,470	100,000	129,810	137,440	2,105,180
14.	TOTAL (MWH)	2,074,390	2,115,570	1,926,150	1,817,830	1,476,720	1,533,950	20,728,070
UNIT	S 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)	79,890	81,600	79,240	8,090	62,470	70,290	773,650
18.	NATURAL GAS (MCF)	12,677,295	13,146,505	11,541,635	11,241,335	8,135,455	8,409,095	122,671,540
19. 20.	OTHER	0	0	0	0	0	0	0
DTU								
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	1,797,510	1,836,030	1,782,840	182,090	1,405,660	1,581,590	17,407,290
24.	NATURAL GAS	13,015,500	13,496,970	11,842,940	11,543,620	8,350,810	8,638,150	125,966,410
25.	SOLAR	0	0	0	0	0	0	0
26. 27.	OTHER TOTAL (MMBTU)	0 14.816.910	15.336.900	0	0	9,760,370	10.223.640	143.420.500
		,,	,,.	,,	,	0,100,010	,,	,,
GEN	ERATION MIX (% MWH)							
28.	HEAVY OIL	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29.		0.01	0.01	0.02	0.02	0.02	0.02	0.02
30.	NATURAL GAS	7.44 82.88	7.50 83.32	83.28	0.07 89.94	83.47	0.00 82.40	7.00
32.	SOLAR	9.67	9.17	8.69	9.17	8.79	8.96	10.16
33.	OTHER	0.00	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	100.00
FUEI	L 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)	133.79	133.26	132.73	132.21	131.70	131.20	134.09
37.	COAL (\$/TON)	62.72	62.79	62.84	62.92	62.92	62.94	62.71
30. 30	SOLAR	4.19	4.15	4.17	4.20	4.42	4.55	4.42
40.	OTHER	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FUE	COST PER MMBTU (\$/MMBTU	Ŋ						
41.	HEAVY OIL	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42.	LIGHT OIL	22.81	22.72	22.63	22.54	22.46	22.37	22.86
43.	COAL	2.79	2.79	2.79	2.80	2.80	2.80	2.79
44.	NATURAL GAS	4.08	4.04	4.07	4.09	4.31	4.43	4.30
45.	SOLAR	0.00	0.00	0.00	0.00	0.00	0.00	0.00
46. 47.	TOTAL (\$/MMBTU)	<u> </u>	<u> </u>	<u>0.00</u> 3.91	4.07	<u> </u>	<u>0.00</u> 4.18	<u> </u>
BLII		I)						
48 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	11,652	11,565	11,554	11,467	12,327	12,086	11,892
51.	NATURAL GAS	7,571	7,657	7,383	7,060	6,775	6,827	7,343
52.	SOLAR	0	0	0	0	0	0	0
53. 54.	OTHER TOTAL (BTU/KWH)	7.143	7.250	<u> </u>	0 6.453	0 6.609	0 6.665	<u> </u>
			.,===	.,	-,	-,	-,	2,210
GEN 55	HEAVY OIL	H (CENTS/KWH)	0.00	0.00	0 00	0.00	0.00	0.00
56.	LIGHT OIL	29.66	29.54	29.42	29.31	29.19	29.08	29.72
57.	COAL	3.25	3.23	3.23	3.21	3.45	3.38	3.31
58.	NATURAL GAS	3.09	3.09	3.00	2.89	2.92	3.02	3.16
59.	SOLAR	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60.		0.00	0.00	0.00	0.00	0.00	0.00	0.00
U 1.		2.01	2.02	2.70	2.03	4.71	2.13	2.00

TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: JANUARY 2022

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(L)	(K)	(L)	(M)	(N)
	PLANT/UNIT	NET CAPA- BILITY	NET GENERATION	NET CAPACITY FACTOR	EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
		(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) ⁽²⁾	(\$) ⁽¹⁾	(cents/KWH)	(\$/UNIT)
1	. TIA SOLAR	1.6	270	22.7	-	22.7	-	SOLAR	-	-	-	-	-	-
2	. BIG BEND SOLAR	19.3	190	1.3	-	1.3	-	SOLAR	-	-	-	-	-	-
3	 LEGOLAND SOLAR 	1.5	2,860	256.3	-	256.3	-	SOLAR	-	-	-	-	-	-
4	. PAYNE CREEK SOLAR	70.1	9,780	18.8	-	18.8	-	SOLAR	-	-	-	-	-	-
5	5. BALM SOLAR	74.2	10,120	18.3	-	18.3	-	SOLAR	-	-	-	-	-	-
6	5. LITHIA SOLAR	74.3	12,290	22.2	-	22.2	-	SOLAR	-	-	-	-	-	-
7	. GRANGE HALL SOLAR	60.8	8,380	18.5	-	18.5	-	SOLAR	-	-	-	-	-	-
8	 PEACE CREEK SOLAR 	54.8	7,670	18.8	-	18.8	-	SOLAR	-	-	-	-	-	-
ç	. BONNIE MINE SOLAR	37.4	5,430	19.5	-	19.5	-	SOLAR	-	-	-	-	-	-
1	0. LAKE HANCOCK SOLAR	49.4	6,470	17.6	-	17.6	-	SOLAR	-	-	-	-	-	-
1	1. WIMAUMA SOLAR	74.7	11,490	20.7	-	20.7	-	SOLAR	-	-	-	-	-	-
1	2. LITTLE MANATEE RIVER SOLAR	74.3	12,240	22.1	-	22.1	-	SOLAR	-	-	-	-	-	-
1	3. DURRANCE SOLAR	59.8	8,590	19.3	-	19.3	-	SOLAR	-	-	-	-	-	-
1	4. FUTURE SOLAR	24.9	3,480.0	18.8	-	18.8	-	SOLAR	-	-	-	-	-	-
1	5. FUTURE SOLAR	74.3	7.320.0	13.2	-	13.2	-	SOLAR	-	-	-	-	-	-
1	6. FUTURE SOLAR	52.3	10.380.0	26.7	-	26.7	-	SOLAR	-	-	-	-	-	-
1	7. FUTURE SOLAR	74.3	10.380.0	18.8	-	18.8	-	SOLAR	-	-	-	-	-	-
1	8. SOLAR TOTAL	(3) 878.0	127,340	19.5	-	19.5	-	SOLAR	-	-	-	-	-	-
1	9. BIG BEND #1 CC TOTAL	0	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
2	0. BIG BEND #2 TOTAL	350	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
	21 B B #3 (GAS)	355	13 490	51	-	_	_	GAS	155 170	1 027 969	159 510 0	805 129	5.97	5 19
N	2 B B #3 (COAL)	400	.0,100	0.0	-		-	COAL	0	1,021,000	0.0	0000,120	0.00	0.00
Ž	23. BIG BEND #3 TOTAL	355	13,490	5.1	82.1	52.8	11,824	00/12		-	159,510.0	805,129	5.97	-
- 2	24. B.B.#4 (GAS)	160	7,200	6.0	-	-	-	GAS	83,580	1,027,997	85,920.0	433,670	6.02	5.19
2	25. B.B.#4 (COAL)	432	136,740	42.5	-	-	-	COAL	72,550	22,500,482	1,632,410.0	4,505,889	3.30	62.11
2	26. BIG BEND #4 TOTAL	432	143,940	44.8	89.3	48.9	11,938		-	-	1,718,330.0	4,939,559	3.43	-
2	27. B.B. IGNITION	-	-	-	-	-	-	GAS	7,100	1,028,169	7,300.0	36,840	-	5.19
2	28. B.B.C.T.#4 TOTAL	61	70	0.2	98.3	57.4	13,000	GAS	890	1,022,472	910.0	4,618	6.60	5.19
2	9. B.B.C.T.#5 TOTAL	350	7,140	2.7	96.0	63.8	9,821	GAS	68,210	1,028,002	70,120.0	353,920	4.96	5.19
3	0. B.B.C.T.#6 TOTAL	350	3,250	1.2	96.1	58.0	9,966	GAS	31,520	1,027,602	32,390.0	163,547	5.03	5.19
3	1. BIG BEND STATION TOTAL	1,898	167,890	11.9	74.3	49.8	11,801	-	-	-	1,981,260.0	6,303,613	3.75	-
3	2. POLK #1 GASIFIER	220	0	0.0	-	0.0	0	COAL	0	0	0.0	0	0.00	0.00
3	33. POLK #1 CT (GAS)	230	5,380	3.1	-	73.1	8,959	GAS	46,880	1,028,157	48,200.0	243,246	4.52	5.19
3	4. POLK #1 TOTAL	230	5,380	3.1	93.8	73.1	8,959	-	-	-	48,200.0	243,246	4.52	-
3	5. POLK #2 ST DUCT FIRING	120	2,040	2.3	-	85.0	8,157	GAS	16,190	1,027,795	16,640.0	84,005	4.12	5.19
3	86. POLK #2 ST W/O DUCT FIRING	360	623,040	-	-	-	-		4,198,315	1,028,003	4,315,880.0	21,783,742	3.50	5.19
3	37. POLK #2 ST TOTAL	480	625,080	175.0	-	173.6	6,931	GAS	-	-	4,332,520.0	21,867,747	3.50	-
3	38. POLK #2 CT (GAS)	180	930	0.7	-	64.6	11,591	GAS	10,490	1,027,645	10,780.0	54,429	5.85	5.19
3	9. POLK #2 CT (OIL)	187	150	0.1	-	80.2	13,000	LGT OIL	333	5,855,856	1,950.0	45,643	30.43	137.07
4	0. POLK #2 TOTAL	(4) 180	1,080	0.8	-	66.4	11,787	-	-	-	12,730.0	100,072	9.27	-
4	1. POLK #3 CT (GAS)	180	0	0.0		0.0	0	GAS	0	0	0.0	0	0.00	0.00
4	2. POLK #3 CT (OIL)	187	150	0.1	-	80.2	13,000	LGT OIL	332	5,873,494	1,950.0	45,506	30.34	137.07
4	3. POLK #3 TOTAL	(4) 180	150	0.1	-	80.2	13,000	-			1,950.0	45,506	30.34	-

SCHEDULE E4

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TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: JANUARY 2022

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(L)	(К)	(L)	(M)	(N)
PLANT/UNIT	NET CAPA- BILITY	NET GENERATION	NET CAPACITY FACTOR	EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
	(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) ⁽²⁾	(\$) ⁽¹⁾	(cents/KWH)	(\$/UNIT)
44. POLK #4 CT (GAS) TOTAL	⁽⁴⁾ 180	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
45. POLK #5 CT (GAS) TOTAL	⁽⁴⁾ 180	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
46. POLK #2 CC TOTAL	1,200	626,310	70.2	97.4	172.2	6,941	-	-	-	4,347,200.0	22,013,325	3.51	-
47. POLK STATION TOTAL	1,430	631,690	59.4	96.8	168.2	6,958	-	-	-	4,395,400.0	22,256,571	3.52	-
48. BAYSIDE #1	792	343,790	58.3	96.6	61.1	7,309	GAS	2,444,440	1,027,994	2,512,870.0	12,683,434	3.69	5.19
49. BAYSIDE #2	1,047	235,990	30.3	97.3	32.7	7,863	GAS	1,805,030	1,027,994	1,855,560.0	9,365,737	3.97	5.19
50. BAYSIDE #3	61	80	0.2	98.6	65.6	12,000	GAS	930	1,032,258	960.0	4,825	6.03	5.19
51. BAYSIDE #4	61	80	0.2	98.6	65.6	12,000	GAS	930	1,032,258	960.0	4,825	6.03	5.19
52. BAYSIDE #5	61	70	0.2	98.6	57.4	13,714	GAS	930	1,032,258	960.0	4,825	6.89	5.19
53. BAYSIDE #6	61	80	0.2	98.6	65.6	11,875	GAS	930	1,021,505	950.0	4,825	6.03	5.19
54. BAYSIDE STATION TOTAL	2,083	580,090	37.4	97.2	45.1	7,537	GAS	4,253,190	1,027,995	4,372,260.0	22,068,471	3.80	5.19
55. SYSTEM TOTAL	6,289	1,507,010	32.2	76.6	79.5	7,133	-		<u> </u>	10,748,920.0	50,628,655	3.36	-

LEGEND:

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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

(4) In Simple Cycle Mode

(3) AC rating

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TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: FEBRUARY 2022

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPA- BILITY	NET GENERATION	NET CAPACITY FACTOR	EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
	(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) ⁽²⁾	(\$) ⁽¹⁾	(cents/KWH)	(\$/UNIT)
1. TIA SOLAR	1.6	260	24.2	-	24.2	-	SOLAR	-	-	-	-	-	-
2. BIG BEND SOLAR	19.3	190	1.5	-	1.5	-	SOLAR	-	-	-	-	-	-
LEGOLAND SOLAR	1.5	3,030	300.6	-	300.6	-	SOLAR	-	-	-	-	-	-
PAYNE CREEK SOLAR	70.1	11,280	23.9	-	23.9	-	SOLAR	-	-	-	-	-	-
5. BALM SOLAR	74.2	11,710	23.5	-	23.5	-	SOLAR	-	-	-	-	-	-
LITHIA SOLAR	74.3	13,060	26.2	-	26.2	-	SOLAR	-	-	-	-	-	-
GRANGE HALL SOLAR	60.8	9,310	22.8	-	22.8	-	SOLAR	-	-	-	-	-	-
 PEACE CREEK SOLAR 	54.8	8,520	23.1	-	23.1	-	SOLAR	-	-	-	-	-	-
BONNIE MINE SOLAR	37.4	5,790	23.0	-	23.0	-	SOLAR	-	-	-	-	-	-
LAKE HANCOCK SOLAR	49.4	7,460	22.5	-	22.5	-	SOLAR	-	-	-	-	-	-
11. WIMAUMA SOLAR	74.7	12,120	24.1	-	24.1	-	SOLAR	-	-	-	-	-	-
12. LITTLE MANATEE RIVER SOLAR	R 74.3	12,960	26.0	-	26.0	-	SOLAR	-	-	-	-	-	-
13. DURRANCE SOLAR	59.8	9,920	24.7	-	24.7	-	SOLAR	-	-	-	-	-	-
14. FUTURE SOLAR	24.9	4,020.0	24.0	-	24.0	-	SOLAR	-	-	-	-	-	-
15. FUTURE SOLAR	74.3	8,450.0	16.9	-	16.9	-	SOLAR	-	-	-	-	-	-
16. FUTURE SOLAR	52.3	11,990.0	34.1	-	34.1	-	SOLAR	-	-	-	-	-	-
17. FUTURE SOLAR	74.3	11,990.0	24.0		24.0		SOLAR	-	-	-	-		-
18. SOLAR TOTAL	⁽³⁾ 878.0	142,060	24.1	-	24.1	-	SOLAR	-	-	-	-	-	-
19. BIG BEND #1 CC TOTAL	0	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
20. BIG BEND #2 TOTAL	350	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
21 B B #3 (GAS)	355	13 500	57	_	-	-	GAS	155 270	1 028 016	159 620 0	790 955	5.86	5.09
22 B B #3 (COAL)	400	.0,000	0.0	-	-	-	COAL	.00,2.0	1,020,010	0.0	0	0.00	0.00
23. BIG BEND #3 TOTAL	355	13,500	5.7	48.5	52.8	11,824	00/12			159,620.0	790,955	5.86	-
24. B.B.#4 (GAS)	160	6,230	5.8	-	-	-	GAS	73,150	1,027,888	75,190.0	372,630	5.98	5.09
25. B.B.#4 (COAL)	432	118,250	40.7	<u> </u>			COAL	63,500	22,500,630	1,428,790.0	3,989,914	3.37	62.83
26. BIG BEND #4 TOTAL	432	124,480	42.9	89.3	46.8	12,082		-	-	1,503,980.0	4,362,544	3.50	-
27. B.B. IGNITION	-	-	-	-	-	-	GAS	7,100	1,028,169	7,300.0	36,168	-	5.09
28. B.B.C.T.#4 TOTAL	61	10	0.0	98.3	16.4	24.000	GAS	230	1.043.478	240.0	1.172	11.72	5.10
29. B.B.C.T.#5 TOTAL	350	5.190	2.2	94.9	51.1	10.023	GAS	50.610	1.027.860	52.020.0	257.811	4.97	5.09
30. B.B.C.T.#6 TOTAL	350	1,540	0.7	96.1	55.0	9,766	GAS	14,630	1,028,025	15,040.0	74,526	4.84	5.09
31. BIG BEND STATION TOTAL	1,898	144,720	11.3	67.8	47.5	11,960	-	-		1,730,900.0	5,523,176	3.82	-
	220	0	0.0		0.0	0	004	0	0	0.0	0	0.00	0.00
32. POLK#1 GASIFIER	220	0 000	0.0	-	0.0	0 000	COAL	71.000	1 000 070	72 220 0	262.950	0.00	0.00
33. POLK #1 CT (GAS)	230	8,230	5.3		74.5	8,898	GAS	71,230	1,028,078	73,230.0	362,850	4.41	5.09
34. FOLK #110TAL	230	0,230	5.5	55.0	74.5	0,090	-	-	-	73,230.0	302,850	4.41	-
35. POLK #2 ST DUCT FIRING	120	2,260	2.8	-	75.3	8,190	GAS	18,000	1,028,333	18,510.0	91,693	4.06	5.09
36. POLK #2 ST W/O DUCT FIRING	360	555,510	-	-	-	-		3,742,155	1,028,001	3,846,940.0	19,062,772	3.43	5.09
37. POLK #2 ST TOTAL	480	557,770	172.9	-	172.4	6,930	GAS	-	-	3,865,450.0	19,154,465	3.43	-
38 POLK #2 CT (GAS)	180	0	0.0	_	0.0	0	GAS	0	0	0.0	0	0.00	0.00
39 POLK #2 CT (ORS)	187	150	0.0	-	0.0 80 2	13 000		333	5 855 856	1 950 0	45 462	30.21	136 52
40. POLK #2 TOTAL	(4) 180	150	0.1		80.2	13,000	-		-	1,950.0	45,462	30.31	100.02
						,				.,	,		
41. POLK #3 CT (GAS)	180	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
42. POLK #3 CT (OIL)	187	150	0.1		80.2	13,000	LGT OIL	332	5,873,494	1,950.0	45,325	30.22	136.52
43. POLK #3 TOTAL	⁽⁴⁾ 180	150	0.1	-	80.2	13,000	-	-	-	1,950.0	45,325	30.22	-

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SCHEDULE E4

TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: FEBRUARY 2022

(A)		(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT		NET CAPA- BILITY	NET GENERATION	NET CAPACITY FACTOR	EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
		(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) ⁽²⁾	(\$) ⁽¹⁾	(cents/KWH)	(\$/UNIT)
44. POLK #4 CT (GAS) TOTAL	(4)	180	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
45. POLK #5 CT (GAS) TOTAL	(4)	180	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
46. POLK #2 CC TOTAL		1,200	558,070	69.2	97.4	172.1	6,933	-	-	-	3,869,350.0	19,245,252	3.45	-
47. POLK STATION TOTAL		1,430	566,300	58.9	96.8	165.7	6,962	-		-	3,942,580.0	19,608,102	3.46	-
48. BAYSIDE #1		792	276,720	52.0	96.6	56.4	7,348	GAS	1,978,040	1,028,002	2,033,430.0	10,076,260	3.64	5.09
49. BAYSIDE #2		1,047	217,230	30.9	97.3	32.2	7,879	GAS	1,664,970	1,027,994	1,711,580.0	8,481,462	3.90	5.09
50. BAYSIDE #3		61	100	0.2	98.6	82.0	12,000	GAS	1,170	1,025,641	1,200.0	5,960	5.96	5.09
51. BAYSIDE #4		61	100	0.2	98.6	82.0	11,500	GAS	1,120	1,026,786	1,150.0	5,705	5.71	5.09
52. BAYSIDE #5		61	100	0.2	98.6	82.0	11,500	GAS	1,120	1,026,786	1,150.0	5,705	5.71	5.09
53. BAYSIDE #6		61	100	0.2	98.6	82.0	12,000	GAS	1,170	1,025,641	1,200.0	5,960	5.96	5.09
54. BAYSIDE STATION TOTAL		2,083	494,350	35.3	97.2	42.4	7,585	GAS	3,647,590	1,027,997	3,749,710.0	18,581,052	3.76	5.09
55. SYSTEM TOTAL		6,289	1,347,430	31.9	74.7	78.4	6,993				9,423,190.0	43,712,330	3.24	

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

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TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: MARCH 2022

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPA- BILITY	NET GENERATION	NET CAPACITY FACTOR	EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
	(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) ⁽²⁾	(\$) ⁽¹⁾	(cents/KWH)	(\$/UNIT)
1. TIA SOLAR	1.6	330	27.8	-	27.8	-	SOLAR	-	-	-	-	-	-
2. BIG BEND SOLAR	19.3	250	1.7	-	1.7	-	SOLAR	-	-	-	-	-	-
LEGOLAND SOLAR	1.5	4,060	364.3	-	364.3	-	SOLAR	-	-	-	-	-	-
PAYNE CREEK SOLAR	70.1	13,260	25.5	-	25.5	-	SOLAR	-	-	-	-	-	-
5. BALM SOLAR	74.2	13,750	24.9	-	24.9	-	SOLAR	-	-	-	-	-	-
LITHIA SOLAR	74.3	17,290	31.3	-	31.3	-	SOLAR	-	-	-	-	-	-
GRANGE HALL SOLAR	60.8	11,050	24.5	-	24.5	-	SOLAR	-	-	-	-	-	-
PEACE CREEK SOLAR	54.8	10,120	24.9	-	24.9	-	SOLAR	-	-	-	-	-	-
BONNIE MINE SOLAR	37.4	8,280	29.8	-	29.8	-	SOLAR	-	-	-	-	-	-
LAKE HANCOCK SOLAR	49.4	8,770	23.9	-	23.9	-	SOLAR	-	-	-	-	-	-
11. WIMAUMA SOLAR	74.7	16,460	29.7	-	29.7	-	SOLAR	-	-	-	-	-	-
12. LITTLE MANATEE RIVER SOLAF	R 74.3	17,360	31.4	-	31.4	-	SOLAR	-	-	-	-	-	-
13. DURRANCE SOLAR	59.8	11,640	26.2	-	26.2	-	SOLAR	-	-	-	-	-	-
14. FUTURE SOLAR	24.9	4,720.0	25.5	-	25.5	-	SOLAR	-	-	-	-	-	-
15. FUTURE SOLAR	74.3	9,900.0	17.9	-	17.9	-	SOLAR	-	-	-	-	-	-
16. FUTURE SOLAR	52.3	14,060.0	36.2	-	36.2	-	SOLAR	-	-	-	-	-	-
17. FUTURE SOLAR	74.3	14,060.0	25.5		25.5		SOLAR	-	-		-		
18. SOLAR TOTAL	(3) 878.0	175,360	26.9	-	26.9	-	SOLAR	-	-	-	-	-	-
19. BIG BEND #1 CC TOTAL	0	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
20. BIG BEND #2 TOTAL	350	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
21. B.B.#3 (GAS)	355	13.510	5.1	-	-	-	GAS	155.390	1.027.994	159.740.0	748.099	5.54	4.81
22. B.B.#3 (COAL)	400	0	0.0	-	-	-	COAL	0	0	0.0	0	0.00	0.00
23. BIG BEND #3 TOTAL	400	13,510	4.5	82.1	46.9	11,824		-	-	159,740.0	748,099	5.54	-
24 BB#4 (GAS)	160	5 620	47				GAS	65 820	1 028 107	67 670 0	316 870	5.64	1 81
25 B B #4 (COAL)	100	106 710	4.7	-	-	-	COAL	57 140	22 500 700	1 285 690 0	3 561 514	3.04	4.01
26. BIG BEND #4 TOTAL	432	112.330	35.0	72.0	47.3	12.048	COAL		-	1.353.360.0	3.878.393	3.45	- 02.33
		,				,				,,	-,		
27. B.B. IGNITION	-	-	-	-	-	-	GAS	6,260	1,028,754	6,440.0	30,138	-	4.81
28. B.B.C.T.#4 TOTAL	61	10	0.0	98.3	16.4	29,000	GAS	280	1,035,714	290.0	1,348	13.48	4.81
29. B.B.C.T.#5 TOTAL	350	9,720	3.7	96.9	56.7	9,894	GAS	93,550	1,028,006	96,170.0	450,380	4.63	4.81
30. B.B.C.T.#6 TOTAL	350	4,030	1.5	96.1	52.3	10,050	GAS	39,390	1,028,180	40,500.0	189,636	4.71	4.81
31. BIG BEND STATION TOTAL	1,943	139,600	9.7	70.7	47.9	11,820	-	-	-	1,650,060.0	5,297,994	3.80	-
32. POLK #1 GASIFIER	220	0	0.0	-	0.0	0	COAL	0	0	0.0	0	0.00	0.00
33. POLK #1 CT (GAS)	230	25.040	14.7	-	73.6	8.919	GAS	217.260	1.027.985	223.340.0	1.045.961	4.18	4.81
34. POLK #1 TOTAL	230	25,040	14.7	93.8	73.6	8,919	-	-	-	223,340.0	1,045,961	4.18	-
	400	0.040	4.0		70.0	0.400	040	00.070	4 007 004	00.470.0	400.007	0.00	4.04
35. FULK #2 ST DUCT FIKING	120	3,010	4.0	-	79.2	8,163	GAS	28,070	1,027,904	29,470.0	138,027	3.82	4.81
36. POLK #2 ST W/O DUCT FIRING	360	510,580			466.2	6.026	CA8	3,440,515	1,028,003	3,536,860.0	10,503,705	3.24	4.81
SI. FOLK #2 SI IUIAL	400	514,190	144.2	-	100.3	0,936	GAD	-	-	3,300,330.0	10,/01,/92	3.25	-
38. POLK #2 CT (GAS)	180	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
39. POLK #2 CT (OIL)	187	150	0.1	-	80.2	13,000	LGT OIL	333	5,855,856	1,950.0	45,281	30.19	135.98
40. POLK #2 TOTAL	(4) 180	150	0.1	<u> </u>	80.2	13,000	•		-	1,950.0	45,281	30.19	-
	190	0	0.0		0.0	0	CAS	0	0	0.0	0	0.00	0.00
41. FULK #3 CT (OH)	100	150	0.0	-	0.0	12 000		222	5 972 AOA	1 050 0	15 111	0.00	125.00
	(4) 180	150	0.1		80.2	13,000	-		3,073,484	1,950.0	45,144	30.10	133.80
TO TOTAL	. 100	130	0.1	-	00.2	13,000	-	-	-	1,350.0		50.10	-

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SCHEDULE E4

TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: MARCH 2022

(A)		(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(К)	(L)	(M)	(N)
PLANT/UNIT		NET CAPA- BILITY	NET GENERATION	NET CAPACITY FACTOR	EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
		(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) ⁽²⁾	(\$) ⁽¹⁾	(cents/KWH)	(\$/UNIT)
44. POLK #4 CT (GAS) TOTAL	(4)	180	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
45. POLK #5 CT (GAS) TOTAL	(4)	180	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
46. POLK #2 CC TOTAL		1,200	514,490	57.7	81.7	166.1	6,939	-	-		3,570,230.0	16,792,217	3.26	-
47. POLK STATION TOTAL		1,430	539,530	50.8	83.7	148.8	7,031	-	-	-	3,793,570.0	17,838,178	3.31	-
48. BAYSIDE #1 49. BAYSIDE #2		792 1 047	345,880 296,530	58.8 38 1	96.6 97.3	60.8 39.2	7,316 7,716	GAS	2,461,540 2 225 700	1,027,999	2,530,460.0 2 288 010 0	11,850,659 10 715 249	3.43 3.61	4.81 4 81
50. BAYSIDE #3		61	200,000	0.0	0.0	0.0	0	GAS	2,220,700	0	2,200,010.0	0	0.00	0.00
51. BAYSIDE #4		61	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
52. BAYSIDE #5		61	10	0.0	98.6	16.4	29,000	GAS	280	1,035,714	290.0	1,348	13.48	4.81
53. BAYSIDE #6		61	10	0.0	98.6	16.4	29,000	GAS	280	1,035,714	290.0	1,348	13.48	4.81
54. BAYSIDE STATION TOTAL		2,083	642,430	41.5	91.4	48.5	7,501	GAS	4,687,800	1,027,998	4,819,050.0	22,568,604	3.51	4.81
55. SYSTEM TOTAL		6,334	1,496,920	31.8	70.6	79.9	6,856	-	<u> </u>		10,262,680.0	45,704,776	3.05	

LEGEND:

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

ST = STEAM TURBINE

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

(4) In Simple Cycle Mode

(3) AC rating

TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: APRIL 2022

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPA- BILITY	NET GENERATION	NET CAPACITY FACTOR	EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
	(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) ⁽²⁾	(\$) ⁽¹⁾	(cents/KWH)	(\$/UNIT)
1. TIA SOLAR	1.6	320	27.8	-	27.8	-	SOLAR	-	-	-	-	-	-
2. BIG BEND SOLAR	19.3	300	2.2	-	2.2	-	SOLAR	-	-	-	-	-	-
LEGOLAND SOLAR	1.5	4,620	427.8	-	427.8	-	SOLAR	-	-	-	-	-	-
PAYNE CREEK SOLAR	70.1	17,310	34.3	-	34.3	-	SOLAR	-	-	-	-	-	-
5. BALM SOLAR	74.2	18,040	33.8	-	33.8	-	SOLAR	-	-	-	-	-	-
LITHIA SOLAR	74.3	19,530	36.5	-	36.5	-	SOLAR	-	-	-	-	-	-
7. GRANGE HALL SOLAR	60.8	14,530	33.2	-	33.2	-	SOLAR	-	-	-	-	-	-
8. PEACE CREEK SOLAR	54.8	13,270	33.6	-	33.6	-	SOLAR	-	-	-	-	-	-
9. BONNIE MINE SOLAR	37.4	9,200	34.2	-	34.2	-	SOLAR	-	-	-	-	-	-
10. LAKE HANCOCK SOLAR	49.4	11,550	32.5	-	32.5	-	SOLAR	-	-	-	-	-	-
11. WIMAUMA SOLAR	74.7	18,700	34.8	-	34.8	-	SOLAR	-	-	-	-	-	-
12. LITTLE MANATEE RIVER SOLAR	74.3	19,600	36.6	-	36.6	-	SOLAR	-	-	-	-	-	-
13. DURRANCE SOLAR	59.8	15,160	35.2	-	35.2	-	SOLAR	-	-	-	-	-	-
14. FUTURE SOLAR	24.9	6,190.0	34.5	-	34.5	-	SOLAR	-	-	-	-	-	-
15. FUTURE SOLAR	74.3	13,000.0	24.3	-	24.3	-	SOLAR	-	-	-	-	-	-
16. FUTURE SOLAR	52.3	18,450.0	49.0	-	49.0	-	SOLAR	-	-	-	-	-	-
17. FUTURE SOLAR	74.3	18,450.0	34.5		34.5		SOLAR	<u> </u>	<u> </u>	<u> </u>			
18. SOLAR TOTAL	³⁾ 878.0	218,220	34.5	-	34.5	-	SOLAR	-	-	-	-	-	-
19. BIG BEND #1 CC TOTAL	0	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
20. BIG BEND #2 TOTAL	340	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
21. B.B.#3 (GAS)	345	0	0.0	-	-	-	GAS	0	0	0.0	0	0.00	0.00
22. B.B.#3 (COAL)	395	0	0.0	-	-	-	COAL	0	0	0.0	0	0.00	0.00
23. BIG BEND #3 TOTAL	345	0	0.0	82.1	0.0	0				0.0	0	0.00	-
24. B.B.#4 (GAS)	155	4,870	4.4	-	-	-	GAS	57,840	1,028,008	59,460.0	251,201	5.16	4.34
25. B.B.#4 (COAL)	422	92,550	30.5				COAL	50,210	22,499,303	1,129,690.0	3,175,693	3.43	63.25
26. BIG BEND #4 TOTAL	422	97,420	32.1	65.5	47.7	12,206		-	-	1,189,150.0	3,426,894	3.52	-
27. B.B. IGNITION	-	-	-	-	-	-	GAS	7,100	1,026,761	7,290.0	30,835	-	4.34
28. B.B.C.T.#4 TOTAL	56	0	0.0	78.6	0.0	0	GAS	0	0	0.0	0	0.00	0.00
29. B.B.C.T.#5 TOTAL	330	32.340	13.6	95.9	100.0	9.428	GAS	296.590	1.027.985	304.890.0	1.288.095	3.98	4.34
30. B.B.C.T.#6 TOTAL	330	7,960	3.4	96.1	56.1	9,922	GAS	76,830	1,027,984	78,980.0	333,674	4.19	4.34
31. BIG BEND STATION TOTAL	1,823	137,720	10.5	67.8	54.9	11,422	-	-	-	1,573,020.0	5,079,498	3.69	-
32. POLK #1 GASIFIER	220	0	0.0	-	0.0	0	COAL	0	0	0.0	0	0.00	0.00
33. POLK #1 CT (GAS)	210	15.840	10.5	-	80.2	8.912	GAS	137.310	1.028.039	141.160.0	596.340	3.76	4.34
34. POLK #1 TOTAL	220	15,840	10.0	93.8	80.2	8,912			-	141,160.0	596,340	3.76	-
35. POLK #2 ST DUCT FIRING	120	6,900	8.0	-	62.5	8,280	GAS	55,570	1,028,073	57,130.0	241,341	3.50	4.34
36. POLK #2 ST W/O DUCT FIRING	341	528,880		-				3,557,535	1,028,001	3,657,150.0	15,450,435	2.92	4.34
37. POLK #2 ST TOTAL	461	535,780	161.4	-	144.9	6,932	GAS	-	-	3,714,280.0	15,691,776	2.93	-
38. POLK #2 CT (GAS)	150	1.010	0.9	_	96.2	10.822	GAS	10.640	1.027.256	10.930.0	46.210	4.58	4 34
39. POLK #2 CT (OIL)	159	150	0.1	-	94.3	13,000	LGT OIL	333	5.855.856	1,950.0	45.098	30.07	135 43
40. POLK #2 TOTAL (4	4) 150	1,160	1.1		95.9	11,103	-		-	12,880.0	91,308	7.87	-
41. POLK #3 CT (GAS)	150	860	0.8	-	95.6	10,756	GAS	8,990	1,028,921	9,250.0	39,044	4.54	4.34
42. POLK #3 CT (OIL)	159	150	0.1		94.3	13,000	LGT OIL	332	5,873,494	1,950.0	44,963	29.98	135.43
43. POLK #3 TOTAL (4	4) 150	1,010	0.9	-	95.4	11,089	-	-	-	11,200.0	84,007	8.32	-

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SCHEDULE E4

DOCKET NO. 20210001-EI EXHIBIT NO. MAS-3 DOCUMENT NO. 2, PAGE 16 OF 42

TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: APRIL 2022

(A)		(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT		NET CAPA- BILITY	NET GENERATION	NET CAPACITY FACTOR	EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
		(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) ⁽²⁾	(\$) ⁽¹⁾	(cents/KWH)	(\$/UNIT)
44. POLK #4 CT (GAS) TOTAL	(4)	150	860	0.8	-	95.6	10,849	GAS	9,070	1,028,666	9,330.0	39,391	4.58	4.34
45. POLK #5 CT (GAS) TOTAL	(4)	150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
46. POLK #2 CC TOTAL		1,061	538,810	70.5	97.4	143.7	6,955	-	-	-	3,747,690.0	15,906,482	2.95	-
47. POLK STATION TOTAL		1,281	554,650	60.1	96.8	137.2	7,011		-	-	3,888,850.0	16,502,822	2.98	-
48. BAYSIDE #1		720	353,440	68.2	96.6	70.6	7,372	GAS	2,534,590	1,027,997	2,605,550.0	11,007,768	3.11	4.34
49. BAYSIDE #2		954	324,850	47.3	51.9	48.6	7,666	GAS	2,422,490	1,028,000	2,490,320.0	10,520,915	3.24	4.34
50. BAYSIDE #3		56	290	0.7	98.6	86.3	12,103	GAS	3,400	1,032,353	3,510.0	14,766	5.09	4.34
51. BAYSIDE #4		56	170	0.4	78.9	101.2	11,765	GAS	1,950	1,025,641	2,000.0	8,469	4.98	4.34
52. BAYSIDE #5		56	290	0.7	78.9	86.3	11,862	GAS	3,340	1,029,940	3,440.0	14,506	5.00	4.34
53. BAYSIDE #6		56	380	0.9	78.9	84.8	12,053	GAS	4,460	1,026,906	4,580.0	19,370	5.10	4.34
54. BAYSIDE STATION TOTAL		1,898	679,420	49.7	72.6	58.1	7,520	GAS	4,970,230	1,028,001	5,109,400.0	21,585,794	3.18	4.34
55. SYSTEM TOTAL		5,880	1,590,010	37.6	65.6	93.7	6,649	-			10,571,270.0	43,168,114	2.71	

(3) AC rating

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

(4) In Simple Cycle Mode

LEGEND:

B.B. = BIG BEND CT CC = COMBINED CYCLE ST

CT = COMBUSTION TURBINE E ST = STEAM TURBINE

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DOCKET NO. 20210001-EI EXHIBIT NO. MAS-3 DOCUMENT NO. 2, PAGE 17 OF 42

TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: MAY 2022

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPA- BILITY	NET GENERATION	NET CAPACITY FACTOR	EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
	(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) ⁽²⁾	(\$) ⁽¹⁾	(cents/KWH)	(\$/UNIT)
1. TIA SOLAR	1.6	340	28.6	-	28.6	-	SOLAR	-	-	-	-	-	-
2. BIG BEND SOLAR	19.3	320	2.2	-	2.2	-	SOLAR	-	-	-	-	-	-
LEGOLAND SOLAR	1.5	4,990	447.1	-	447.1	-	SOLAR	-	-	-	-	-	-
PAYNE CREEK SOLAR	70.1	19,440	37.3	-	37.3	-	SOLAR	-	-	-	-	-	-
5. BALM SOLAR	74.2	20,230	36.6	-	36.6	-	SOLAR	-	-	-	-	-	-
LITHIA SOLAR	74.3	20,350	36.8	-	36.8	-	SOLAR	-	-	-	-	-	-
GRANGE HALL SOLAR	60.8	16,270	36.0	-	36.0	-	SOLAR	-	-	-	-	-	-
PEACE CREEK SOLAR	54.8	14,840	36.4	-	36.4	-	SOLAR	-	-	-	-	-	-
BONNIE MINE SOLAR	37.4	10,020	36.0	-	36.0	-	SOLAR	-	-	-	-	-	-
LAKE HANCOCK SOLAR	49.4	12,910	35.1	-	35.1	-	SOLAR	-	-	-	-	-	-
11. WIMAUMA SOLAR	74.7	20,170	36.3	-	36.3	-	SOLAR	-	-	-	-	-	-
12. LITTLE MANATEE RIVER SOLAR	74.3	20,410	36.9	-	36.9	-	SOLAR	-	-	-	-	-	-
13. DURRANCE SOLAR	59.8	17,040	38.3	-	38.3	-	SOLAR	-	-	-	-	-	-
14. FUTURE SOLAR	24.9	6,940.0	37.5	-	37.5	-	SOLAR	-	-	-	-	-	-
15. FUTURE SOLAR	74.3	14,580.0	26.4	-	26.4	-	SOLAR	-	-	-	-	-	-
16. FUTURE SOLAR	52.3	20,700.0	53.2	-	53.2	-	SOLAR	-	-	-	-	-	-
17. FUTURE SOLAR	74.3	20,700.0	37.4		37.4	-	SOLAR				-	-	-
18. SOLAR TOTAL (3	878.0	240,250	36.8	-	36.8	-	SOLAR	-	-	-	-	-	-
19. BIG BEND #1 CC TOTAL	0	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
20. BIG BEND #2 TOTAL	340	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
21 B B #3 (GAS)	345	0	0.0	_	-	-	GAS	0	0	0.0	0	0.00	0.00
22 B B #3 (COAL)	395	0	0.0	-	-	-	COAL	ů 0	0	0.0	Ő	0.00	0.00
23. BIG BEND #3 TOTAL	395	0	0.0	82.1	0.0	0	00/12			0.0	0	0.00	-
24 B B #4 (CAS)	165	7 100	6.0				CAS	84.000	1 028 022	96 590 0	260 201	E 01	4.00
24. B.B.#4 (GAS)	100	126.640	0.2	-	-	-	GAS	04,220	1,020,022	00,000.0	300,201	3.01	4.20
25. B.B.#4 (COAL) 26. BIG BEND #4 TOTAL	422	143.830	43.5	89.3	50.0	12.039	COAL	- 73,110	22,500,205	1,644,990.0	4,571,140	3.35	62.52
		,				,				.,,	-,,		
27. B.B. IGNITION	-	-	-	-	-	-	GAS	2,090	1,028,708	2,150.0	8,939	-	4.28
28. B.B.C.T.#4 TOTAL	56	10	0.0	98.3	17.9	31,000	GAS	300	1,033,333	310.0	1,283	12.83	4.28
29. B.B.C.T.#5 TOTAL	330	41,580	16.9	96.9	100.0	9,424	GAS	381,160	1,027,993	391,830.0	1,630,189	3.92	4.28
30. B.B.C.T.#6 TOTAL	330	11,420	4.7	96.1	58.7	9,789	GAS	108,740	1,028,049	111,790.0	465,072	4.07	4.28
31. BIG BEND STATION TOTAL	1,873	196,840	14.1	74.4	56.4	11,357	-	-	-	2,235,500.0	7,036,824	3.57	-
32. POLK #1 GASIFIER	220	0	0.0	-	0.0	0	COAL	0	0	0.0	0	0.00	0.00
33. POLK #1 CT (GAS)	210	6,550	4.2	-	86.6	8,777	GAS	55,920	1,028,076	57,490.0	239,165	3.65	4.28
34. POLK #1 TOTAL	220	6,550	4.0	72.6	86.6	8,777	-	-	-	57,490.0	239,165	3.65	-
35 POLK #2 ST DUCT FIRING	120	18 460	20.7		77 3	8 274	GAS	148 580	1 027 998	152 740 0	635 464	3 44	4 28
36 POLK #2 ST W/O DUCT FIRING	3/1	600 860	20.7		11.5	0,274	0A0	4 040 365	1,027,330	1 153 500 0	17 280 204	2.88	4.20
37. POLK #2 ST TOTAL	461	619,320	180.6		144.0	6,953	GAS	-	-	4,306,240.0	17,915,758	2.89	-
	450	4 050	4.0		100.0	40.074	040	11.000	4 007 047	44.442.2	50.000		
38. POLK #2 CT (GAS)	150	1,350	1.2	-	100.0	10,674	GAS	14,020	1,027,817	14,410.0	59,963	4.44	4.28
39. POLK #2 CT (OIL)	159	150	0.1		94.3	13,000	LGTUIL	333	5,855,856	1,950.0	44,916	29.94	134.88
40. POLK #2 101AL (4	7 150	1,500	1.3	-	99.4	10,907	-	-	-	16,360.0	104,879	6.99	-
41. POLK #3 CT (GAS)	150	1,200	1.1	-	100.0	10,742	GAS	12,550	1,027,092	12,890.0	53,675	4.47	4.28
42. POLK #3 CT (OIL)	159	150	0.1		94.3	13,000	LGT OIL	332	5,873,494	1,950.0	44,781	29.85	134.88
43. POLK #3 TOTAL (4	¹⁾ 150	1,350	1.2	-	99.3	10,993		-	-	14,840.0	98,456	7.29	-

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SCHEDULE E4

DOCKET NO. 20210001-EI EXHIBIT NO. MAS-3 DOCUMENT NO. 2, PAGE 18 OF 42

TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: MAY 2022

(A)		(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT		NET CAPA- BILITY	NET GENERATION	NET CAPACITY FACTOR	EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
		(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) ⁽²⁾	(\$) ⁽¹⁾	(cents/KWH)	(\$/UNIT)
44. POLK #4 CT (GAS) TOTAL	(4)	150	600	0.5	-	100.0	10,767	GAS	6,280	1,028,662	6,460.0	26,859	4.48	4.28
45. POLK #5 CT (GAS) TOTAL	(4)	150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
46. POLK #2 CC TOTAL		1,061	622,770	78.9	97.4	142.9	6,975		-	-	4,343,900.0	18,145,952	2.91	-
47. POLK STATION TOTAL		1,281	629,320	66.0	93.2	140.9	6,994		-	-	4,401,390.0	18,385,117	2.92	-
48. BAYSIDE #1		720	391,490	73.1	96.6	75.5	7,345	GAS	2,797,030	1,028,001	2,875,350.0	11,962,657	3.06	4.28
49. BAYSIDE #2		954	384,720	54.2	97.3	57.7	7,552	GAS	2,826,390	1,028,000	2,905,530.0	12,088,227	3.14	4.28
50. BAYSIDE #3		56	1,310	3.1	98.6	86.6	11,771	GAS	15,000	1,028,000	15,420.0	64,154	4.90	4.28
51. BAYSIDE #4		56	630	1.5	98.6	93.8	11,841	GAS	7,250	1,028,966	7,460.0	31,008	4.92	4.28
52. BAYSIDE #5		56	1,590	3.8	98.6	86.0	11,748	GAS	18,180	1,027,503	18,680.0	77,754	4.89	4.28
53. BAYSIDE #6		56	1,320	3.2	79.5	87.3	11,818	GAS	15,180	1,027,668	15,600.0	64,924	4.92	4.28
54. BAYSIDE STATION TOTAL		1,898	781,060	55.3	96.6	65.6	7,475	GAS	5,679,030	1,027,999	5,838,040.0	24,288,724	3.11	4.28
55. SYSTEM TOTAL		5,930	1,847,470	41.9	74.5	101.2	6,752				12,474,930.0	49,710,665	2.69	

(3) AC rating

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

LEGEND:

B.B. = BIG BEND CT = CC = COMBINED CYCLE ST =

CT = COMBUSTION TURBINE E ST = STEAM TURBINE

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(4) In Simple Cycle Mode

DOCKET NO. 20210001-EI EXHIBIT NO. MAS-3 DOCUMENT NO. 2, PAGE 19 OF 42

TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: JUNE 2022

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPA- BILITY	NET GENERATION	NET CAPACITY FACTOR	EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
	(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) ⁽²⁾	(\$) ⁽¹⁾	(cents/KWH)	(\$/UNIT)
1. TIA SOLAR	1.6	290	25.2	-	25.2	-	SOLAR	-	-	-	-	-	-
2. BIG BEND SOLAR	19.3	290	2.1	-	2.1	-	SOLAR	-	-	-	-	-	-
LEGOLAND SOLAR	1.5	4,420	409.3	-	409.3	-	SOLAR	-	-	-	-	-	-
PAYNE CREEK SOLAR	70.1	16,790	33.3	-	33.3	-	SOLAR	-	-	-	-	-	-
5. BALM SOLAR	74.2	17,430	32.6	-	32.6	-	SOLAR	-	-	-	-	-	-
6. LITHIA SOLAR	74.3	17,440	32.6	-	32.6	-	SOLAR	-	-	-	-	-	-
GRANGE HALL SOLAR	60.8	14,020	32.0	-	32.0	-	SOLAR	-	-	-	-	-	-
PEACE CREEK SOLAR	54.8	12,800	32.4	-	32.4	-	SOLAR	-	-	-	-	-	-
BONNIE MINE SOLAR	37.4	8,680	32.2	-	32.2	-	SOLAR	-	-	-	-	-	-
LAKE HANCOCK SOLAR	49.4	11,120	31.3	-	31.3	-	SOLAR	-	-	-	-	-	-
11. WIMAUMA SOLAR	74.7	16,570	30.8	-	30.8	-	SOLAR	-	-	-	-	-	-
12. LITTLE MANATEE RIVER SOLAR	74.3	17,510	32.7	-	32.7	-	SOLAR	-	-	-	-	-	-
13. DURRANCE SOLAR	59.8	14,740	34.2	-	34.2	-	SOLAR	-	-	-	-	-	-
14. FUTURE SOLAR	24.9	5,950.0	33.2	-	33.2	-	SOLAR	-	-	-	-	-	-
15. FUTURE SOLAR	74.3	12,500.0	23.4	-	23.4	-	SOLAR	-	-	-	-	-	-
16. FUTURE SOLAR	52.3	17,740.0	47.1	-	47.1	-	SOLAR	-	-	-	-	-	-
17. FUTURE SOLAR	74.3	17,740.0	33.2		33.2	-	SOLAR				-	-	-
18. SOLAR TOTAL	878.0	206,030	32.6	-	32.6	-	SOLAR	-	-	-	-	-	-
19. BIG BEND #1 CC TOTAL	0	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
20. BIG BEND #2 TOTAL	340	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
21. B.B.#3 (GAS)	345	51.360	20.7	-	-	-	GAS	582.810	1.027.985	599.120.0	2.429.064	4.73	4.17
22. B.B.#3 (COAL)	395	0	0.0	-	-	-	COAL	0	0	0.0	_,,, 0	0.00	0.00
23. BIG BEND #3 TOTAL	345	51,360	20.7	82.1	60.0	11,665		-	-	599,120.0	2,429,064	4.73	-
24 BB#4 (GAS)	155	7 620	6.8	_	-	-	GAS	87 040	1 027 918	89 470 0	362 770	4 76	4 17
25 BB#4 (COAL)	422	144 780	47.7	-	-	-	COAL	75.560	22 498 677	1 700 000 0	4 730 807	3 27	62.61
26. BIG BEND #4 TOTAL	422	152,400	50.2	89.3	54.7	11,742	00/12	-	-	1,789,470.0	5,093,577	3.34	-
27. B.B. IGNITION	-	-	-	-	-	-	GAS	21,290	1,028,182	21,890.0	88,734	-	4.17
	56	2 150	53	98.3	85 3	11 795	GAS	24 660	1 028 386	25 360 0	102 779	4 78	4 17
20. B.B.C.T.#5 TOTAL	330	52 070	21.9	96.9	22.3	11,755	GAS	595 240	1,020,300	611 900 0	2 /80 871	4.76	4.17
30. B.B.C.T.#6 TOTAL	330	12,960	5.5	96.1	5.6	19,951	GAS	251,520	1,027,990	258,560.0	1,048,298	8.09	4.17
31. BIG BEND STATION TOTAL	1,823	270,940	20.6	74.1	32.5	12,122	-	-		3,284,410.0	11,243,323	4.15	-
32. POLK #1 GASIFIER	220	0	0.0	-	0.0	0	COAL	0	0	0.0	0	0.00	0.00
33. POLK #1 CT (GAS)	210	59.650	39.5	-	87.1	8.781	GAS	509.530	1.028.006	523.800.0	2.123.645	3.56	4.17
34. POLK #1 TOTAL	220	59,650	37.7	93.8	87.1	8,781	-	-	-	523,800.0	2,123,645	3.56	-
	120	27 910	30.3		02.3	8 275	GAS	224 670	1 027 007	230 960 0	036 301	3 36	4 17
36 POLK #2 ST W/O DUCT FIRMO	3/1	504 750	52.5	-	32.3	0,275	540	3 008 515	1,021,001	4 110 400 0	16 665 211	2.30	4.17
37. POLK #2 ST TOTAL	461	622,660	187.6		141.0	6,972	GAS	- 3,330,313	1,020,004	4,341,450.0	17,601,602	2.83	
28 DOLK #2 CT (CAO)	450	000			400.0	40 700	CAS	0.400	1 000 754	0.000.0	10.044	4.05	4.47
38. POLK #2 CT (GAS)	150	300	0.3	-	100.0	10,733	GAS	3,130	1,028,754	3,220.0	13,044	4.35	4.17
39. POLK #2 C1 (OIL)	159	150	0.1		94.3	13,000	LGT UIL	333	5,855,856	1,950.0	44,/33	29.82	134.33
40. POLK #2 101AL	150	450	0.4	-	98.0	11,489	-	-	-	5,170.0	51,111	12.84	-
41. POLK #3 CT (GAS)	150	300	0.3	-	100.0	11,000	GAS	3,210	1,028,037	3,300.0	13,379	4.46	4.17
42. POLK #3 CT (OIL)	159	150	0.1		94.3	13,000	LGT OIL	332	5,873,494	1,950.0	44,599	29.73	134.33
43. POLK #3 TOTAL (4	¹⁾ 150	450	0.4	-	98.0	11,667	-	-	-	5,250.0	57,978	12.88	-

37

SCHEDULE E4

DOCKET NO. 20210001-EI EXHIBIT NO. MAS-3 DOCUMENT NO. 2, PAGE 20 OF 42

TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: JUNE 2022

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPA- BUITY	NET GENERATION		EQUIV. AVAIL.	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
	(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) (2)	(\$) ⁽¹⁾	(cents/KWH)	(\$/UNIT)
44. POLK #4 CT (GAS) TOTAL	⁽⁴⁾ 150	300	0.3	-	100.0	11,000	GAS	3,210	1,028,037	3,300.0	13,379	4.46	4.17
45. POLK #5 CT (GAS) TOTAL	⁽⁴⁾ 150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
46. POLK #2 CC TOTAL	1,061	623,860	81.7	97.4	140.6	6,981	-	-	-	4,355,170.0	17,730,736	2.84	-
47. POLK STATION TOTAL	1,281	683,510	74.1	96.8	127.1	7,138	-	-	-	4,878,970.0	19,854,381	2.90	-
48. BAYSIDE #1	720	396,130	76.4	96.6	79.0	7,325	GAS	2,822,700	1,027,998	2,901,730.0	11,764,590	2.97	4.17
49. BAYSIDE #2	954	416,000	60.6	97.3	63.0	7,501	GAS	3,035,300	1,027,997	3,120,280.0	12,650,675	3.04	4.17
50. BAYSIDE #3	56	5,410	13.4	98.6	89.5	11,603	GAS	61,050	1,028,174	62,770.0	254,447	4.70	4.17
51. BAYSIDE #4	56	4,370	10.8	98.6	89.7	11,643	GAS	49,500	1,027,879	50,880.0	206,309	4.72	4.17
52. BAYSIDE #5	56	6,820	16.9	98.6	85.8	11,729	GAS	77,810	1,028,017	79,990.0	324,300	4.76	4.17
53. BAYSIDE #6	56	5,410	13.4	98.6	86.3	11,713	GAS	61,640	1,028,066	63,370.0	256,906	4.75	4.17
54. BAYSIDE STATION TOTAL	1,898	834,140	61.0	97.2	70.3	7,528	GAS	6,108,000	1,027,999	6,279,020.0	25,457,227	3.05	4.17
55. SYSTEM TOTAL	5,880	1,994,620	47.1	75.4	84.4	7,241				14,442,400.0	56,554,931	2.84	

(3) AC rating

As burned fuel cost system total includes ignition
 Fuel burned (MM BTU) system total excludes ignition

LEGEND:

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

ST = STEAM TURBINE

3000

(4) In Simple Cycle Mode

DOCKET NO. 20210001-EI EXHIBIT NO. MAS-3 DOCUMENT NO. 2, PAGE 21 OF 42

TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: JULY 2022

PLANTINIT NET BLAY NET PLANTINIT NET PLANTINIT <th>(A)</th> <th>(B)</th> <th>(C)</th> <th>(D)</th> <th>(E)</th> <th>(F)</th> <th>(G)</th> <th>(H)</th> <th>(I)</th> <th>(J)</th> <th>(K)</th> <th>(L)</th> <th>(M)</th> <th>(N)</th>	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
DAMO DAMOB PS PS DTUKKMP UNITS ØTUUNT ØM BTU ^R IP ¹⁰ (embsKVMP) (EAUK) 2. PORPO SOLAR 13.3 200 20 2.0 2.0 SOLAR 	PLANT/UNIT	NET CAPA- BILITY	NET GENERATION	NET CAPACITY FACTOR	EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
1 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10 10		(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) ⁽²⁾	(\$) ⁽¹⁾	(cents/KWH)	(\$/UNIT)
2. BIG BUND SCLAR 2. BIG BUND SCLAR 1. BOYNE	1. TIA SOLAR	1.6	290	24.4	-	24.4	-	SOLAR	-	-	-	-	-	-
3. LECOLARD SULAR 1.5 4.770 382.5 - 382.5 - 382.5 - 382.5 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <td>2. BIG BEND SOLAR</td> <td>19.3</td> <td>290</td> <td>2.0</td> <td>-</td> <td>2.0</td> <td>-</td> <td>SOLAR</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>	2. BIG BEND SOLAR	19.3	290	2.0	-	2.0	-	SOLAR	-	-	-	-	-	-
4 PANCECREEK SOLAR 70.1 162.70 31.2 - 31.2 - SOLAR - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	LEGOLAND SOLAR	1.5	4,270	382.6	-	382.6	-	SOLAR	-	-	-	-	-	-
5. BALM BCAR 7.2 16380 3.8.5 - 30.5 - 30.4 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <td< td=""><td>PAYNE CREEK SOLAR</td><td>70.1</td><td>16,270</td><td>31.2</td><td>-</td><td>31.2</td><td>-</td><td>SOLAR</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></td<>	PAYNE CREEK SOLAR	70.1	16,270	31.2	-	31.2	-	SOLAR	-	-	-	-	-	-
5. LITHINGCLAR A 74.3 172.0 312 - 312 - 312 - 30.4	5. BALM SOLAR	74.2	16,880	30.6	-	30.6	-	SOLAR	-	-	-	-	-	-
C - GENACE HALL SOLAR 00.6 1 5500 300 . 300 . SOLAR 	LITHIA SOLAR	74.3	17,240	31.2	-	31.2	-	SOLAR	-	-	-	-	-	-
B PEACE CREEK SOLAR 54.8 12.40 30.4 - 30.4 - SOLAR - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	GRANGE HALL SOLAR	60.8	13,590	30.0	-	30.0	-	SOLAR	-	-	-	-	-	-
0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	 PEACE CREEK SOLAR 	54.8	12,410	30.4	-	30.4	-	SOLAR	-	-	-	-	-	-
10. LAKE INANCOCK SOLAR 44 10. 700 22.3 - 23.3 - SOLAR - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	BONNIE MINE SOLAR	37.4	8,460	30.4	-	30.4	-	SOLAR	-	-	-	-	-	-
11. MMAUMSCLAR FOR SOLAR 747, 10.300 20.4 . 294 . 2014 2014 . 2014 . 2014 . 2014	LAKE HANCOCK SOLAR	49.4	10,760	29.3	-	29.3	-	SOLAR	-	-	-	-	-	-
12. LTLE MAATE ENVERSOLAR 74.3 17.300 31.3 - 31.3 - 31.3 - 13.4 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <td< td=""><td>11. WIMAUMA SOLAR</td><td>74.7</td><td>16,330</td><td>29.4</td><td>-</td><td>29.4</td><td>-</td><td>SOLAR</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></td<>	11. WIMAUMA SOLAR	74.7	16,330	29.4	-	29.4	-	SOLAR	-	-	-	-	-	-
13. DLRANCE SOLAR 59.0 14.200 32.1 - SOLAR - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <	12. LITTLE MANATEE RIVER SOLAR	74.3	17,300	31.3	-	31.3	-	SOLAR	-	-	-	-	-	-
14. FUTURE SOLAR 24.9 5,770.0 31.1 - 31.1 - SOLAR - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	13. DURRANCE SOLAR	59.8	14,280	32.1	-	32.1	-	SOLAR	-	-	-	-	-	-
15. FUTURE SOLAR 74.3 12,1100 21.9 - 21.9 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	14. FUTURE SOLAR	24.9	5,770.0	31.1	-	31.1	-	SOLAR	-	-	-	-	-	-
16 FUTURE SOLAR 52.3 17,190.0 44.2 - 44.2 - SOLAR - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	15. FUTURE SOLAR	74.3	12,110.0	21.9	-	21.9	-	SOLAR	-	-	-	-	-	-
17. FUTURE SOLAR p 74.3 17.1900 31.1 . 30.1 . SOLAR 	16. FUTURE SOLAR	52.3	17,190.0	44.2	-	44.2	-	SOLAR	-	-	-	-	-	-
18. SOLAR TOTAL 0 87.0 200,530 30.7 - SOLAR - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	17. FUTURE SOLAR	74.3	17,190.0	31.1		31.1	-	SOLAR					-	-
19. BIG BEND #1 CC TOTAL 0 0 0.0 0.0 0.0 0.0 0.0 0.0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	18. SOLAR TOTAL (3)	878.0	200,630	30.7	-	30.7	-	SOLAR	-	-	-	-	-	-
20. BIG BEND #2 TOTAL 340 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	19. BIG BEND #1 CC TOTAL	0	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
21 B B 30 (GAS) 345 50,200 19,6 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <td>20. BIG BEND #2 TOTAL</td> <td>340</td> <td>0</td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0</td> <td>GAS</td> <td>0</td> <td>0</td> <td>0.0</td> <td>0</td> <td>0.00</td> <td>0.00</td>	20. BIG BEND #2 TOTAL	340	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	21. B.B.#3 (GAS)	345	50.200	19.6	-	-	-	GAS	580.440	1.027.996	596.690.0	2,432,654	4.85	4.19
23. BIG DEND #3 TOTAL 24. 54. 55.1 11,886 2000 1 2.4. 55.1 11,886 2000 1.028,034 1.028,034 1.028,034 1.028,034 1.028,034 1.028,034 1.028,034 1.028,034 1.028,034 1.028,034 1.028,034 1.028,034 1.028,034 1.028,034 1.028,034 1.028,034 1.028,034 1.028,034 1.028,034 1.028,034 1.028,034 1.028,034 1.028,034 1.028,034 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045 1.028,045	22 B B #3 (COAL)	395	0,200	0.0	-	-	-	COAL	0	1,021,000	0.0	2,102,001	0.00	0.00
24. B.B.# (GAS) 155 8.120 7.0 </td <td>23. BIG BEND #3 TOTAL</td> <td>345</td> <td>50,200</td> <td>19.6</td> <td>82.1</td> <td>55.1</td> <td>11,886</td> <td></td> <td></td> <td><u> </u></td> <td>596,690.0</td> <td>2,432,654</td> <td>4.85</td> <td>-</td>	23. BIG BEND #3 TOTAL	345	50,200	19.6	82.1	55.1	11,886			<u> </u>	596,690.0	2,432,654	4.85	-
25 B B#4 (COAL) 422 154.270 49.1 - - - - 79,890 22,499,812 1,797,510.0 5,010,824 3.25 62.72 26 BIG BEND #4 TOTAL 422 162,390 51.7 89.3 56.4 11,652 - - - 1,992,120.0 5,396,596 3.32 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	24 BB#4 (GAS)	155	8 120	7.0			_	GAS	92 030	1 028 034	94 610 0	385 702	4 75	4 19
22.6 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 1023200 10200 1	25 BB#4 (COAL)	422	154 270	49.1	_	_	_	COAL	79,890	22 499 812	1 797 510 0	5 010 894	3 25	62 72
27. B.B. IGNITION - - - - - - GAS 16,280 1,028,256 16,740.0 68,230 - 4.19 28. B.G.T.#A TOTAL 330 57,960 23.6 96.9 24.1 3,101 GAS 513,150 1,028,093 34,400.0 140,233 4.96 4.19 30. B.G.T.#F TOTAL 330 57,960 23.6 96.9 24.1 3,101 GAS 513,150 1,028,004 527,520.0 2,150,637 3,71 4.19 31. BIG BEND STATION TOTAL 1,823 273,380 20.2 74.1 31.6 11,160 - - - 3,050,810.0 10,188,685 3.73 - 32. POLK #1 CGASIFIER 220 55,670 35.6 - 67.2 8.779 GAS 475.360 10,028,020 488,700.0 1,992,341 3.58 - - - - 488,700.0 1,992,341 3.58 - - - 488,700.0 1,992,341 3.58 - - - - - - - - - - <td< td=""><td>26. BIG BEND #4 TOTAL</td><td>422</td><td>162,390</td><td>51.7</td><td>89.3</td><td>56.4</td><td>11,652</td><td>00/12</td><td>- 10,000</td><td>-</td><td>1,892,120.0</td><td>5,396,596</td><td>3.32</td><td>-</td></td<>	26. BIG BEND #4 TOTAL	422	162,390	51.7	89.3	56.4	11,652	00/12	- 10,000	-	1,892,120.0	5,396,596	3.32	-
28. B.B.C.T.#4 TOTAL 56 2,830 6.8 98.3 76.6 12,155 GAS 33,460 1,028,093 34,400.0 140,233 4.96 4.19 29. B.B.C.T.#5 TOTAL 330 57,960 23.6 96.9 24.1 9,101 GAS 513,150 1,028,093 34,400.0 21,50,637 3.71 4.19 30. B.B.C.T.#6 TOTAL 330 0 0.0 96.1 0.0 0 GAS 80 1,000,000 20.0 2,150,637 3.71 4.19 31. BIG BEND STATION TOTAL 1,823 273,380 20.2 74.1 31.6 11,160 - - - 3,050,810.0 10,188,685 3.73 - 32. POLK #1 GASIFIER 220 0 0 0.0 - 0.0 0 0 0.0 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 <td< td=""><td>27. B.B. IGNITION</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>GAS</td><td>16,280</td><td>1,028,256</td><td>16,740.0</td><td>68,230</td><td>-</td><td>4.19</td></td<>	27. B.B. IGNITION	-	-	-	-	-	-	GAS	16,280	1,028,256	16,740.0	68,230	-	4.19
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		56	2 920	6 9	08.2	76.6	10 155	GAS	22 460	1 029 002	24 400 0	140 222	4.96	4 19
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	20. B.B.C.T.#4 TOTAL	220	2,030	22.6	90.5	70.0	12,155	GAS	53,400	1,020,093	54,400.0	2 150 627	4.50	4.19
31. BIG BEND STATION TOTAL 1,823 273,380 20.2 74.1 31.6 11,160 - - - 3,050,810.0 10,188,685 3.73 - 32. POLK #1 GASIFIER 220 0 0 0 0 0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	30. B.B.C.T.#6 TOTAL	330	0	0.0	96.1	0.0	9,101	GAS	80	1,000,000	80.0	2,150,037	0.00	4.19
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	31. BIG BEND STATION TOTAL	1,823	273,380	20.2	74.1	31.6	11,160	-	-		3,050,810.0	10,188,685	3.73	-
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	32 POLK #1 GASIFIER	220	0	0.0	-	0.0	0	COAL	0	n	0.0	0	0.00	0.00
34. POLK #1 TOTAL 210 3000 312 01.4 01.79 0.60 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 10000 <	33 POLK #1 CT (GAS)	210	55 670	35.6	_	87.2	8 779	GAS	475.380	1 028 020	488 700 0	1 992 341	3 58	4 10
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	34. POLK #1 TOTAL	220	55,670	34.0	93.8	87.2	8,779	-	-	-	488,700.0	1,992,341	3.58	-
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		400	00.000	20.4		00.5	0.075	040	000 050	4 000 007	007 000 0	007 504	0.07	1.40
30. POLK #2 ST WO DUCL FINING 341 $017,480$ $ -$	35. POLK #2 ST DUCT FIRING	120	28,680	32.1	-	90.5	8,275	GAS	230,850	1,028,027	237,320.0	967,504	3.37	4.19
37. POLK #2 \$1 TOTAL 461 646,160 188.4 - 140.4 6,972 GAS - - 4,505,090.0 18,366,733 2.84 - 38. POLK #2 CT (GAS) 150 1,500 1.3 - 100.0 10,700 GAS 15,620 1,027,529 16,050.0 65,464 4.36 4.19 39. POLK #2 CT (OL) 159 150 0.1 - 94.3 13,000 LGT OLL 333 5,855,856 1,950.0 44,553 29.70 133.79 40. POLK #2 TOTAL (4) 150 1,050 0.9 - 99.5 10,909 - - - 18,000.0 110,017 6.67 - 41. POLK #3 CT (GAS) 150 1,050 0.9 - 100.0 10,686 GAS 10,910 1,028,414 11,220.0 45,724 4.35 4.19 42. POLK #3 CT (OL) 159 150 0.1 - 94.3 13,000 LGT OLL 332 5,873,494 1,950.0 44,420 29.61 133.80 43. POLK #3 CT (OL) 159 150	36. POLK #2 ST W/O DUCT FIRING	341	617,480	-		<u> </u>			4,151,525	1,028,001	4,267,770.0	17,399,249	2.82	4.19
38. POLK #2 CT (GAS) 150 1,500 1.3 - 100.0 10,700 GAS 15,620 1,027,529 16,050.0 65,464 4.36 4.19 39. POLK #2 CT (OIL) 159 150 0.1 - 94.3 13,000 LGT OIL 333 5,855,856 1,950.0 44,553 29.70 133.79 40. POLK #2 TOTAL (4) 150 1,050 0.9 - 99.5 10,909 - - - 18,000.0 110,017 6.67 - 41. POLK #3 CT (GAS) 150 1,050 0.9 - 100.0 10,686 GAS 10,910 1,028,414 11,220.0 45,724 4.35 4.19 42. POLK #3 CT (OIL) 159 150 0.1 - 94.3 13,000 LGT OIL 332 5,873,494 1,950.0 44,420 29.61 133.80 43. POLK #3 CT (OIL) 159 150 0.1 - 94.3 13,000 LGT OIL 332 5,873,494 1,950.0 44,420 29.61 133.80 43. POLK #3 CT (OIL) 159 150 <td>37. POLK #2 ST TOTAL</td> <td>461</td> <td>646,160</td> <td>188.4</td> <td>-</td> <td>140.4</td> <td>6,972</td> <td>GAS</td> <td>-</td> <td>-</td> <td>4,505,090.0</td> <td>18,366,753</td> <td>2.84</td> <td>-</td>	37. POLK #2 ST TOTAL	461	646,160	188.4	-	140.4	6,972	GAS	-	-	4,505,090.0	18,366,753	2.84	-
39. POLK #2 CT (OIL) 159 150 0.1 - 94.3 13,000 LGT OIL 333 5,855,856 1,950.0 44,553 29.70 133.79 40. POLK #2 TOTAL (4) 150 1,650 1.5 - 99.5 10,909 - - - 18,000.0 110,017 6.67 - - - 18,000.0 110,017 6.67 - - - 18,000.0 110,017 6.67 - - - 18,000.0 110,017 6.67 - - - - 18,000.0 110,017 6.67 - - - - 18,000.0 110,017 6.67 - - - - - 13,000 LGT OIL 10,010 1,028,414 11,220.0 45,724 4.35 4.19 42. POLK #3 CT (OIL) 159 150 0.1 - 99.3 13,000 LGT OIL 332 5,873,494 1,950.0 44,420 29.61 133.80 43. POLK #3 CT (OIL) 159 150 0.1 - 99.3 13,000 LGT OIL	38. POLK #2 CT (GAS)	150	1,500	1.3	-	100.0	10,700	GAS	15,620	1,027,529	16,050.0	65,464	4.36	4.19
40. POLK #2 TOTAL (4) 150 1,650 1.5 - 99.5 10,909 - - - 18,000.0 110,017 6.67 - 41. POLK #3 CT (GAS) 150 1,050 0.9 - 100.0 10,686 GAS 10,910 1,028,414 11,220.0 45,724 4.35 4.19 42. POLK #3 CT (OIL) 159 150 0.1 - 94.3 13,000 LGT OIL 332 5,873,494 1,950.0 44,420 29.61 133.800 43. POLK #3 CT (ALL) 150 1200 11 - 99.3 10,975 - - 13.170.0 90.144 7.51	39. POLK #2 CT (OIL)	159	150	0.1	-	94.3	13,000	LGT OIL	333	5,855,856	1,950.0	44,553	29.70	133.79
41. POLK #3 CT (GAS) 150 1,050 0.9 - 100.0 10,686 GAS 10,910 1,028,414 11,220.0 45,724 4.35 4.19 42. POLK #3 CT (OIL) 159 150 0.1 - 94.3 13,000 LGT OIL 332 5,873,494 1,950.0 44,420 29.61 133.80 43. POLK #3 TOTAL (9) 150 1200 11 - 99.3 10,975 - - 13.170.0 90.144 7.51	40. POLK #2 TOTAL (4)	150	1,650	1.5	· ·	99.5	10,909	•		-	18,000.0	110,017	6.67	-
42. POLK #3 TOTAL (9) 150 1200 11 - 94.3 13,000 LGT OIL 332 5,873,494 1,950.0 44,420 29.61 133.80 43. POLK #3 TOTAL (9) 150 1200 11 - 94.3 13,000 LGT OIL 332 5,873,494 1,950.0 44,420 29.61 133.80	41 POLK #3 CT (GAS)	150	1 050	0.9	_	100.0	10.686	GAS	10 910	1 028 414	11 220 0	45 724	4 35	⊿ 10
Te. Foldword (vole) 10 10 10 10 10 10 10 10 10 10 10 10 10	42 POLK #3 CT (OIL)	150	150	0.3	-	94 3	13 000		333	5 873 494	1 950 0	44 420	20.61	133.80
	43 POLK #3 TOTAL (4)	150	1 200	11		99.3	10,000	-			13 170 0	90 144	7.51	

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SCHEDULE E4

DOCKET NO. 20210001-EI EXHIBIT NO. MAS-3 DOCUMENT NO. 2, PAGE 22 OF 42

TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: JULY 2022

(A)		(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT		NET CAPA- BILITY	NET GENERATION		EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
		(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) ⁽²⁾	(\$) ⁽¹⁾	(cents/KWH)	(\$/UNIT)
44. POLK #4 CT (GAS) TOTAL	(4)	150	1,350	1.2	-	100.0	10,733	GAS	14,100	1,027,660	14,490.0	59,094	4.38	4.19
45. POLK #5 CT (GAS) TOTAL	(4)	150	1,200	1.1	-	100.0	10,742	GAS	12,550	1,027,092	12,890.0	52,598	4.38	4.19
46. POLK #2 CC TOTAL		1,061	651,560	82.5	97.4	139.0	7,004	-	-	-	4,563,640.0	18,678,606	2.87	-
47. POLK STATION TOTAL		1,281	707,230	74.2	96.8	127.3	7,144	-	-	-	5,052,340.0	20,670,947	2.92	-
48. BAYSIDE #1		720	416,240	77.7	96.6	80.3	7,318	GAS	2,963,250	1,028,000	3,046,220.0	12,419,129	2.98	4.19
49. BAYSIDE #2		954	452,840	63.8	97.3	65.7	7,476	GAS	3,293,140	1,028,001	3,385,350.0	13,801,715	3.05	4.19
50. BAYSIDE #3		56	5,710	13.7	98.6	84.3	11,764	GAS	65,330	1,028,165	67,170.0	273,801	4.80	4.19
51. BAYSIDE #4		56	4,890	11.7	98.6	85.6	11,722	GAS	55,780	1,027,608	57,320.0	233,777	4.78	4.19
52. BAYSIDE #5		56	7,050	16.9	98.6	86.2	11,672	GAS	80,060	1,027,854	82,290.0	335,535	4.76	4.19
53. BAYSIDE #6		56	6,420	15.4	98.6	84.3	11,746	GAS	73,360	1,027,944	75,410.0	307,455	4.79	4.19
54. BAYSIDE STATION TOTAL		1,898	893,150	63.2	97.2	72.2	7,517	GAS	6,530,920	1,027,996	6,713,760.0	27,371,412	3.06	4.19
55. SYSTEM TOTAL		5,880	2,074,390	47.4	75.4	84.5	7,143				14,816,910.0	58,231,044	2.81	

(3) AC rating

LEGEND:

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

ST = STEAM TURBINE

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

(4) In Simple Cycle Mode

DOCKET NO. 20210001-EI EXHIBIT NO. MAS-3 DOCUMENT NO. 2, PAGE 23 OF 42

TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: AUGUST 2022

PLANTUMT CAPACT NET CAPACTOR PACTOR	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
Levo (bit) (b)	PLANT/UNIT	NET CAPA- BILITY	NET GENERATION	NET CAPACITY FACTOR	EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
1. The SOLAR 16 200 244 - 444 SOLAR - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -		(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) ⁽²⁾	(\$) ⁽¹⁾	(cents/KWH)	(\$/UNIT)
2 HORENSCAR 113 4 (10) 3/14 3 9/14 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1 9 1	1. TIA SOLAR	1.6	290	24.4	-	24.4	-	SOLAR	-	-	-	-	-	-
3. LEGGAND SOLAR 1.5 4.169 374.6 - 374.6 - 80.4.8	2. BIG BEND SOLAR	19.3	270	1.9	-	1.9	-	SOLAR	-	-	-	-	-	-
4. PANECREEKSOLAR 70.1 15700 30.1 - 30.1 - 80.L R R - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - <td>3. LEGOLAND SOLAR</td> <td>1.5</td> <td>4,180</td> <td>374.6</td> <td>-</td> <td>374.6</td> <td>-</td> <td>SOLAR</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td>	3. LEGOLAND SOLAR	1.5	4,180	374.6	-	374.6	-	SOLAR	-	-	-	-	-	-
8. BAMSOLAR 74.2 116,280 28.5 - 28.5 - 80,484 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	4. PAYNE CREEK SOLAR	70.1	15,700	30.1	-	30.1	-	SOLAR	-	-	-	-	-	-
6 LITHE SOLAR 143 1500 200 1 - 301 - 301 - 50L4R	5. BALM SOLAR	74.2	16,280	29.5	-	29.5	-	SOLAR	-	-	-	-	-	-
7. GRANCE HALL SOLAR 66.8 15.20 20.0 - 22.0 - 22.0 - 22.0 - 22.0 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -<	6. LITHIA SOLAR	74.3	16,650	30.1	-	30.1	-	SOLAR	-	-	-	-	-	-
B PEACE CREEK SCUAR 54.8 11.960 22.4 . 20.4 	GRANGE HALL SOLAR	60.8	13,120	29.0	-	29.0	-	SOLAR	-	-	-	-	-	-
0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.<	PEACE CREEK SOLAR	54.8	11,990	29.4	-	29.4	-	SOLAR	-	-	-	-	-	-
10 LACK HANCOCK SOLAR 444 10.300 22.3 . 23.3 . 23.3 . 23.3 	BONNIE MINE SOLAR	37.4	8,320	29.9	-	29.9	-	SOLAR	-	-	-	-	-	-
11. WIALMASCLAR 977.0. 747 15.800 22.5 . 22.5 . 22.5 . 22.5 . 22.5 . 22.5 22.5	10. LAKE HANCOCK SOLAR	49.4	10,390	28.3	-	28.3	-	SOLAR	-	-	-	-	-	-
12 LTLE MANATE FIVER SOLAR 74.3 16,700 30.3 - 30.3 - SOLAR - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -<	11. WIMAUMA SOLAR	74.7	15,830	28.5	-	28.5	-	SOLAR	-	-	-	-	-	-
13 DLRANCE SOLAR 59.8 13,700 31.0 - 30.0 - SOLAR - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	12. LITTLE MANATEE RIVER SOLAR	74.3	16,730	30.3	-	30.3	-	SOLAR	-	-	-	-	-	-
14. FUTURE SOLAR 24.9 5,500.0 30.0 - 30.0 - SOLAR - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	13. DURRANCE SOLAR	59.8	13,780	31.0	-	31.0	-	SOLAR	-	-	-	-	-	-
15. FUTURE SOLAR 74.3 11,080.0 21.1 - 21.1 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	14. FUTURE SOLAR	24.9	5,560.0	30.0	-	30.0	-	SOLAR	-	-	-	-	-	-
16 FUTURE SOLAR 52.3 16.570.0 32.0 - 22.0 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -<	15. FUTURE SOLAR	74.3	11,680.0	21.1	-	21.1	-	SOLAR	-	-	-	-	-	-
17. FUTURE SOLAR n 7.43 16.570.0 30.0 . 30.0 . SOLAR 	FUTURE SOLAR	52.3	16,570.0	42.6	-	42.6	-	SOLAR	-	-	-	-	-	-
18. SOLAR TOTAL 0 978.0 193,910 29.7 . 29.7 . SOLAR 	17. FUTURE SOLAR	74.3	16,570.0	30.0		30.0		SOLAR			<u> </u>		-	
19. BIG BEND #1 CC TOTAL 1,055 3,320 0.4 0.0 13.1 7,461 GAS 24,090 1,028,227 24,77.0 99,941 3.01 4.15 20. BIG BEND #2 TOTAL 340 0 0.0 0.0 0.0 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 <t< td=""><td>18. SOLAR TOTAL (3)</td><td>878.0</td><td>193,910</td><td>29.7</td><td>-</td><td>29.7</td><td>-</td><td>SOLAR</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td></t<>	18. SOLAR TOTAL (3)	878.0	193,910	29.7	-	29.7	-	SOLAR	-	-	-	-	-	-
20. BIG BEND #2 TOTAL 340 0 0.0 0.0 0 GAS 0 0 0.0 0.00 0.00 21. BIAP (GAS) 345 43.110 16.8 - - - COAL 0 0.00 20.03.05 4.72 4.15 23. BLAP (GAS) 345 43.110 16.8 - - - COAL 0 0 0.00 20.03.05 4.72 4.15 24. BLAP (GAS) 345 43.110 16.8 92.1 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -	19. BIG BEND #1 CC TOTAL	1,055	3,320	0.4	0.0	13.1	7,461	GAS	24,090	1,028,227	24,770.0	99,941	3.01	4.15
21 8.83 (CA) 345 43,110 16.8 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -<	20. BIG BEND #2 TOTAL	340	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	21. B.B.#3 (GAS)	345	43.110	16.8	-	-	-	GAS	490.850	1.028.013	504.600.0	2.036.365	4.72	4.15
23. BIG BEND #3 TOTAL 345 43.110 16.8 82.1 58.9 11.705 50.460.00 2.036,365 4.72 24. BEA# (GAS) 155 8.360 7.2 <t< td=""><td>22. B.B.#3 (COAL)</td><td>395</td><td>0</td><td>0.0</td><td>-</td><td>-</td><td>-</td><td>COAL</td><td>0</td><td>0</td><td>0.0</td><td>_,,0</td><td>0.00</td><td>0.00</td></t<>	22. B.B.#3 (COAL)	395	0	0.0	-	-	-	COAL	0	0	0.0	_,,0	0.00	0.00
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	23. BIG BEND #3 TOTAL	345	43,110	16.8	82.1	58.9	11,705			<u>.</u>	504,600.0	2,036,365	4.72	-
24. BJAH (DAL) 133 6.360 1/2 - - - - 0.053 91,000 1,027,979 190,0300 5,123,917 322 62.79 28. BJAH (DAL) 422 167,120 53.2 89.3 58.1 11,566 - - - 0.053 1,027,979 190,000 5,123,917 322 62.79 28. BJAH (DAL) 422 167,120 53.2 89.3 58.1 11,566 - - - 0.053 1,027,979 100,00 5,123,917 3223 62.79 28. BLC, TAF TOTAL 56 2,570 6.9 98.3 81.3 11,969 GAS 53,770 1,027,986 573,380.0 1,38,648 4.83 4.15 30. BLS, CT, AF TOTAL 330 63,010 25.7 96.9 29.0 9,100 GAS 57,770 1,027,986 573,380.0 1,38,648 4.83 4.15 31. BIG BEND STATION TOTAL 2,878 400,390 18.7 47.0 48.5 10,416 - - - 4,170,580.0 14,616,553 3.65 - </td <td>04 B B #4 (CAS)</td> <td>155</td> <td>8 260</td> <td>7.0</td> <td></td> <td></td> <td></td> <td>CAS</td> <td>04.000</td> <td>1 007 070</td> <td>06 630 0</td> <td>280.072</td> <td>4.66</td> <td>4.15</td>	04 B B #4 (CAS)	155	8 260	7.0				CAS	04.000	1 007 070	06 630 0	280.072	4.66	4.15
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	24. B.B.#4 (GAS)	155	8,300	1.2	-	-	-	GAS	94,000	1,027,979	96,630.0	389,973	4.00	4.15
La DOLL W T ONL Le In the construction of th	25. B.B.#4 (CUAL) 26. BIG BEND #4 TOTAL	422	150,700	53.2	89.3	- 58.1	11 565	COAL	01,000	22,500,306	1,830,030.0	5,123,910	3.23	02.79
27. B.B. (GNITION - - - - - - - - - - - - - 4.15 28. B.B.C.T.#4 TOTAL 56 2,870 6.9 96.3 81.3 11,969 GAS 33,420 1,027,828 34,350.0 2,313,982 2,313,982 3.67 4.15 28. B.B.C.T.#F TOTAL 330 120,960 49.3 96.1 55.6 9,100 GAS 557,770 1,027,868 573,380.0 2,313,982 3.67 4.15 30. B.B.C.T.#F TOTAL 330 120,960 18.7 47.0 48.5 10,416 - - - 4,170,580.0 14,616,353 3.65 - 32. POLK #1 GASIFIER 220 0 0 0 0 0 0 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 <t< td=""><td>20. BIG BEND #4 TOTAL</td><td>422</td><td>107,120</td><td>55.2</td><td>03.5</td><td>50.1</td><td>11,505</td><td></td><td>-</td><td>-</td><td>1,352,000.0</td><td>3,313,003</td><td>5.50</td><td>-</td></t<>	20. BIG BEND #4 TOTAL	422	107,120	55.2	03.5	50.1	11,505		-	-	1,352,000.0	3,313,003	5.50	-
28. B.B.C.T.# TOTAL 56 2.870 6.9 98.3 81.3 11,969 GAS 33,420 1,027,828 34,350.0 138,648 4.83 4.15 29. B.B.C.T.#S TOTAL 330 65,010 25.7 96.9 29.0 9,100 GAS 557,770 1,027,966 573,380.0 2,313,992 3.67 4.15 30. B.B.C.T.#S TOTAL 330 120,960 49.3 96.1 55.6 9,101 GAS 1,070,830 1,022,066 1,100,820.0 4,442,499 3.67 4.15 31. BIG BEND STATION TOTAL 2,878 400,390 18.7 47.0 48.5 10,416 - - - 4,170,580.0 14,616,353 3.65 - 32. POLK #1 CASIFIER 220 0 0.00 - 0.00 0 COAL 0 0 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	27. B.B. IGNITION	-	-	-	-	-	-	GAS	17,120	1,028,037	17,600.0	71,025	-	4.15
29. B.B.C.T.#S TOTAL 330 $63,010$ 25.7 96.3 29.0 $9,100$ GAS $557,770$ $1,027,986$ $573,380.0$ $2,313,992$ 3.67 4.15 30. B.B.C.T.#6 TOTAL 330 $120,960$ 49.3 96.1 55.6 $9,101$ GAS $1,070,830$ $1,028,006$ $1,100,820.0$ $4,442,499$ 3.67 4.15 31. BIG BEND STATION TOTAL $2,878$ $400,390$ 18.7 47.0 48.5 $10,416$ $ 4,170,580.0$ $14,616,553$ 3.65 $-$ 32. POLK #1 GASIFIER 220 0 0.0 $ 0.0$ 0 0.0 0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	28. B.B.C.T.#4 TOTAL	56	2,870	6.9	98.3	81.3	11,969	GAS	33,420	1,027,828	34,350.0	138,648	4.83	4.15
30. B.B.C.T.#6 TOTAL 330 120,960 49.3 96.1 55.6 9,101 GAS 1,070,830 1,028,006 1,100,820.0 4,442,499 3.67 4.15 31. BIG BEND STATION TOTAL 2,878 400,390 18.7 47.0 48.5 10,416 - - - 4,170,580.0 14,616,553 3.65 - 32. POLK #1 GASIFIER 220 0 0.0 - 0.0 0 COAL 0 0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	29. B.B.C.T.#5 TOTAL	330	63,010	25.7	96.9	29.0	9,100	GAS	557,770	1,027,986	573,380.0	2,313,992	3.67	4.15
31. BIG BEND STATION TOTAL $2,878$ $400,390$ 18.7 47.0 48.5 $10,416$ $ 4,170,580.0$ $14,616,353$ 3.65 $-$ 32. POLK #1 GASIFIER 220 0 0.0 0.0 $ 0.0$ 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00	30. B.B.C.T.#6 TOTAL	330	120,960	49.3	96.1	55.6	9,101	GAS	1,070,830	1,028,006	1,100,820.0	4,442,499	3.67	4.15
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	31. BIG BEND STATION TOTAL	2,878	400,390	18.7	47.0	48.5	10,416	-	-	-	4,170,580.0	14,616,353	3.65	-
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	32. POLK #1 GASIFIER	220	0	0.0	-	0.0	n	COAL	0	0	0.0	0	0.00	0.00
34. POLK #1 TOTAL 220 53,040 32.4 93.8 84.2 8,838 - - - 448,770.0 1,991,826 3.57 - 35. POLK #2 ST DUCT FIRING 120 21,660 24.3 - 91.6 8,277 GAS 174,410 1,027,980 179,290.0 723,566 3.34 4.15 36. POLK #2 ST W/D DUCT FIRING 341 618,070 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - 4,155,105 1,028,000 42,271,450.0 17,28,076 2.79 4,15 - - - - <td>33. POLK #1 CT (GAS)</td> <td>210</td> <td>53.040</td> <td>33.9</td> <td>-</td> <td>84.2</td> <td>8.838</td> <td>GAS</td> <td>456.010</td> <td>1.027.982</td> <td>468,770.0</td> <td>1.891.826</td> <td>3.57</td> <td>4.15</td>	33. POLK #1 CT (GAS)	210	53.040	33.9	-	84.2	8.838	GAS	456.010	1.027.982	468,770.0	1.891.826	3.57	4.15
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	34. POLK #1 TOTAL	220	53,040	32.4	93.8	84.2	8,838	-	-		468,770.0	1,891,826	3.57	-
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		400	04.000	04.0		01.0	0.077	040	171 110	4 007 000	470.000.0	700 500	0.04	4.45
30. POLK #2 ST W/O DUCL FIRING $\frac{341}{461}$ $\frac{616,070}{639,730}$ $\frac{-}{186.5}$ $\frac{-}{-}$ $\frac{-}{-}$ $\frac{4,155,105}{6AS}$ $1,028,000$ $\frac{4,271,430,00}{4,271,430,0}$ $17,286,076$ 2.79 4.15 37. POLK #2 ST W/O DUCL FIRING $\frac{341}{639,730}$ $\frac{616,070}{186.5}$ $ 4,155,105$ $1,022,000$ $4,271,430,00$ $17,961,642$ 2.81 $-$ 38. POLK #2 CT (GAS) 150 1.50 1.3 $ 100.0$ $10,727$ GAS $15,660$ $1,027,458$ $16,090.0$ $64,967$ 4.33 4.15 39. POLK #2 CT (OIL) 159 150 0.1 $ 94.3$ $13,000$ LGT OIL 333 $5,855,856$ $1,950.0$ $44,375$ 29.58 133.26 41. POLK #3 CT (GAS) 150 $1,350$ 1.2 $ 100.0$ $10,733$ GAS $14,100$ $1,027,660$ $14,490.0$ $58,496$ 4.33 4.15 42. POLK #3 CT (OIL) 159 150 0.1 $-$ </td <td>35. POLK #2 ST DUCT FIRING</td> <td>120</td> <td>21,000</td> <td>24.3</td> <td>-</td> <td>91.6</td> <td>8,277</td> <td>GAS</td> <td>174,410</td> <td>1,027,980</td> <td>179,290.0</td> <td>123,500</td> <td>3.34</td> <td>4.15</td>	35. POLK #2 ST DUCT FIRING	120	21,000	24.3	-	91.6	8,277	GAS	174,410	1,027,980	179,290.0	123,500	3.34	4.15
37. POLK #2 STICIAL 461 633,730 106.3 - 149.1 6,957 GAS - - 4,450,740.0 17,961,642 2.61 - 38. POLK #2 CT (GAS) 150 1,500 1.3 - 100.0 10,727 GAS 15,660 1,027,458 16,090.0 64,967 4.33 4.15 39. POLK #2 CT (OL) 159 150 0.1 - 94.3 13,000 LGT OLL 333 5.855.856 1,950.0 44,375 29.58 133.26 40. POLK #2 TOTAL (*) 150 1,650 1.5 - 99.5 10,933 - - - 18,040.0 109,342 6.63 - 41. POLK #3 CT (OL) 150 1,350 1.2 - 100.0 10,733 GAS 14,100 1,027,660 14,490.0 58,496 4.33 4.15 42. POLK #3 CT (OLL) 150 150 1.3 - 94.3 13,000 LGT OLL 332 5,873,494 1,950.0 44,243 29.50 133.26 43. POLK #3 TOTAL (*) 150 <td< td=""><td>36. POLK #2 ST W/O DUCT FIRING</td><td>341</td><td>618,070</td><td>496 5</td><td></td><td></td><td>6.057</td><td>CAR</td><td>4,155,105</td><td>1,028,000</td><td>4,271,450.0</td><td>17,238,076</td><td>2.79</td><td>4.15</td></td<>	36. POLK #2 ST W/O DUCT FIRING	341	618,070	496 5			6.057	CAR	4,155,105	1,028,000	4,271,450.0	17,238,076	2.79	4.15
38. POLK #2 CT (GAS) 150 1,500 1.3 - 100.0 10,727 GAS 15,660 1,027,458 16,090.0 64,967 4.33 4.15 39. POLK #2 CT (OL) 159 150 0.1 - 94.3 13,000 LGT OLL 333 5,855,856 1,950.0 44,375 29.58 133.26 40. POLK #2 TOTAL (4) 150 1,650 1.5 - 99.5 10,933 - - - 18,040.0 64,967 4.33 4.15 41. POLK #3 CT (GAS) 150 1,350 1.2 - 100.0 10,733 GAS 14,100 1,027,660 14,490.0 58,496 4.33 4.15 42. POLK #3 CT (OL) 159 150 0.1 - 94.3 13,000 LGT OIL 332 5,873,494 1,950.0 44,243 29.50 133.26 43. POLK #3 TOTAL (4) 150 1.500 1.3 - 99.4 10,0900 2.670L 332 5,873,494 1,950.0 44,243 29.50 133.26 43. POLK #3 TOTAL 150	SI. FOLK #2 ST IVIAL	401	039,730	100.5	-	149.1	0,957	GAD	-	-	4,430,740.0	17,901,042	2.61	-
39. POLK #2 CT (OIL) 159 150 0.1 - 94.3 13,000 LGT OIL 333 5,855,856 1,950.0 44,375 29.58 133.26 40. POLK #2 TOTAL (4) 150 1,650 1.5 - 99.5 10,933 - - - 18,040.0 109,342 6.63 - - 13.26 41. POLK #3 CT (GAS) 150 1,350 1.2 - 100.0 10,733 GAS 14,100 1,027,660 14,490.0 58,496 4.33 4.15 42. POLK #3 CT (OIL) 159 150 0.1 - 99.4 10,960 - - - 16440.0 58,496 4.33 4.15 43. POLK #3 CT (OIL) 159 1500 1.3 - 99.4 10,960 - - - - 16,440.0 58,496 4.33 4.15 43. POLK #3 CT (OIL) 159 1500 1.3 - 99.4 10,960 - - - - 16,440.0 14,243 29.50 133.26 - - - -	38. POLK #2 CT (GAS)	150	1,500	1.3	-	100.0	10,727	GAS	15,660	1,027,458	16,090.0	64,967	4.33	4.15
40. POLK #2 TOTAL (4) 150 1,650 1.5 - 99.5 10,933 - - - 18,040.0 109,342 6.63 - 41. POLK #3 CT (GAS) 150 1,350 1.2 - 100.0 10,733 GAS 14,100 1,027,660 14,490.0 58,496 4.33 4.15 42. POLK #3 CT (OIL) 159 150 0.1 - 94.3 13,000 LGT OIL 332 5,873,494 1,950.0 44,243 29.50 133.26 43. POLK #3 TOTAL (4) 150 1.500 1.3 - 99.4 10,960 - - 16.440.0 102 7.39 6.85	39. POLK #2 CT (OIL)	159	150	0.1	-	94.3	13,000	LGT OIL	333	5,855,856	1,950.0	44,375	29.58	133.26
41. POLK #3 CT (GAS) 150 1,350 1.2 - 100.0 10,733 GAS 14,100 1,027,660 14,490.0 58,496 4.33 4.15 42. POLK #3 CT (OIL) 159 150 0.1 - 94.3 13,000 LGT OIL 332 5,873,494 1,950.0 44,243 29.50 133.26 43. POLK #3 TOTAL (4) 150 1.500 1.3 - 99.4 10.960 - - 16.440.0 102 739 6.85	40. POLK #2 TOTAL (4)	150	1,650	1.5		99.5	10,933		-		18,040.0	109,342	6.63	-
42. POLK #3 CT (OIL) 159 150 0.1 - 94.3 13,000 LGT OIL 332 5,873,494 1,950.0 44,243 29.50 133.26 43. POLK #3 CT (OIL) 150 1.50 1.3 - 99.4 10,960 - - 16.440.0 102739 6.85		150	1 350	1 0		100.0	10 722	GAS	14 100	1 027 660	14 490 0	58 406	1 33	1 15
43, POLK 9 (10) 100 1.500 1.3 - 99.4 10.060 6640.0 102739 6.85	42 POLK #3 CT (OIL)	150	150	0.1	-	94.3	13 000		332	5 873 494	1 950 0	44 243	29.50	133.26
	43. POLK #3 TOTAL (4)	150	1.500	13		99.4	10,960	-			16.440.0	102.739	6.85	100.20

SCHEDULE E4

DOCKET NO. 20210001-EI EXHIBIT NO. MAS-3 DOCUMENT NO. 2, PAGE 24 OF 42

TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: AUGUST 2022

(A)		(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(L)	(K)	(L)	(M)	(N)
PLANT/UNIT		NET CAPA- BILITY	NET GENERATION	NET CAPACITY FACTOR	EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
		(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) ⁽²⁾	(\$) ⁽¹⁾	(cents/KWH)	(\$/UNIT)
44. POLK #4 CT (GAS) TOTAL	(4)	150	1,350	1.2	-	100.0	10,733	GAS	14,100	1,027,660	14,490.0	58,496	4.33	4.15
45. POLK #5 CT (GAS) TOTAL	(4)	150	1,200	1.1	-	100.0	10,675	GAS	12,470	1,027,265	12,810.0	51,734	4.31	4.15
46. POLK #2 CC TOTAL		1,061	645,430	81.8	97.4	147.1	6,991	-	-	-	4,512,520.0	18,283,953	2.83	-
47. POLK STATION TOTAL		1,281	698,470	73.3	96.8	132.2	7,132	-	-	-	4,981,290.0	20,175,779	2.89	-
48. BAYSIDE #1		720	387,880	72.4	96.6	78.6	7,327	GAS	2,764,590	1,027,997	2,841,990.0	11,469,316	2.96	4.15
49. BAYSIDE #2 50. BAYSIDE #3		954 56	418,950 3,810	59.0 9.1	97.3 98.6	61.1 81.0	7,521 11,953	GAS GAS	3,064,920 44,290	1,027,997 1,028,223	3,150,730.0 45,540.0	12,715,280 183,744	3.04 4.82	4.15 4.15
51. BAYSIDE #4		56	3,250	7.8	98.6	80.6	12,049	GAS	38,090	1,028,091	39,160.0	158,022	4.86	4.15
52. BAYSIDE #5		56	4,590	11.0	98.6	76.6	12,142	GAS	54,210	1,028,039	55,730.0	224,898	4.90	4.15
53. BAYSIDE #6		56	4,320	10.4	98.6	79.5	12,009	GAS	50,470	1,027,937	51,880.0	209,382	4.85	4.15
54. BAYSIDE STATION TOTAL		1,898	822,800	58.3	97.2	68.6	7,517	GAS	6,016,570	1,027,999	6,185,030.0	24,960,642	3.03	4.15
55. SYSTEM TOTAL		6,935	2,115,570	41.0	64.0	89.3	7,250	-			15,336,900.0	59,752,774	2.82	

(3) AC rating

LEGEND:

42

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

ST = STEAM TURBINE

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

(4) In Simple Cycle Mode

TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: SEPTEMBER 2022

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPA- BILITY	NET GENERATION	NET CAPACITY FACTOR	EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
	(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) ⁽²⁾	(\$) ⁽¹⁾	(cents/KWH)	(\$/UNIT)
1. TIA SOLAR	1.6	260	22.6	-	22.6	-	SOLAR	-	-	-	-	-	-
2. BIG BEND SOLAR	19.3	230	1.7	-	1.7	-	SOLAR	-	-	-	-	-	-
3. LEGOLAND SOLAR	1.5	3,470	321.3	-	321.3	-	SOLAR	-	-	-	-	-	-
4. PAYNE CREEK SOLAR	70.1	13,650	27.0	-	27.0	-	SOLAR	-	-	-	-	-	-
5. BALM SOLAR	74.2	14,140	26.5	-	26.5	-	SOLAR	-	-	-	-	-	-
6. LITHIA SOLAR	74.3	14,340	26.8	-	26.8	-	SOLAR	-	-	-	-	-	-
7. GRANGE HALL SOLAR	60.8	11,390	26.0	-	26.0	-	SOLAR	-	-	-	-	-	-
PEACE CREEK SOLAR	54.8	10,420	26.4	-	26.4	-	SOLAR	-	-	-	-	-	-
9. BONNIE MINE SOLAR	37.4	6,720	25.0	-	25.0	-	SOLAR	-	-	-	-	-	-
10. LAKE HANCOCK SOLAR	49.4	9,030	25.4	-	25.4	-	SOLAR	-	-	-	-	-	-
11. WIMAUMA SOLAR	74.7	13,680	25.4	-	25.4	-	SOLAR	-	-	-	-	-	-
12. LITTLE MANATEE RIVER SOLAR	74.3	14,370	26.9	-	26.9	-	SOLAR	-	-	-	-	-	-
13. DURRANCE SOLAR	59.8	11,990	27.8	-	27.8	-	SOLAR	-	-	-	-	-	-
14. FUTURE SOLAR	24.9	4,830.0	26.9	-	26.9	-	SOLAR	-	-	-	-	-	-
15. FUTURE SOLAR	74.3	10,150.0	19.0	-	19.0	-	SOLAR	-	-	-	-	-	-
16. FUTURE SOLAR	52.3	14,400.0	38.2	-	38.2	-	SOLAR	-	-	-	-	-	-
17. FUTURE SOLAR	74.3	14,400.0	26.9		26.9		SOLAR						
18. SOLAR TOTAL (3)	878.0	167,470	26.5	-	26.5	-	SOLAR	-	-	-	-	-	-
19. BIG BEND #1 CC TOTAL	1,055	296,610	39.0	0.0	40.0	6,291	GAS	1,815,250	1,028,007	1,866,090.0	7,578,296	2.55	4.17
20. BIG BEND #2 TOTAL	340	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
21. B.B.#3 (GAS)	345	48.640	19.6	-	-	-	GAS	549,750	1.027.995	565,140.0	2,295,094	4.72	4.17
22. B.B.#3 (COAL)	395	0	0.0	-	-	-	COAL	0	0	0.0	_,,0	0.00	0.00
23. BIG BEND #3 TOTAL	345	48,640	19.6	82.1	61.0	11,619				565,140.0	2,295,094	4.72	
24. B.B.#4 (GAS)	155	8.130	7.3	-	-	-	GAS	91.280	1.027.936	93.830.0	381.075	4.69	4.17
25. B.B.#4 (COAL)	422	154,310	50.8	-	-	-	COAL	79,240	22,499,243	1,782,840.0	4,979,203	3.23	62.84
26. BIG BEND #4 TOTAL	422	162,440	53.5	89.3	58.3	11,553		-		1,876,670.0	5,360,278	3.30	-
27. B.B. IGNITION	-	-	-	-	-	-	GAS	21,300	1,027,700	21,890.0	88,923	-	4.17
28. B.B.C.T.#4 TOTAL	56	8,700	21.6	98.3	86.3	11,622	GAS	98,350	1,028,063	101,110.0	410,591	4.72	4.17
29. 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
30. 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
31. BIG BEND STATION TOTAL	2,878	516,390	24.9	47.0	46.5	8,538	-	-	-	4,409,010.0	15,733,182	3.05	-
32. POLK #1 GASIFIER	220	0	0.0	-	0.0	0	COAL	0	0	0.0	0	0.00	0.00
33. POLK #1 CT (GAS)	210	54.730	36.2	-	90.8	8.696	GAS	462,980	1.027.993	475.940.0	1.932.846	3.53	4.17
34. POLK #1 TOTAL	220	54,730	34.6	93.8	90.8	8,696	-	-	-	475,940.0	1,932,846	3.53	-
35. POLK #2 ST DUCT FIRING	120	31,280	36.2	-	89.3	8,276	GAS	251,810	1,027,997	258,860.0	1,051,255	3.36	4.17
36. POLK #2 ST W/O DUCT FIRING	341	573,230	-		-	-		3,857,255	1,028,003	3,965,270.0	16,103,247	2.81	4.17
37. POLK #2 ST TOTAL	461	604,510	182.1	-	130.9	6,988	GAS	-	-	4,224,130.0	17,154,502	2.84	-
38. POLK #2 CT (GAS)	150	0	0.0	-	0.0	0	GAS	0	0	0.0	1	0.00	0.00
39. POLK #2 CT (OIL)	159	150	0.1	-	94.3	13,000	LGT OIL	333	5,855,856	1,950.0	44,200	29.47	132.73
40. POLK #2 TOTAL (4) 150	150	0.1	-	94.3	13,000	-	-	-	1,950.0	44,201	29.47	-
41. POLK #3 CT (GAS)	150	1,200	1.1	-	100.0	10,708	GAS	12,500	1,028,000	12,850.0	52,185	4.35	4.17
42. POLK #3 CT (OIL)	159	150	0.1		94.3	13,000	LGT OIL	332	5,873,494	1,950.0	44,067	29.38	132.73
43. POLK #3 TOTAL (4	150	1,350	1.3	-	99.3	10,963	-	-	-	14,800.0	96,252	7.13	-

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SCHEDULE E4

DOCKET NO. 20210001-EI EXHIBIT NO. MAS-3 DOCUMENT NO. 2, PAGE 26 OF 42

TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: SEPTEMBER 2022

(A)		(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT		NET CAPA- BILITY	NET GENERATION	NET CAPACITY FACTOR	EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
		(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) ⁽²⁾	(\$) ⁽¹⁾	(cents/KWH)	(\$/UNIT)
44. POLK #4 CT (GAS) TOTAL	(4)	150	1,040	1.0	-	99.0	10,817	GAS	10,950	1,027,397	11,250.0	45,714	4.40	4.17
45. POLK #5 CT (GAS) TOTAL	(4)	150	900	0.8	-	100.0	10,722	GAS	9,390	1,027,689	9,650.0	39,201	4.36	4.17
46. POLK #2 CC TOTAL		1,061	607,950	79.6	97.4	130.2	7,010	-	-	-	4,261,780.0	17,379,870	2.86	-
47. POLK STATION TOTAL		1,281	662,680	71.8	96.8	121.6	7,149	-	-	-	4,737,720.0	19,312,716	2.91	-
48. BAYSIDE #1		720	101,560	19.6	29.0	67.5	7,400	GAS	731,050	1,028,014	751,530.0	3,051,984	3.01	4.17
49. BAYSIDE #2		954	440,590	64.1	97.3	66.0	7,482	GAS	3,206,840	1,027,996	3,296,620.0	13,387,898	3.04	4.17
50. BAYSIDE #3		56	8,860	22.0	98.6	87.4	11,620	GAS	100,130	1,028,163	102,950.0	418,022	4.72	4.17
51. BAYSIDE #4		56	8,920	22.1	98.6	88.5	11,557	GAS	100,280	1,028,022	103,090.0	418,648	4.69	4.17
52. BAYSIDE #5		56	9,650	23.9	98.6	85.3	11,662	GAS	109,470	1,028,044	112,540.0	457,015	4.74	4.17
53. BAYSIDE #6		56	10,030	24.9	98.6	87.4	11,587	GAS	113,050	1,028,041	116,220.0	471,961	4.71	4.17
54. BAYSIDE STATION TOTAL		1,898	579,610	42.4	71.5	67.3	7,734	GAS	4,360,820	1,028,006	4,482,950.0	18,205,528	3.14	4.17
55. SYSTEM TOTAL		6,935	1,926,150	38.6	56.9	83.2	7,076		-		13,629,680.0	53,251,426	2.76	

(3) AC rating

LEGEND:

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

ST = STEAM TURBINE

As burned fuel cost system total includes ignition
 Fuel burned (MM BTU) system total excludes ignition

(4) In Simple Cycle Mode

DOCKET NO. 20210001-EI EXHIBIT NO. MAS-3 DOCUMENT NO. 2, PAGE 27 OF 42

TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: OCTOBER 2022

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(L)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPA- BILITY	NET GENERATION	NET CAPACITY FACTOR	EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
	(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) (2)	(\$) ⁽¹⁾	(cents/KWH)	(\$/UNIT)
1. TIA SOLAR	1.6	290	24.4	-	24.4	-	SOLAR	-	-	-	-	-	-
2. BIG BEND SOLAR	19.3	220	1.5	-	1.5	-	SOLAR	-	-	-	-	-	-
LEGOLAND SOLAR	1.5	3,590	321.7	-	321.7	-	SOLAR	-	-	-	-	-	-
PAYNE CREEK SOLAR	70.1	13,490	25.9	-	25.9	-	SOLAR	-	-	-	-	-	-
5. BALM SOLAR	74.2	13,990	25.3	-	25.3	-	SOLAR	-	-	-	-	-	-
LITHIA SOLAR	74.3	13,980	25.3	-	25.3	-	SOLAR	-	-	-	-	-	-
GRANGE HALL SOLAR	60.8	11,250	24.9	-	24.9	-	SOLAR	-	-	-	-	-	-
PEACE CREEK SOLAR	54.8	10,300	25.3	-	25.3	-	SOLAR	-	-	-	-	-	-
BONNIE MINE SOLAR	37.4	7,100	25.5	-	25.5	-	SOLAR	-	-	-	-	-	-
LAKE HANCOCK SOLAR	49.4	8,930	24.3	-	24.3	-	SOLAR	-	-	-	-	-	-
11. WIMAUMA SOLAR	74.7	14,210	25.6	-	25.6	-	SOLAR	-	-	-	-	-	-
12. LITTLE MANATEE RIVER SOLAR	74.3	14,040	25.4	-	25.4	-	SOLAR	-	-	-	-	-	-
13. DURRANCE SOLAR	59.8	11,850	26.6	-	26.6	-	SOLAR	-	-	-	-	-	-
14. FUTURE SOLAR	24.9	4,790.0	25.9	-	25.9	-	SOLAR	-	-	-	-	-	-
15. FUTURE SOLAR	74.3	10,070.0	18.2	-	18.2	-	SOLAR	-	-	-	-	-	-
16. FUTURE SOLAR	52.3	14,280.0	36.7	-	36.7	-	SOLAR	-	-	-	-	-	-
17. FUTURE SOLAR	74.3	14,280.0	25.8	-	25.8		SOLAR		-	-	-		
18. SOLAR TOTAL (3)	878.0	166,660	25.5	-	25.5	-	SOLAR	-	-	-	-	-	-
19. BIG BEND #1 CC TOTAL	1,055	664,980	84.7	0.0	86.8	6,234	GAS	4,032,710	1,028,004	4,145,640.0	16,927,062	2.55	4.20
20. BIG BEND #2 TOTAL	340	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
21 B B #3 (GAS)	345	44 880	17.5	-	_	-	GAS	510 250	1 028 025	524 550 0	2 141 744	4 77	4 20
22 B B #3 (COAL)	395	0	0.0	-	-	-	COAL	0.0,200	1,020,020	0.0	2,,	0.00	0.00
23. BIG BEND #3 TOTAL	345	44.880	17.5	82.1	59.4	11.688	OONE			524.550.0	2.141.744	4.77	- 0.00
		.,				.,				,	_,,.		
24. B.B.#4 (GAS)	155	830	0.7	-	-	-	GAS	9,320	1,027,897	9,580.0	39,120	4.71	4.20
25. B.B.#4 (COAL)	422	15,880	5.1	-	-	-	COAL	8,090	22,508,035	182,090.0	509,008	3.21	62.92
26. BIG BEND #4 TOTAL	422	16,710	5.3	8.6	60.0	11,470		-	-	191,670.0	548,128	3.28	-
27. B.B. IGNITION	-	-	-	-	-	-	GAS	12,110	1,028,076	12,450.0	50,831	-	4.20
28. B.B.C.T.#4 TOTAL	56	2.180	5.2	98.3	76.3	12.197	GAS	25.880	1.027.434	26.590.0	108.630	4.98	4.20
29. 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
30. 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
31. BIG BEND STATION TOTAL	2,878	728,750	34.0	35.1	83.6	6,708	-	-	-	4,888,450.0	19,776,395	2.71	-
32. POLK #1 GASIFIER	220	0	0.0	-	0.0	0	COAL	0	0	0.0	0	0.00	0.00
33. POLK #1 CT (GAS)	210	47,070	30.1	-	83.0	8,883	GAS	406,740	1,028,003	418,130.0	1,707,267	3.63	4.20
34. POLK #1 TOTAL	220	47,070	28.8	93.8	83.0	8,883	-	-	-	418,130.0	1,707,267	3.63	-
	100	17.010	10.0			0.070	~ ~ ~	100 550	1 000 001		504 555		4.00
35. POLK #2 ST DUCT FIRING	120	17,210	19.3	-	81.5	8,276	GAS	138,550	1,028,004	142,430.0	581,555	3.38	4.20
36. POLK #2 ST W/O DUCT FIRING	341	523,710				-		3,534,145	1,028,003	3,633,110.0	14,834,364	2.83	4.20
37. POLK #2 ST TOTAL	461	540,920	157.7	-	129.1	6,980	GAS	-	-	3,775,540.0	15,415,919	2.85	-
38. POLK #2 CT (GAS)	150	410	0.4	-	68.3	12.293	GAS	4.910	1.026.477	5.040.0	20.610	5.03	4.20
39. POLK #2 CT (OIL)	159	150	0.1	-	94.3	13,000	LGT OIL	333	5.855.856	1,950.0	44.027	29.35	132.21
40. POLK #2 TOTAL (4)	150	560	0.5		73.8	12,482	-	-	-	6,990.0	64,637	11.54	-
	450	¢			0.0	<u>^</u>	C48	<u>^</u>	•		0	0.00	0.00
41. FULK #3 CT (GAS)	150	0	0.0	-	0.0	12,000	GAS	0	U	0.0	42.905	0.00	0.00
42. FOLK #3 UT (UIL)	159	150	0.1		94.3	13,000	LGTUIL	332	5,873,494	1,950.0	43,895	29.26	132.21
43. POLK #3 IUIAL (4)	150	150	U.1	-	94.3	13,000	-	-	-	1,950.0	43,895	29.26	-

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SCHEDULE E4

DOCKET NO. 20210001-EI EXHIBIT NO. MAS-3 DOCUMENT NO. 2, PAGE 28 OF 42

TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: OCTOBER 2022

(A)		(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(L)	(K)	(L)	(M)	(N)
PLANT/UNIT		NET CAPA- BILITY	NET GENERATION	NET CAPACITY FACTOR	EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
		(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) (2)	(\$) ⁽¹⁾	(cents/KWH)	(\$/UNIT)
44. POLK #4 CT (GAS) TOTAL	(4)	150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
45. POLK #5 CT (GAS) TOTAL	(4)	150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
46. POLK #2 CC TOTAL		1,061	541,630	68.6	97.4	128.7	6,987	-	-	-	3,784,480.0	15,524,451	2.87	-
47. POLK STATION TOTAL		1,281	588,700	61.8	96.8	118.3	7,139	-	-	-	4,202,610.0	17,231,718	2.93	-
48. BAYSIDE #1		720	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
49. BAYSIDE #2		954	318,550	44.9	97.3	46.4	7,709	GAS	2,388,740	1,027,994	2,455,610.0	10,026,594	3.15	4.20
50. BAYSIDE #3		56	3,580	8.6	98.6	79.9	12,006	GAS	41,830	1,027,492	42,980.0	175,579	4.90	4.20
51. BAYSIDE #4		56	3,100	7.4	98.6	81.4	11,965	GAS	36,080	1,027,993	37,090.0	151,444	4.89	4.20
52. BAYSIDE #5		56	4,890	11.7	98.6	76.6	12,125	GAS	57,680	1,027,913	59,290.0	242,108	4.95	4.20
53. BAYSIDE #6		56	3,600	8.6	98.6	78.4	12,106	GAS	42,390	1,028,073	43,580.0	177,930	4.94	4.20
54. BAYSIDE STATION TOTAL		1,898	333,720	23.6	60.5	47.3	7,906	GAS	2,566,720	1,027,985	2,638,550.0	10,773,655	3.23	4.20
55. SYSTEM TOTAL		6,935	1,817,830	35.2	49.0	95.2	6,453				11,729,610.0	47,781,768	2.63	

(3) AC rating

LEGEND:

46

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

ST = STEAM TURBINE

As burned fuel cost system total includes ignition
 Fuel burned (MM BTU) system total excludes ignition

(4) In Simple Cycle Mode

DOCKET NO. 20210001-EI EXHIBIT NO. MAS-3 DOCUMENT NO. 2, PAGE 29 OF 42

TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: NOVEMBER 2022

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(L)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPA- BILITY	NET GENERATION	NET CAPACITY FACTOR	EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
	(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) ⁽²⁾	(\$) ⁽¹⁾	(cents/KWH)	(\$/UNIT)
1. TIA SOLAR	1.6	270	23.4	-	23.4	-	SOLAR	-	-	-	-	-	-
2. BIG BEND SOLAR	19.3	180	1.3	-	1.3	-	SOLAR	-	-	-	-	-	-
3. LEGOLAND SOLAR	1.5	2,960	273.7	-	273.7	-	SOLAR	-	-	-	-	-	-
4. PAYNE CREEK SOLAR	70.1	10,090	20.0	-	20.0	-	SOLAR	-	-	-	-	-	-
5. BALM SOLAR	74.2	10,450	19.5	-	19.5	-	SOLAR	-	-	-	-	-	-
6. LITHIA SOLAR	74.3	11,980	22.4	-	22.4	-	SOLAR	-	-	-	-	-	-
	54.0	8,390	19.1	-	19.1	-	SOLAR	-	-	-	-	-	-
	04.0 27.4	7,000	19.4	-	19.4	-	SOLAR	-	-	-	-	-	-
	37.4	0,010	22.3	-	22.3	-	SOLAR	-	-	-	-	-	-
	49.4	11 740	21.0	-	21.0	-	SOLAR	-	-	-	-	-	-
	74.7	12 030	21.0	-	21.0	-	SOLAR	-	-	-	-	-	-
13 DURRANCE SOLAR	59.8	8 860	20.5		22.5		SOLAR	_			-		
14 FUTURE SOLAR	24.9	3 590 0	20.0	-	20.0	-	SOLAR	-		-	_	-	_
15. FUTURE SOLAR	74.3	7 530 0	14.1	-	14.1	-	SOLAR	-		-	_	-	_
16 FUTURE SOLAR	52.3	10,690,0	28.3	-	28.3	-	SOLAR	-	-		-	_	-
17. FUTURE SOLAR	74.3	10,690.0	20.0	-	20.0	-	SOLAR	-	-	-	-	-	-
18. SOLAR TOTAL (3)	878.0	129,810	20.5		20.5		SOLAR		<u> </u>				
19. BIG BEND #1 CC TOTAL	1,055	758,410	99.7	0.0	102.3	6,229	GAS	4,595,280	1,028,000	4,723,950.0	20,323,688	2.68	4.42
20. BIG BEND #2 TOTAL	340	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
21 PP#2 (CAS)	245	0.020	2.6				CAS	104 650	1 027 009	107 590 0	462 920	5 1 2	4.42
21. B.B.#3 (GAS)	205	9,030	3.0	-	-	-	GAS	104,050	1,027,996	107,560.0	402,039	5.13	4.42
22. B.B.#3 (COAL)	395	9.020	2.6	42.0		11 014	CUAL			107 590 0	462 920	<u> </u>	0.00
23. BIG BEND #3 TOTAL	345	9,030	5.6	43.0	54.5	11,914		-		107,550.0	402,039	5.15	-
24. B.B.#4 (GAS)	155	6,000	5.4	-	-	-	GAS	71,970	1,027,928	73,980.0	318,304	5.31	4.42
25. B.B.#4 (COAL)	422	114,030	37.5	-			COAL	62,470	22,501,361	1,405,660.0	3,930,668	3.45	62.92
26. BIG BEND #4 TOTAL	422	120,030	39.4	83.3	46.2	12,327		-	-	1,479,640.0	4,248,972	3.54	-
27. B.B. IGNITION	-	-	-	-	-	-	GAS	12,110	1,027,250	12,440.0	53,559	-	4.42
28. B.B.C.T.#4 TOTAL	56	110	0.3	98.3	65.5	13.091	GAS	1.400	1.028.571	1.440.0	6.192	5.63	4.42
29. 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
30. 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
31. BIG BEND STATION TOTAL	2,878	887,580	42.8	41.5	87.2	7,112	-	-	-	6,312,610.0	25,095,250	2.83	-
32 POLK #1 GASIFIER	220	0	0.0	-	0.0	0	COAL	0	0	0.0	0	0.00	0.00
33. POLK #1 CT (GAS)	210	7.830	5.2	-	79.3	8.921	GAS	67.950	1.027.962	69.850.0	300.525	3.84	4.42
34. POLK #1 TOTAL	220	7,830	4.9	93.8	79.3	8,921	-	-	-	69,850.0	300,525	3.84	-
	400	4 500	1.0		50.0	0.047	040	10.000	4 007 000	10,000,0	50.000	0.55	4.40
	120	1,580	1.8	-	59.8	8,247	GAS	12,080	1,027,003	13,030.0	50,U8U 0 105 622	3.55	4.42
30. POLK #2 ST W/O DUCT FIRING	461	302,000				7 094	GAS	2,079,175	1,026,004	2,137,400.0	9,195,032	3.04	4.42
ST. FOLK #2 ST TOTAL	401	303,380	51.5	-	50.1	1,004	GAG	-	-	2,100,400.0	3,231,712	3.05	-
38. POLK #2 CT (GAS)	150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
39. POLK #2 CT (OIL)	159	150	0.1		94.3	13,000	LGT OIL	333	5,855,856	1,950.0	43,857	29.24	131.70
40. POLK #2 TOTAL (4)	150	150	0.1	-	94.3	13,000	-	-	-	1,950.0	43,857	29.24	-
41 POLK #3 CT (GAS)	150	0	0.0	_	0.0	٥	GAS	0	٥	0.0	n	0.00	0.00
42. POLK #3 CT (OIL)	159	150	0.1	-	94.3	13.000	LGT OIL	332	5.873.494	1.950.0	43,725	29.15	131 70
43. POLK #3 TOTAL (4)	150	150	0.1	-	94.3	13,000			-	1,950.0	43,725	29.15	

SCHEDULE E4

DOCKET NO. 20210001-EI EXHIBIT NO. MAS-3 DOCUMENT NO. 2, PAGE 30 OF 42

TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: NOVEMBER 2022

(A)		(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(L)	(K)	(L)	(M)	(N)
PLANT/UNIT		NET CAPA- BILITY	NET GENERATION	NET CAPACITY FACTOR	EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
		(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) ⁽²⁾	(\$) ⁽¹⁾	(cents/KWH)	(\$/UNIT)
44. POLK #4 CT (GAS) TOTAL	(4)	150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
45. POLK #5 CT (GAS) TOTAL	(4)	150	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
46. POLK #2 CC TOTAL		1,061	303,880	39.7	97.4	90.1	7,089	-	-	-	2,154,330.0	9,339,294	3.07	-
47. POLK STATION TOTAL		1,281	311,710	33.7	96.8	89.4	7,135	-	-	-	2,224,180.0	9,639,819	3.09	-
48. BAYSIDE #1		720	15,230	2.9	25.8	32.0	7,957	GAS	117,880	1,027,995	121,180.0	521,351	3.42	4.42
49. BAYSIDE #2		954	131,950	19.2	97.3	26.8	8,308	GAS	1,066,370	1,028,020	1,096,250.0	4,716,268	3.57	4.42
50. BAYSIDE #3		56	120	0.3	98.6	71.4	12,917	GAS	1,510	1,026,490	1,550.0	6,678	5.57	4.42
51. BAYSIDE #4		56	60	0.1	98.6	53.6	14,833	GAS	870	1,022,989	890.0	3,848	6.41	4.42
52. BAYSIDE #5		56	140	0.3	98.6	62.5	14,071	GAS	1,920	1,026,042	1,970.0	8,492	6.07	4.42
53. BAYSIDE #6		56	120	0.3	98.6	53.6	14,500	GAS	1,690	1,029,586	1,740.0	7,474	6.23	4.42
54. BAYSIDE STATION TOTAL		1,898	147,620	10.8	70.3	27.3	8,289	GAS	1,190,240	1,028,011	1,223,580.0	5,264,111	3.57	4.42
55. SYSTEM TOTAL		6,935	1,476,720	29.5	54.3	81.4	6,609	-			9,760,370.0	39,999,180	2.71	

LEGEND:

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

ST = STEAM TURBINE

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

(4) In Simple Cycle Mode

48

TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: DECEMBER 2022

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPA- BILITY	NET GENERATION	NET CAPACITY FACTOR	EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
	(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) ⁽²⁾	(\$) (1)	(cents/KWH)	(\$/UNIT)
1. TIA SOLAR	1.6	260	21.8	-	21.8	-	SOLAR	-	-	-	-	-	-
2. BIG BEND SOLAR	19.3	160	1.1	-	1.1	-	SOLAR	-	-	-	-	-	-
3. LEGOLAND SOLAR	1.5	2,680	240.1	-	240.1	-	SOLAR	-	-	-	-	-	-
4. PAYNE CREEK SOLAR	70.1	8,470	16.2	-	16.2	-	SOLAR	-	-	-	-	-	-
5. BALM SOLAR	74.2	8,770	15.9	-	15.9	-	SOLAR	-	-	-	-	-	-
6. LITHIA SOLAR	74.3	10,360	18.7	-	18.7	-	SOLAR	-	-	-	-	-	-
7. GRANGE HALL SOLAR	60.8	7,030	15.5	-	15.5	-	SOLAR	-	-	-	-	-	-
8. PEACE CREEK SULAR	54.8	6,450	15.8	-	15.8	-	SOLAR	-	-	-	-	-	-
9. BOINNE MINE SOLAR	37.4	5,030	10.1	-	10.1	-	SOLAR	-	-	-	-	-	-
10. LAKE HANCOCK SOLAR	49.4	5,600	15.2	-	15.2	-	SOLAR	-	-	-	-	-	-
	74.7	10,430	18.8	-	18.8	-	SOLAR	-	-	-	-	-	-
12. LITTLE MANATEE RIVER SOLAR	74.3	7,440	10.0	-	10.0	-	SOLAR	-	-	-	-	-	-
	39.6	7,440	16.7	-	10.7	-	SOLAR	-	-	-	-	-	-
	24.9	5,010	10.2	-	10.2	-	SOLAR	-	-	-	-	-	-
	74.3 53.3	0,320	00.4	-	11.4	-	SOLAR	-	-	-	-	-	-
17. FUTURE SOLAR	32.3	8,970	23.1	-	23.1	-	SOLAR	-	-	-	-	-	-
	74.3	0,970	10.2	-	10.2	-	SOLAR	-	-	-	-	-	-
	22.2	7,000	47.0	-	47.0	-	SOLAR	-	-	-	-	-	-
	70.0	2,680	5.1	-	5.1	-	SOLAR	-	-	-	-	-	-
	70.0	2,000	17.0	-	17.0	-	SOLAR	-	-	-	-	-	-
21. FOTORE SOLAR 22. SOLAR TOTAL (3)	1102.0	127.440	16.9		16.9	<u> </u>	SOLAR						
	1102.0	137,440	10.0	-	10.0	-	JOLAN	-	-	-	-	-	-
23. BIG BEND #1 CC TOTAL	1,120	787,780	94.5	98.0	96.9	6,277	GAS	4,810,060	1,028,002	4,944,750.0	21,872,120	2.78	4.55
24. BIG BEND #2 TOTAL	350	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
25. B.B.#3 (GAS)	355	13,470	5.1	-	-	-	GAS	155,030	1,028,059	159,380.0	704,947	5.23	4.55
26. B.B.#3 (COAL)	400	0	0.0				COAL	0	0	0.0	0	0.00	0.00
27. BIG BEND #3 TOTAL	355	13,470	5.1	82.1	52.7	11,832		-	-	159,380.0	704,947	5.23	-
28. B.B.#4 (GAS)	160	6.890	5.8	-	-	-	GAS	80.970	1.028.035	83,240.0	368,184	5.34	4.55
29 B B #4 (COAL)	432	130,860	40.7	-	-	-	COAL	70,290	22 500 925	1 581 590 0	4 423 948	3.38	62.94
30. BIG BEND #4 TOTAL	432	137,750	42.9	89.3	46.8	12,086	00/12		-	1,664,830.0	4,792,132	3.48	-
31. B.B. IGNITION	-	-	-	-	-	-	GAS	6,260	1,028,754	6,440.0	28,465	-	4.55
	61	420	0.9	08.2	00 1	11 629	GAS	4 990	1 024 590	5 000 0	22 100	E 16	4 55
22 BBCT#5 TOTAL	250	430	0.9	50.5	00.1	11,020	GAS	4,000	1,024,550	5,000.0	22,190	5.10	4.55
34 BBCT#6 TOTAL	350	0	0.0	0.0	0.0	0	GAS	0	0	0.0	0	0.00	0.00
34. B.B.C.1.#0 TOTAL	550	Ū	0.0	0.0	0.0	Ū	GAG	Ū	U	0.0	Ū	0.00	0.00
35. BIG BEND STATION TOTAL	3,018	939,430	41.8	60.8	82.9	7,211	-	-	-	6,773,960.0	27,419,854	2.92	-
36. POLK #1 GASIFIER	220	0	0.0	-	0.0	0	COAL	0	0	0.0	0	0.00	0.00
37. POLK #1 CT (GAS)	230	21,630	12.6		73.5	8,961	GAS	188,540	1,028,058	193,830.0	857,322	3.96	4.55
38. POLK #1 TOTAL	230	21,630	12.6	93.8	73.5	8,961	-	-	-	193,830.0	857,322	3.96	-
39 POLK #2 ST DUCT FIRING	120	2 310	2.6	-	83.7	8 182	GAS	18,380	1 028 292	18 900 0	83 577	3.62	4 55
	360	239 370	2.0	_	-	0,102	0/10	1 659 095	1,028,006	1 705 560 0	7 544 173	3 15	4.55
41. POLK #2 ST TOTAL	480	241,680	67.7		80.6	7,135	GAS	-	-	1,724,460.0	7,627,750	3.16	-
	190	1 500	10		67.5	11 650	CAR	17.000	1 028 402	10 410 0	81.202	E 4 F	4.55
42. FULK #2 CT (GAS)	180	1,580	1.2	-	5.10	11,052	GAS	17,900	1,028,492	18,410.0	81,393	5.15	4.55
43. FULK #2 UT (UIL)	18/	1 720	0.1		80.2	13,000	LGT UIL	333	5,855,856	1,950.0	43,088	29.13	131.20
44. FULK #2 IUIAL (*)	100	1,730	1.3	-	00.5	11,769	-	-	-	20,360.0	120,001	1.23	-
45. POLK #3 CT (GAS)	180	0	0.0	-	0.0	0	GAS	0	0	0.0	0	0.00	0.00
46. POLK #3 CT (OIL)	187	150	0.1		80.2	13,000	LGT OIL	332	5,873,494	1,950.0	43,558	29.04	131.20
47. POLK #3 TOTAL (4)	180	150	0.1	-	80.2	13.000			-	1.950.0	43.558	29.04	

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SCHEDULE E4

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TAMPA ELECTRIC COMPANY SYSTEM NET GENERATION AND FUEL COST ESTIMATED FOR THE PERIOD: DECEMBER 2022

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)
PLANT/UNIT	NET CAPA- BILITY	NET GENERATION	NET CAPACITY FACTOR	EQUIV. AVAIL. FACTOR	NET OUTPUT FACTOR	AVG. NET HEAT RATE	FUEL TYPE	FUEL BURNED	FUEL HEAT VALUE	FUEL BURNED	AS BURNED FUEL COST	FUEL COST PER KWH	COST OF FUEL
	(MW)	(MWH)	(%)	(%)	(%)	(BTU/KWH)		(UNITS)	(BTU/UNIT)	(MM BTU) ⁽²⁾	(\$) (1)	(cents/KWH)	(\$/UNIT)
48. POLK #4 CT (GAS) TOTAL	(4) 180	940	0.7	-	65.3	11,681	GAS	10,680	1,028,090	10,980.0	48,564	5.17	4.55
49. POLK #5 CT (GAS) TOTAL	⁽⁴⁾ 180	930	0.7	-	64.6	11,806	GAS	10,680	1,028,090	10,980.0	48,564	5.22	4.55
50. POLK #2 CC TOTAL	1,200	245,430	27.5	81.7	79.9	7,207	-		-	1,768,730.0	7,893,517	3.22	-
51. POLK STATION TOTAL	1,430	267,060	25.1	83.7	78.9	7,349	-	-	-	1,962,560.0	8,750,839	3.28	-
52. BAYSIDE #1	792	137,370	23.3	96.6	32.7	7,702	GAS	1,029,200	1,028,002	1,058,020.0	4,679,939	3.41	4.55
53. BAYSIDE #2	1,047	51,050	6.6	97.3	28.3	8,042	GAS	399,370	1,027,994	410,550.0	1,815,999	3.56	4.55
54. BAYSIDE #3	61	380	0.8	98.6	89.0	11,342	GAS	4,190	1,028,640	4,310.0	19,053	5.01	4.55
55. BAYSIDE #4	61	330	0.7	98.6	90.2	11,485	GAS	3,690	1,027,100	3,790.0	16,779	5.08	4.55
56. BAYSIDE #5	61	470	1.0	98.6	85.6	11,723	GAS	5,360	1,027,985	5,510.0	24,373	5.19	4.55
57. BAYSIDE #6	61	420	0.9	98.6	86.1	11,762	GAS	4,810	1,027,027	4,940.0	21,872	5.21	4.55
58. BAYSIDE STATION TOTAL	2,083	190,020	12.3	97.2	31.5	7,826	GAS	1,446,620	1,027,996	1,487,120.0	6,578,015	3.46	4.55
59. SYSTEM TOTAL	7,633	1,533,950	27.0	66.2	77.1	6,665		<u> </u>	<u> </u>	10,223,640.0	42,748,708	2.79	

(3) AC rating

LEGEND:

50

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

(4) In Simple Cycle Mode

SCHEDULE E4

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SCHEDULE E5

TAMPA ELECTRIC COMPANY SYSTEM GENERATED FUEL COST INVENTORY ANALYSIS ESTIMATED FOR THE PERIOD: JANUARY 2022 THROUGH JUNE 2022

		Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22
1							
1. 2. 3. 4.	UNITS (BBL) UNIT COST (\$/BBL) AMOUNT (\$) BURNED:	0 0.00 0	0 0.00 0	0 0.00 0	0 0.00 0	0 0.00 0	0 0.00 0
6. 7. 8. 9.	UNITS (BBL) UNIT COST (\$/BBL) AMOUNT (\$) ENDING INVENTORY:	0 0.00 0	0 0.00 0	0 0.00 0	0 0.00 0	0 0.00 0	0 0.00 0
10. 11. 12.	UNITS (BBL) UNIT COST (\$/BBL) AMOUNT (\$)	0 0.00 0	0 0.00 0	0 0.00 0	0 0.00 0	0 0.00 0	0 0.00 0
13.	DAYS SUPPLY:	0	0	0	0	0	0
14. 15. 16. 17.	LIGHT OIL PURCHASES: UNITS (BBL) UNIT COST (\$/BBL) AMOUNT (\$) PURNED:	665 102.65 68,265	665 102.38 68,083	665 101.85 67,728	665 101.07 67,209	665 100.43 66,788	665 99.96 66,475
10. 19. 20. 21. 22	UNITS (BBL) UNIT COST (\$/BBL) AMOUNT (\$) ENDING INVENTORY	665 137.07 91,149	665 136.52 90,787	665 135.98 90,425	665 135.43 90,061	665 134.88 89,697	665 134.33 89,332
23. 24. 25.	UNITS (BBL) UNIT COST (\$/BBL) AMOUNT (\$)	41,760 137.03 5,722,460	41,760 136.49 5,699,756	41,760 135.94 5,677,059	41,760 135.40 5,654,207	41,760 134.85 5,631,298	41,760 134.30 5,608,440
26. 27.	DAYS SUPPLY: NORMAL DAYS SUPPLY: EMERGENCY	1,909,609 6	1,909,599 6	1,909,599 6	1,909,599 6	1,909,599 6	1,909,599 6
28. 29. 30.	COAL PURCHASES: UNITS (TONS) UNIT COST (\$/TON)	65,000 64.46	55,000 63.99	70,000 63.38	70,000 63.47	55,000 64.03	45,000 61.43
31. 32.	AMOUNT (\$) BURNED:	4,190,125	3,519,461	4,436,677	4,442,855	3,521,454	2,764,201
33. 34. 35.	UNITS (TONS) UNIT COST (\$/TON) AMOUNT (\$) ENDING INVENTORY:	62.11 4,505,889	63,500 62.83 3,989,914	62.33 3,561,514	50,210 63.25 3,175,693	62.52 4,571,140	62.61 4,730,807
37. 38. 39.	UNITS (TONS) UNIT COST (\$/TON) AMOUNT (\$)	232,888 60.96 14,196,096	224,388 61.42 13,782,069	237,248 61.84 14.672.013	257,038 62.22 15,992,163	238,928 62.62 14,961,389	208,368 62.46 13.014.329
40.	DAYS SUPPLY:	108	117	121	118	96	81
41.	NATURAL GAS PURCHASES:						
42. 43	UNITS (MCF)	8,871,536 5 19	7,779,965	8,734,935 4 80	9,187,705 4 32	10,533,255 4 27	12,412,825 4 17
44. 45.	AMOUNT (\$) BURNED:	46,057,217	39,598,109	41,955,637	39,702,520	45,016,467	51,745,193
46. 47. 48.	UNITS (MCF) UNIT COST (\$/MCF) AMOUNT (\$)	8,871,535 5.19 46,031,617	7,779,965 5.09 39,631,629	8,734,935 4.81 42,052,837	9,187,705 4.34 39,902,360	10,533,255 4.28 45,049,828	12,412,825 4.17 51,734,792
49. 50. 51. 52.	ENDING INVENTORY: UNITS (MCF) UNIT COST (\$/MCF) AMOUNT (\$)	389,105 3.92 1,524,320	389,105 3.83 1,490,800	389,105 3.58 1,393,600	389,105 3.07 1,193,760	389,105 2.98 1,160,400	389,105 3.01 1,170,800
53.	DAYS SUPPLY:	1	1	1	1	1	1
54. 55. 56. 57.	NUCLEAR BURNED: UNITS (MMBTU) UNIT COST (\$/MMBTU) AMOUNT (\$)	0 0.00 0	0 0.00 0	0 0.00 0	0 0.00 0	0 0.00 0	0 0.00 0
58. 59. 60. 61.	OTHER PURCHASES: UNITS (MMBTU) UNIT COST (\$/MMBTU) AMOUNT (\$) PURNED:	0 0.00 0	0 0.00 0	0 0.00 0	0 0.00 0	0 0.00 0	0 0.00 0
62. 63. 64. 65.	UNITS (MMBTU) UNIT COST (\$/MMBTU) AMOUNT (\$)	0 0.00 0	0 0.00 0	0 0.00 0	0 0.00 0	0 0.00 0	0 0.00 0
66. 67. 68. 69.	ENDING INVENTORY: UNITS (MMBTU) UNIT COST (\$/MMBTU) AMOUNT (\$)	0 0.00 0	0 0.00 0	0 0.00 0	0 0.00 0	0 0.00 0	0 0.00 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

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SCHEDULE E5

TAMPA ELECTRIC COMPANY SYSTEM GENERATED FUEL COST INVENTORY ANALYSIS ESTIMATED FOR THE PERIOD: JULY 2022 THROUGH DECEMBER 2022

Jul-22 Nov-22 TOTAL Aug-22 Sep-22 Oct-22 Dec-22 HEAVY OIL PURCHASES: 1 UNITS (BBL) UNIT COST (\$/BBL) 2. 0 0 0 0 0 0 0 3. 0.00 0.00 0.00 0.00 0.00 0.00 0.00 AMOUNT (\$) 4. 0 0 0 0 0 0 0 5. BURNED: UNITS (BBL) UNIT COST (\$/BBL) 6. ٥ ٥ ٥ ٥ ٥ ٥ ٥ 7. 0.00 0.00 0.00 0.00 0.00 0.00 0.00 8. AMOUNT (\$) 0 0 0 0 0 0 0 ENDING INVENTORY: 9. 10 UNITS (BBL) 0 0 0 0 0 0 0 UNIT COST (\$/BBL) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 11 AMOUNT (\$) 12. 0 0 0 0 0 0 0 13. DAYS SUPPLY: 0 0 0 0 0 0 LIGHT OIL 14 PURCHASES UNITS (BBL) 665 665 665 665 665 665 7.980 15. 16 UNIT COST (\$/BBL) 99.82 99.73 99.66 99.62 99.57 99.46 100.52 17 AMOUNT (\$) 66,383 66,323 66,277 66,250 66,212 66,144 802,137 BURNED: 18 UNITS (BBL) 19. 665 665 665 665 665 665 7,980 UNIT COST (\$/BBL) 133.79 133.26 20 132.73 132.21 131.70 131.20 134.09 AMOUNT (\$) ENDING INVENTORY: 21 88,973 88,618 88,267 87,922 87,582 87,246 1,070,059 22. UNITS (BBL) UNIT COST (\$/BBL) 23. 41,760 41,760 41,760 41,760 41,760 41,760 41,760 24 133.76 133.23 132.70 132.18 131.67 131.16 131.16 AMOUNT (\$) 25. 5,585,850 5,563,555 5,541,565 5,519,893 5,498,523 5,477,422 5,477,422 DAYS SUPPLY: NORMAL 26 1,909,599 1,909,599 1,909,599 1,909,599 1,909,599 1,909,599 27. DAYS SUPPLY: EMERGENCY 6 6 6 6 6 -COAL 28 PURCHASES: UNITS (TONS) UNIT COST (\$/TON) 29 85,000 75,000 50,000 65,000 50,000 60,000 745,000 30. 63.16 63.39 61.43 62.84 61.43 61.43 62.97 31 AMOUNT (\$) 5,368,545 4,754,278 3,071,334 4,084,755 3,071,334 3,685,601 46,910,620 32 BURNED: UNITS (TONS) 81.600 33 79.890 79.240 8.090 62.470 70.290 773.650 UNIT COST (\$/TON) 34 62.79 62.72 62.84 62.92 62.92 62.94 62.71 35 AMOUNT (\$) 5,010,894 5,123,910 4,979,203 509,008 3,930,668 4,423,948 48,512,588 ENDING INVENTORY: 36 UNITS (TONS) 213,478 206,878 211,788 37 177,638 234,548 222,078 211,788 38 UNIT COST (\$/TON) 62.74 63.05 62.81 62.82 62.55 62.19 62.19 39 AMOUNT (\$) 13,392,646 13,044,122 11,156,751 14,734,591 13,891,417 13,171,253 13,171,253 40 DAYS SUPPLY 82 113 108 153 100 92 NATURAL GAS PURCHASES: UNITS (MCF) 41 42. 12,677,295 13,146,505 11,541,635 11,241,335 8,135,455 8,409,095 122,671,541 UNIT COST (\$/MCF) 43 4.19 4.15 4.17 4.20 4.43 4.55 4.41 54.542,646 48.178,436 38.286,074 541.426,764 44 AMOUNT (\$) 53.145.337 47,195,478 36 003 650 BURNED: 45 46 UNITS (MCF) 12,677,295 13,146,505 11,541,635 11.241.335 8,135,455 8,409,095 122,671,540 47 UNIT COST (\$/MCF) 4.17 4.20 4.42 4.42 4.19 4.15 4.55 47,184,838 AMOUNT (\$) 35,980,930 38,237,514 541,661,724 48 53,131,177 54,540,246 48,183,956 ENDING INVENTORY: 49. UNITS 389,105 389,105 389,105 389,105 389,105 389,105 389,105 50 (MCF) UNIT COST (\$/MCF) AMOUNT (\$) 51 3 05 3 05 3 04 3.06 3.12 3 25 3 25 1,181,839 1,192,479 1,215,200 1,263,760 1,263,760 52. 1,184,960 1,187,361 53. DAYS SUPPLY: 1 1 1 1 1 1 NUCLEAR 54 BURNED: 55 UNITS (MMBTU) Λ ٥ ٥ ٥ 0 ٥ 0 UNIT COST (\$/MMBTU) 56 0.00 0.00 0.00 0.00 0.00 0.00 0.00 AMOUNT (\$) 57. 0 0 0 0 0 0 0 OTHER 58 PURCHASES: UNITS (MMBTU) 59 0 0 0 0 0 0 0 UNIT COST (\$/MMBTU) 60. 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: UNITS (MMBTU) UNIT COST (\$/MMBTU) 0 0 0 63. 0 0 0 0 64 0.00 0.00 0.00 0.00 0.00 0.00 0.00 AMOUNT (\$) 65 0 0 0 0 0 0 0 ENDING INVENTORY: 66 UNITS (MMBTU) 67 0 0 0 0 0 0 0 UNIT COST (\$/MMBTU) 0.00 0.00 0.00 0.00 0.00 0.00 0.00 68 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

(4)

2,880.0

3,000.0

3,000.0

0.0

SCH. - D

MKT. BASE

(2)

TOTAL

TOTAL

SEMINOLE JURISD.

VARIOUS JURISD.

Jun-22

(3)

(1)

(10)

5,728.00

6,247.00

6,247.00

0.00

86,998.00

94,887.00

94,887.00

0.00

81,270.00

88,640.00

88,640.00

0.00

(8)

(9)

MONTH	0015 70		TYPE &	TOTAL MWH	FROM OTHER	MWH FROM OWN	(A) FUEL	(B) TOTAL	TOTAL \$ FOR FUEL	TOTAL COST	GAINS ON
MONTH	SOLD TO	50	HEDULE	SOLD	SYSTEMS	GENERATION	COST	COST	ADJUSTMENT	\$	SALES
Jan-22	SEMINOLE	JURISD.	SCH D	2,900.0	0.0	2,900.0	3.111	3.330	90,210.00	96,568.00	6,358.00
	VARIOUS	JURISD.	MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
	TOTAL		-	2,900.0	0.0	2,900.0	3.111	3.330	90,210.00	96,568.00	6,358.00
Fab 22				2 770 0	0.0	0 770 0	2.054	2 462	04 000 00	87 596 00	F 766 00
Feb-22	SEIVIINOLE	JURISD.	SCH D	2,770.0	0.0	2,770.0	2.954	3.102	61,620.00	87,586.00	5,766.00
	VARIOUS	JURISD.	MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
	TOTAL			2,770.0	0.0	2,770.0	2.954	3.162	81,820.00	87,586.00	5,766.00
Mar-22	SEMINOLE	JURISD.	SCH D	2,990.0	0.0	2,990.0	2.887	3.091	86,330.00	92,414.00	6,084.00
	VARIOUS	JURISD.	MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
	TOTAL			2,990.0	0.0	2,990.0	2.887	3.091	86,330.00	92,414.00	6,084.00
Apr-22	SEMINOLE	JURISD.	SCH D	2,880.0	0.0	2,880.0	2.632	2.817	75,800.00	81,142.00	5,342.00
	VARIOUS	JURISD.	MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
	TOTAL			2,880.0	0.0	2,880.0	2.632	2.817	75,800.00	81,142.00	5,342.00
May-22	SEMINOLE	JURISD.	SCH D	2,880.0	0.0	2,880.0	2.822	3.021	81,270.00	86,998.00	5,728.00
	VARIOUS	JURISD.	MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00

0.0

0.0

0.0

0.0

2,880.0

3,000.0

3,000.0

0.0

2.822 3.021

2.955 3.163

2.955 3.163

0.000

0.000

ESTIMATED FOR THE PERIOD: JANUARY 2022 THROUGH JUNE 2022

(5) MWH

WHEELED

(6)

(7)

CENTS/KWH

TAMPA ELECTRIC COMPANY

POWER SOLD

ESTIMATED FOR THE PERIOD: JULY 2022 THROUGH DECEMBER 2022

(1)	(2)		(3)	(4)	(5)	(6)	(7)		(8)	(9)	(10)
					MWH						
					WHEELED		CENTS	S/KWH			
		-	TYPE	TOTAL	FROM	MWH	(A)	(B)	TOTAL \$		
			&	MWH	OTHER	FROM OWN	FUEL	TOTAL	FOR FUEL	TOTAL COST	GAINS ON
MONTH	SOLD TO	SCI	HEDULE	SOLD	SYSTEMS	GENERATION	COST	COST	ADJUSTMENT	\$	SALES
Jul-22	SEMINOLE J	JURISD.	SCH D	2,940.0	0.0	2,940.0	2.776	2.971	81,610.00	87,362.00	5,752.00
	VARIOUS J	JURISD.	MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
	TOTAL			2,940.0	0.0	2,940.0	2.776	2.971	81,610.00	87,362.00	5,752.00
Aug-22	SEMINOLE J	JURISD.	SCH D	2,940.0	0.0	2,940.0	2.918	3.123	85,780.00	91,825.00	6,045.00
	VARIOUS J	JURISD.	MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
	TOTAL			2,940.0	0.0	2,940.0	2.918	3.123	85,780.00	91,825.00	6,045.00
						0.000.0	0 700	0.044	00 500 00	00.470.00	5 070 00
Sep-22	SEMINOLE J	JURISD.	SCH D	2,960.0	0.0	2,960.0	2.720	2.911	80,500.00	86,173.00	5,673.00
	VARIOUS J	JURISD.	MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
	TOTAL			2,960.0	0.0	2,960.0	2.720	2.911	80,500.00	86,173.00	5,673.00
Oct-22	SEMINOLE J	JURISD.	SCH D	2,950.0	0.0	2,950.0	2.757	2.951	81,320.00	87,051.00	5,731.00
	VARIOUS J	JURISD.	MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
	TOTAL			2,950.0	0.0	2,950.0	2.757	2.951	81,320.00	87,051.00	5,731.00
Nov-22	SEMINOLE J	JURISD.	SCH D	2,800.0	0.0	2,800.0	2.444	2.616	68,420.00	73,242.00	4,822.00
	VARIOUS J	JURISD.	MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
	TOTAL			2,800.0	0.0	2,800.0	2.444	2.616	68,420.00	73,242.00	4,822.00
Dec-22	SEMINOLE J	JURISD.	SCH D	3,030.0	0.0	3,030.0	2.590	2.773	78,490.00	84,022.00	5,532.00
	VARIOUS J	JURISD.	MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
	TOTAL		····· · · · · · · · · ·	3,030.0	0.0	3,030.0	2.590	2.773	78,490.00	84,022.00	5,532.00
TOTAL										,	,
Jan-22	SEMINOLE J	JURISD.	SCH D	35,040.0	0.0	35,040.0	2.797	2.994	980,190.00	1,049,270.00	69,080.00
THRU	VARIOUS J	JURISD.	MKT. BASE	0.0	0.0	0.0	0.000	0.000	0.00	0.00	0.00
Dec-22	TOTAL		-	35,040.0	0.0	35,040.0	2.797	2.994	980,190.00	1,049,270.00	69,080.00

SCHEDULE E7

TAMPA ELECTRIC COMPANY PURCHASED POWER EXCLUSIVE OF ECONOMY AND QUALIFYING FACILITIES ESTIMATED FOR THE PERIOD: JANUARY 2022 THROUGH DECEMBER 2022

(1)	(2) (3)		(4)	(5)	(6)	(7)	8)	3)	(9)
				ммн	ммн		CENTS	S/KWH	
		TYPE	TOTAL	FOR	FOR	MWH	(A)	(B)	TOTAL \$
MONTH	PURCHASED				INTERRUP-	FOR	FUEL	TOTAL	FOR FUEL
WONTH	T KOW	SCHEDOLL	FUNCTIAGED	UTILITIES	TIBLE		0031	0031	ADJUSTWENT
Jan-22	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
Feb-22	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 22	VARIOUS	EIDM	0.0	0.0	0.0	0.0	0.000	0.000	0.00
Wai -22	TOTAL	FINI	0.0	0.0	0.0	0.0	0.000	0.000	0.00
Apr-22	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-22	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-22	VARIOUS	FIRM	0.0	0.0	0.0	0.0	0.000	0 000	0.00
0411 22	TOTAL		0.0	0.0	0.0	0.0	0.000	0.000	0.00
Jul-22	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
A.u. 00	VARIOUS		0.0	0.0	0.0	0.0	0.000	0.000	0.00
Aug-22	TOTAL		0.0	0.0	0.0	0.0	0.000	0.000	0.00
Sep-22	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-22	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-22	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
De- 00	VARIOUS	EIDM	0.0	0.0	0.0	0.0	0.000	0.000	0.00
Dec-22	TOTAL		0.0	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	0.00
Jan-22	VARIOUS	FIRM	0.0	0.0	0.0	0.0	0.000	0.000	0.00
THRU	TOTAL		0.0	0.0	0.0	0.0	0.000	0.000	0.00
Dec-22									

SCHEDULE E8

TAMPA ELECTRIC COMPANY ENERGY PAYMENT TO QUALIFYING FACILITIES ESTIMATED FOR THE PERIOD: JANUARY 2022 THROUGH DECEMBER 2022

(2) (1) (3) (4) (5) (6) (7) (8) (9) MWH MWH CENTS/KWH TOTAL \$ TYPE TOTAL FOR FOR MWH (A) (B) FOR FUEL PURCHASED MWH OTHER INTERRUP-FOR FÙÉL TOTAL ADJUST-& MONTH FROM SCHEDULE PURCHASED UTILITIES TIBLE FIRM COST COST MENT VARIOUS CO-GEN Jan-22 149.230.00 AS AVAIL 5.660.0 0.0 0.0 5.660.0 2.637 2.637 TOTAL 5,660.0 0.0 0.0 5,660.0 2.637 2.637 149,230.00 Feb-22 VARIOUS CO-GEN. AS AVAIL 5,670.0 0.0 0.0 5,670.0 2.454 2.454 139,130.00 ΤΟΤΑΙ 5,670.0 0.0 0.0 5,670.0 2.454 2.454 139,130.00 Mar-22 VARIOUS CO-GEN. AS AVAIL. 5,910.0 0.0 0.0 5,910.0 2.783 2.783 164,470.00 TOTAL 5,910.0 0.0 0.0 5,910.0 2.783 2.783 164,470.00 Apr-22 VARIOUS CO-GEN. 5.670.0 0.0 5.670.0 2.500 141.730.00 AS AVAIL 0.0 2.500 TOTAL 2.500 5.670.0 0.0 0.0 5.670.0 2.500 141.730.00 May-22 VARIOUS CO-GEN. AS AVAIL. 5,550.0 0.0 0.0 5,550.0 2.343 2.343 130,060.00 TOTAL 5,550.0 0.0 0.0 5,550.0 2.343 2.343 130,060.00 VARIOUS CO-GEN. Jun-22 AS AVAIL. 5,920.0 0.0 0.0 5,920.0 2.861 2.861 169,370.00 TOTAL 5,920.0 0.0 0.0 5,920.0 2.861 2.861 169,370.00 Jul-22 VARIOUS CO-GEN. 5,720.0 2.631 2.631 AS AVAIL 5,720.0 0.0 0.0 2.631 150,520.00 5,720.0 5,720.0 2.631 150,520.00 TOTAL 0.0 0.0 Aug-22 VARIOUS CO-GEN. AS AVAIL. 5,770.0 0.0 0.0 5,770.0 3.012 3.012 173,790.00 TOTAL 5,770.0 0.0 0.0 5,770.0 3.012 3.012 173,790.00 VARIOUS CO-GEN. Sep-22 AS AVAIL. 5,780.0 0.0 5,780.0 3.186 3.186 184,140.00 0.0 TOTAL 5,780.0 3.186 3.186 184,140.00 0.0 0.0 5,780.0 Oct-22 VARIOUS CO-GEN. AS AVAIL 5.770.0 0.0 0.0 5.770.0 2.866 2.866 165.380.00 TOTAL 5,770.0 0.0 5,770.0 2.866 2.866 165.380.00 0.0 Nov-22 VARIOUS CO-GEN. AS AVAIL. 5,550.0 0.0 0.0 5,550.0 2.793 2.793 154,990.00 TOTAL 5,550.0 0.0 0.0 5,550.0 2.793 2.793 154.990.00 Dec-22 VARIOUS CO-GEN. AS AVAIL. 5,870.0 0.0 0.0 5,870.0 2.443 2.443 143,410.00 TOTAL 5,870.0 0.0 0.0 5,870.0 2.443 2.443 143,410.00 TOTAL VARIOUS CO-GEN. Jan-22 THRU 68 840 0 0.0 0.0 68.840.0 2 7 1 1 1.866.220.00 AS AVAIL 2711 68,840.0 2.711 1,866,220.00 TOTAL 68,840.0 0.0 2.711 0.0

Dec-22

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		(10)
MONTH	PURCHASED FROM	TYPE & SCHEDULE	TOTAL MWH PURCHASED	MWH FOR INTERRUP- TIBLE	MWH FOR FIRM	TRANSACT. COST cents/KWH	TOTAL \$ FOR FUEL ADJUSTMENT	COST IF GEI (A) CENTS PER KWH	NERATED (B) DOLLARS	FUEL SAVINGS (9B)-(8)
Jan-22	VARIOUS	SCH J	260.0	0.0	260.0	5.488	14,270.00	55.792	145,060.00	130,790.00
Feb-22	VARIOUS	SCH J	190.0	0.0	190.0	5.395	10,250.00	64.447	122,450.00	112,200.00
Mar-22	VARIOUS	SCH J	90.0	0.0	90.0	5.756	5,180.00	303.622	273,260.00	268,080.00
Apr-22	VARIOUS	SCH J	30.0	0.0	30.0	5.667	1,700.00	3,713.700	1,114,110.00	1,112,410.00
May-22	VARIOUS	SCH J	600.0	0.0	600.0	4.362	26,170.00	220.233	1,321,400.00	1,295,230.00
Jun-22	VARIOUS	SCH J	8,210.0	0.0	8,210.0	5.848	480,100.00	40.894	3,357,370.00	2,877,270.00
Jul-22	VARIOUS	SCH J	8,730.0	0.0	8,730.0	6.978	609,210.00	41.340	3,608,990.00	2,999,780.00
Aug-22	VARIOUS	SCH J	5,490.0	0.0	5,490.0	6.646	364,870.00	60.824	3,339,230.00	2,974,360.00
Sep-22	VARIOUS	SCH J	61,730.0	0.0	61,730.0	6.660	4,111,460.00	11.514	7,107,430.00	2,995,970.00
Oct-22	VARIOUS	SCH J	19,540.0	0.0	19,540.0	5.671	1,108,180.00	21.879	4,275,230.00	3,167,050.00
Nov-22	VARIOUS	SCH J	20.0	0.0	20.0	6.600	1,320.00	5,610.950	1,122,190.00	1,120,870.00
Dec-22	VARIOUS	SCH J	80.0	0.0	80.0	5.525	4,420.00	678.713	542,970.00	538,550.00
TOTAL	VARIOUS	SCH J	104.970.0	0.0	104.970.0	6.418	6.737.130.00	25.083	26.329.690.00	19.592.560.00

TAMPA ELECTRIC COMPANY ECONOMY ENERGY PURCHASES ESTIMATED FOR THE PERIOD: JANUARY 2022 THROUGH DECEMBER 2022

SCHEDULE E9

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

	Current	Current	Projected	Difference	
	Jan 2021 - Aug 2021	Sep 2021 - Dec 2021	Jan 2022 - Dec 2022	\$	%
Base Rate Revenue	67.30	67.30	67.30	0.00	0.0%
Fuel Recovery Revenue	28.56	39.38	27.45	(11.93)	-30.3%
Conservation Revenue	1.66	1.66	2.36	0.70	42.2%
Capacity Revenue	0.02	1.70	0.31	(1.39)	-81.8%
Environmental Revenue	2.69	2.69	2.63	(0.06)	-2.2%
Storm Protection Plan Revenue	2.39	2.39	2.91	0.52	21.8%
Florida Gross Receipts Tax Revenue	2.63	2.95	2.64	(0.31)	-10.5%
TOTAL REVENUE	\$105.25	\$118.07	\$105.60	(\$12.47)	-10.6%

SCHEDULE H1

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

						DIFFERENCE (%)	
	ACTUAL 2019	ACTUAL 2020	ACT/EST 2021	EST 2022	2020-2019	2021-2020	2022-2021
FUEL COST OF SYSTEM NE	T GENERATION	(\$)					
1 HEAVY OIL {1}	0	0	0	0	0.0%	0.0%	0.0%
2 LIGHT OIL {1}	183,150	636,201	764,784	1,070,059	247.4%	20.2%	39.9%
3 COAL	45,241,314	33,991,967	50,861,452	48,512,588	-24.9%	49.6%	-4.6%
4 NATURAL GAS	480,359,200	379,848,073	539,523,560	541,661,724	-20.9%	42.0%	0.4%
6 OTHER	0	0	0	0	0.0%	0.0%	0.0%
7 TOTAL (\$)	525,783,664	414,476,241	591,149,796	591,244,371	-21.2%	42.6%	0.0%
SYSTEM NET GENERATION	(MWH)		â	0	0.00/	0.00/	0.00/
8 HEAVY OIL {1}	0	1 001	0	2 600	0.0%	0.0%	0.0%
	1 194 254	903 680	1 402 956	1 463 780	-24.3%	55.2%	4 3%
11 NATURAL GAS	17.513.363	16.519.857	15.869.733	17.155.510	-5.7%	-3.9%	8.1%
12 NUCLEAR	756,215	1,119,822	1,430,357	2,105,180	48.1%	27.7%	47.2%
13 OTHER	0	0	0	0	0.0%	0.0%	0.0%
14 TOTAL (MWH)	19,464,414	18,545,260	18,705,322	20,728,070	-4.7%	0.9%	10.8%
15 HEAVY OIL (BBL) {1}	0	0	0	0	0.0%	0.0%	0.0%
16 LIGHT OIL (BBL) {1}	1,436	4,345	5,444	7,980	202.6%	25.3%	46.6%
17 COAL (TON)	570,012	431,512	692,719	773,650	-24.3%	60.5%	11.7%
18 NATURAL GAS (MCF)	137,873,625	127,992,191	121,415,204	122,671,540	-7.2%	-5.1%	1.0%
19 NUCLEAR (MMBTU)	0	0	0	0	0.0%	0.0%	0.0%
20 OTHER	0	0	0	0	0.0%	0.0%	0.0%
BTUS BURNED (MMRTH)							
21 HEAVY OIL {1}	0	0	0	0	0.0%	0.0%	0.0%
22 LIGHT OIL {1}	8,362	25,328	31,824	46,800	202.9%	25.6%	47.1%
23 COAL	13,177,799	9,830,729	15,775,515	17,407,290	-25.4%	60.5%	10.3%
24 NATURAL GAS	140,983,651	131,021,110	124,368,185	125,966,410	-7.1%	-5.1%	1.3%
25 NUCLEAR	0	0	0	0	0.0%	0.0%	0.0%
26 OTHER	0	0	0	0	0.0%	0.0%	0.0%
27 TOTAL (MIMBTU)	154,169,812	140,877,167	140,175,524	143,420,500	-8.6%	-0.5%	2.3%
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}	0.00	0.01	0.01	0.02	0.0%	0.0%	100.0%
30 COAL	6.13	4.87	7.50	7.06	-20.6%	54.0%	-5.9%
31 NATURAL GAS	89.98	89.08	84.84	82.76	-1.0%	-4.8%	-2.5%
33 OTHER	0.00	0.04	0.00	0.00	0.0%	20.7 %	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}	127.04	140.42	140.48	62 71	-0.8%	-4.1%	-4.5%
38 NATURAL GAS (\$/MCF)	3.48	2.97	4.44	4.42	-14.7%	49.5%	-0.5%
39 NUCLEAR (\$/MMBTU)	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%
41 HEAVY OIL JAN	/WIMBIU)	0.00	0.00	0.00	0.0%	0.0%	0.0%
42 LIGHT OIL {1}	21 90	25 12	24.03	22.86	14 7%	-4.3%	-4.9%
43 COAL	3.43	3.46	3.22	2.79	0.9%	-6.9%	-13.4%
44 NATURAL GAS	3.41	2.90	4.34	4.30	-15.0%	49.7%	-0.9%
45 NUCLEAR	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)	3.41	2.94	4.22	4.12	-13.8%	43.5%	-2.4%
BTU BURNED PER KWH (BI	TU/KWH)						
48 HEAVY OIL {1}	0	0	0	0	0.0%	0.0%	0.0%
49 LIGHT OIL (1)	14,368	13,324	13,982	13,000	-7.3%	4.9%	-7.0%
50 COAL	11,034	10,879	11,244	11,892	-1.4%	3.4%	5.8%
51 NATURAL GAS	8,050	7,931	7,837	7,343	-1.5%	-1.2%	-6.3%
52 NUCLEAR	0	0	0	0	0.0%	0.0%	0.0%
55 UTHER 54 TOTAL (BTII/KWH)	7.921	0	7 494	6.919	<u> </u>	0.0% -1.3%	<u> </u>
	7,321	7,550	,,-34	0,313		-1.5 /6	-1.1 /0
GENERATED FUEL COST P	ER KWH (cents/I	KWH)					
55 HEAVY OIL {1}	0.00	0.00	0.00	0.00	0.0%	0.0%	0.0%
56 LIGHT OIL {1}	31.47	33.47	33.60	29.72	6.4%	0.4%	-11.5%
57 COAL	3.79	3.76	3.63	3.31	-0.8%	-3.5%	-8.8%
50 NATURAL GAS	2.74	2.30	3.40	3.16	-16.1%	47.8%	-7.1%
60 OTHER	0.00	0.00	0.00	0.00	0.0%	0.0%	0.0%
61 TOTAL (cents/KWH)	2.70	2.23	3.16	2.85	-17.4%	41.7%	-9.8%

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

DOCKET NO. 20210001-EI FAC 2022 PROJECTION FILING EXHIBIT NO. MAS-3 DOCUMENT NO. 3

EXHIBIT TO THE TESTIMONY OF

M. ASHLEY SIZEMORE

DOCUMENT NO. 3

LEVELIZED AND TIERED FUEL RATE JANUARY 2022 - DECEMBER 2022

Tampa Electric Company Comparison of Levelized and Tiered Fuel Revenues For the Period January 2022 through December 2022

	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	6,622,149	3.057	202,439,095	2.745	181,777,990
TIER II (Over 1,000) kWh	3,003,068	3.057	91,803,776	3.745	112,464,881
Total	9,625,217		294,242,871		294,242,871



BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20210001-EI FUEL & PURCHASED POWER COST RECOVERY AND CAPACITY COST RECOVERY

GENERATING PERFORMANCE INCENTIVE FACTOR PROJECTIONS

JANUARY 2022 THROUGH DECEMBER 2022

TESTIMONY AND EXHIBIT

OF

PATRICK A. BOKOR

FILED: SEPTEMBER 3, 2021

TAMPA ELECTRIC COMPANY DOCKET NO. 20210001-EI FILED: 09/03/2021

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, Unit Commitment.
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 15 years of experience in the electric
21		industry, in the areas of unit commitment and economic
22		dispatch, power and gas trading, accounting, and risk
23		management. In my current role, I am responsible for
24		developing and implementing business plans and strategic
25		initiatives to optimize business performance of Tampa
Electric's generation. Specifically, I am responsible for 1 directing short-term resource availability, preparation 2 of the hourly, daily and weekend Unit Commitment Plan for 3 review approval operations, and by grid fleet 4 5 optimization, and overall operating and business performance. 6 7 What is the purpose of your testimony? 8 Q. 9 My testimony describes Tampa Electric's methodology for Α. 10 determining the various factors required to compute the 11 Generating Performance Incentive Factor ("GPIF") as 12 ordered by the Commission. 13 14 Ο. Have you prepared an exhibit to support your direct 15 16 testimony? 17 Yes. Exhibit No. PAB-2, consisting of two documents, was 18 Α. prepared under my direction and supervision. Document No. 19 1 contains the GPIF schedules. Document No. 2 is a summary 20 of the GPIF targets for the 2022 period. 21 22 Which generating units on Tampa Electric's system are 23 Q. included in the determination of the GPIF? 24 25

Four natural gas combined cycle units and one coal unit 1 Α. are included. These are Polk Units 1 and 2, Bayside Units 2 3 1 and 2, and Big Bend Unit 4. 4 5 Q. Does your exhibit comply with the Commission's approved GPIF methodology? 6 7 Yes. In accordance with the GPIF Manual, the GPIF units Α. 8 less than 80 percent of 9 selected represent no the estimated system net generation. The units Tampa Electric 10 11 proposes to use for the period January 2022 through December 2022 represent 82.6 percent of the total 12 forecasted system net generation for this period. 13 14 To account for the concerns presented in the testimony of 15 Commission Staff witness Sidney W. Matlock during the 2005 16 fuel hearing, Tampa Electric removes outliers from the 17 calculation of the GPIF targets. The methodology was 18 approved by the Commission in Order No. PSC-2006-1057-19 20 FOF-EI issued in Docket No. 20060001-EI on December 22, 2006. 21 22 23 Q. Did Tampa Electric identify any outages as outliers? 24 Yes, Big Bend Unit 4 and Polk Unit 1 outages 25 Α. were 3

	1	
1		identified as outliers and were removed.
2		
3	Q.	Did Tampa Electric make any other adjustments?
4		
5	A.	Yes. As allowed per Section 4.3 of the GPIF Implementation
6		Manual, the Forced Outage and Maintenance Outage Factors
7		were adjusted to reflect recent unit performance and known
8		unit modifications or equipment changes.
9		
10	Q.	Please describe how Tampa Electric developed the various
11		factors associated with GPIF.
12		
13	A.	Targets were established for equivalent availability and
14		heat rate for each unit considered for the 2022 period.
15		A range of potential improvements and degradations were
16		determined for each of these metrics.
17		
18	Q.	How were the target values for unit availability
19		determined?
20		
21	A.	The Planned Outage Factor ("POF") and the Equivalent
22		Unplanned Outage Factor ("EUOF") were subtracted from 100 $$
23		percent to determine the target Equivalent Availability
24		Factor ("EAF"). The factors for each of the five units
25		included within the GPIF are shown on page 5 of Document
	I	

No. 1. 1 2 To give an example for the 2022 period, the projected 3 EUOF for Big Bend Unit 4 is 16.2 percent, the POF is 12.1 4 5 percent. Therefore, the target EAF for Big Bend Unit 4 equals 71.7 percent or: 6 7 100% - (16.2% + 12.1%) = 71.7%8 9 This is shown on Page 4, column 3 of Document No. 1. 10 11 How was the potential for unit availability improvement 12 Q. determined? 13 14 Maximum equivalent availability is derived using the 15 Α. following formula: 16 17 EAF $_{MAX} = 1 - [0.80 (EUOF_T) + 0.95 (POF_T)]$ 18 19 The factors included in the above equations are the same 20 factors that determine target equivalent 21 the availability. Calculating the maximum incentive points, 22 a 20 percent reduction in EUOF, plus a five percent 23 reduction in the POF is necessary. Continuing with the 24 Big Bend Unit 4 example: 25

EAF $_{MAX} = 1 - [0.80 (16.2\%) + 0.95 (12.1\%)] = 75.6\%$ 1 2 This is shown on page 4, column 4 of Document No. 1. 3 4 5 Q. How was the potential for unit availability degradation determined? 6 7 The potential for unit availability degradation is 8 Α. significantly greater than the potential 9 for unit availability improvement. This concept was discussed 10 11 extensively during the development of the incentive. To incorporate this biased effect into the unit availability 12 tables, Tampa Electric uses a potential degradation range 13 14 equal to twice the potential improvement. Consequently, minimum equivalent availability is calculated using the 15 16 following formula: 17 EAF $_{MIN} = 1 - [1.40 (EUOF_T) + 1.10 (POF_T)]$ 18 19 Again, continuing using the Big Bend Unit 4 example, 20 21 EAF MIN = 1 - [1.40 (16.2%) + 1.10 (12.1%)] = 64.0% 22 23 The equivalent availability maximum and minimum for the other 24 four units are computed in a similar manner. 25

	I	
1	Q.	How did Tampa Electric determine the Planned Outage,
2		Maintenance Outage, and Forced Outage Factors?
3		
4	A.	The company's planned outages for January 2022 through
5		December 2022 are shown on page 17 of Document No. 1. Two
6		GPIF units have a major planned outage of 28 days or
7		greater in 2022; therefore, two Critical Path Method
8		Diagrams are provided.
9		
10		Planned Outage Factors are calculated for each unit. For
11		example, Big Bend Unit 4 is scheduled for planned outages
12		from April 1, 2022 to April 14, 2022 and from October 4,
13		2022 to November 2, 2022. There are 1,056 planned outage
14		hours scheduled for the 2022 period, with a total of 8,760
15		hours during this 12-month period. Consequently, the POF
16		for Big Bend Unit 4 is 12.1 percent or:
17		
18		1,056 x 100% = 12.1%
19		8,760
20		
21		The factor for each unit is shown on pages 5 and 12 through
22		16 of Document No. 1. Polk Unit 1 has a POF of 1.9 percent.
23		Polk Unit 2 has a POF of 7.9 percent. Bayside Unit 1 has
24		a POF of 20.3 percent, and Bayside Unit 2 has a POF of
25		3.8 percent.

1	Q.	How did you determine the Forced Outage and Maintenance
2		Outage Factors for each unit?
3		
4	A.	Projected factors are based upon historical unit
5		performance. For each unit, the three most recent July
6		through June annual periods formed the basis of the target
7		development. Historical data and target values are
8		analyzed to assure applicability to current conditions of
9		operation. This provides assurance that any periods of
10		abnormal operations or recent trends having material
11		effect can be taken into consideration. These target
12		factors are additive and result in a EUOF of 16.2 percent
13		for Big Bend Unit 4. The EUOF of Big Bend Unit 4 is
14		verified by the data shown on page 12, lines 3, 5, 10,
15		and 11 of Document No. 1 and calculated using the
16		following formula:
17		
18		$EUOF = (EFOH + EMOH) \times 100\%$
19		DH
20		
20		Or
21		
22		$EUOF = (6/3 + 747) \times 100\% = 16.2\%$
23		8,/60
24		
25		Relative to Big Bend Unit 4, the EUOF of 16.2 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 1 4 5 The projected EUOF for this unit is 10.3 percent. The unit will have one planned outage in 2022, and the POF is 6 1.9 percent. Therefore, the 7 target equivalent availability for this unit is 87.7 percent. 8 9 Polk Unit 2 10 The projected EUOF for this unit is 2.7 percent. The unit 11 will have two planned outages in 2022, and the POF is 7.9 12 percent. Therefore, the target equivalent availability 13 14 for this unit is 89.3 percent. 15 16 Bayside Unit 1 The projected EUOF for this unit is 2.4 percent. The unit 17 will have one planned outage in 2022, and the POF is 20.3 18 percent. Therefore, the target equivalent availability 19 20 for this unit is 77.4 percent. 21 Bayside Unit 2 22 23 The projected EUOF for this unit is 3.4 percent. The unit will have one planned outage in 2022, and the POF is 3.8 24 percent. Therefore, the target equivalent availability 25

	i i	
1		for this unit is 92.7 percent.
2		
3	Big	Bend Unit 4
4		The projected EUOF for this unit is 16.2 percent. The
5		unit will have two planned outages in 2022, and the POF
6		is 12.1 percent. Therefore, the target equivalent
7		availability for this unit is 71.7 percent.
8		
9	Q.	Please summarize your testimony regarding EAF.
10		
11	A.	The GPIF system weighted EAF of 82.1 percent is shown on
12		page 5 of Document No. 1.
13		
14	Q.	Why are Forced and Maintenance Outage Factors adjusted
15		for planned outage hours?
16		
17	A.	The adjustment makes the factors more accurate and
18		comparable. A unit in a planned outage stage or reserve
19		shutdown stage cannot incur a forced or maintenance
20		outage. To demonstrate the effects of a planned outage,
21		note the Equivalent Unplanned Outage Rate and Equivalent
22		Unplanned Outage Factor for Big Bend Unit 4 on page 12 of
23		Document No. 1. Except for the months of April, October,
24		and November, the Equivalent Unplanned Outage Rate and
25		Equivalent Unplanned Outage Factor are equal. This is

because no planned outages are scheduled for these months. 1 During the months of April, October, and November, the 2 3 Equivalent Unplanned Outage Rate exceeds the Equivalent Unplanned Outage Factor due to the scheduled planned 4 5 outages. Therefore, the adjusted factors apply to the period hours after the planned outage hours have been 6 extracted. 7 8 Does this mean that both rate and factor data are used in 9 Q. calculated data? 10 11 Yes. Rates provide a proper and accurate method of 12 Α. determining unit metrics, which subsequently 13 are 14 converted to factors. Therefore, 15 EFOF + EMOF + POF + EAF = 100%16 17 Since factors are additive, they are easier to work with 18 and to understand. 19 20 Has Tampa Electric prepared the necessary heat rate data 21 Q. required for the determination of the GPIF? 22 23 Yes. Target heat rates and ranges of potential operation 24 Α. have been developed as required and have been adjusted to 25

reflect the afore mentioned agreed upon GPIF methodology. 1 2 3 Q. How were the targets determined? 4 5 Α. Net heat rate data for the three most recent July through June annual periods formed the basis for the target 6 development. The historical data and the target values 7 analyzed to assure applicability to current 8 are conditions of operation. This provides assurance that any 9 period of abnormal operations or equipment modifications 10 11 having material effect on heat rate can be taken into consideration. 12 13 14 Q. How were the ranges of heat rate improvement and heat rate degradation determined? 15 16 The ranges were determined through analysis of historical 17 Α. net heat rate and net output factor data. This is the 18 same data from which the net heat rate versus net output 19 20 factor curves have been developed for each unit. This information is shown on pages 25 through 29 of Document 21 No. 1. 22 23 Please elaborate on the analysis used in the determination 24 Ο. of the ranges. 25

1		
1	A.	The net heat rate versus net output factor curves are the
2		result of a first order curve fit to historical data. The
3		standard error of the estimate of this data was
4		determined, and a factor was applied to produce a band of
5		potential improvement and degradation. Both the curve fit
6		and the standard error of the estimate were performed by
7		the computer program for each unit. These curves are also
8		used in post-period adjustments to actual heat rates to
9		account for unanticipated changes in unit dispatch and
10		fuel.
11		
12	Q.	Please summarize your heat rate projection (Btu/Net kWh)
13		and the range about each target to allow for potential
14		improvement or degradation for the 2022 period.
15		
16	A.	The heat rate target for Polk Unit 1 is 8,855 Btu/Net kWh
17		with a range of $\pm 1,584$ Btu/Net kWh. The heat rate target
18		for Polk Unit 2 is 6,841 Btu/Net kWh with a range of \pm 923
19		Btu/Net kWh. The heat rate for Bayside Unit 1 is 7,339
20		Btu/Net kWh with a range of ± 171 Btu/Net kWh. The heat
21		rate target for Bayside Unit 2 is 7,695 Btu/Net kWh with
22		a range of ± 276 Btu/Net kWh. The heat rate target for Big
23		Bend Unit 4 is 10,726 Btu/Net kWh with a range of ±1,102
24		Btu/Net kWh. A zone of tolerance of ± 75 Btu/Net kWh is
25		included within a range for each target. This is shown on

1		page 4, and pages 7 through 11 of Document No. 1.
2		
3	Q.	Do these heat rate targets and ranges meet the
4		Commission's requirements?
5		
6	A.	Yes.
7		
8	Q.	After determining the target values and ranges for average
9		net operating heat rate and equivalent availability, what
10		is the next step in determining the GPIF targets?
11		
12	A.	The next step is to calculate the savings and weighting
13		factor to be used for both average net operating heat
14		rate and equivalent availability. This is shown in
15		Document No. 1, pages 7 through 11. The baseline
16		production costing analysis was performed to calculate
17		the total system fuel cost if all units operated at target
18		heat rate and target availability for the period. This
19		total system fuel cost of \$487,019,890 is shown on
20		Document No. 1, page 6, column 2. Multiple production
21		cost simulations were performed to calculate total system
22		fuel cost with each unit individually operating at maximum
23		improvement in equivalent availability and each station
24		operating at maximum improvement in average net operating
25		heat rate. The respective savings are shown on page 6,

column 4 of Document No. 1. 1 2 3 Column 4 totals \$31,877,118 which reflects the savings if all of the units operated at maximum improvement. A 4 5 weighting factor for each metric is then calculated by dividing unit savings by the total. For Big Bend Unit 4, 6 the weighting factor for average net operating heat rate 7 is 11.18 percent as shown in the right-hand column on 8 Document No. 1, page 6. Pages 7 through 11 of Document 9 No. 1 show the point table, the Fuel Savings/(Loss) and 10 11 the equivalent availability or heat rate value. The individual weighting factor is also shown. For example, 12 as shown on page 7 of Document No. 1, if Big Bend Unit 4, 13 14 operates at 9,624 average net operating heat rate, fuel savings would equal \$3,563,326 and +10 average net 15 operating heat rate points would be awarded. 16 17 The GPIF Reward/Penalty table on page 2 of Document No. 18 1 is a summary of the tables on pages 7 through 11. The 19 left-hand column of this document shows the incentive 20 points for Tampa Electric. The center column shows the 21

total fuel savings and is the same amount as shown on page 6, column 4, or \$31,877,118. The right-hand column of page 2 is the estimated reward or penalty based upon performance.

22

23

24

25

1	Q.	How was the maximum allowed incentive determined?
2		
3	A.	Referring to page 3, line 14, the estimated average common
4		equity for the period January 2022 through December 2022
5		is \$4,108,620,276. This produces the maximum allowed
6		jurisdictional incentive of \$13,796,217 shown on line 21.
7		
8	Q.	Are there any constraints set forth by the Commission
9		regarding the magnitude of incentive dollars?
10		
11	A.	Yes. As Order No. PSC-2013-0665-FOF-EI, issued in Docket
12		No. 20130001-EI on December 18, 2013 states, incentive
13		dollars are not to exceed 50 percent of fuel savings.
14		Page 2 of Document No. 1 demonstrates that this constraint
15		is met, limiting total potential reward and penalty
16		incentive dollars to \$15,938,559.
17		
18	Q.	Please summarize your direct testimony.
19		
20	A.	Tampa Electric has complied with the Commission's
21		directions, philosophy, and methodology in its
22		determination of the GPIF. The GPIF is determined by the
23		following formula for calculating Generating Performance
24		Incentive Points (GPIP).
25		

1		
1		$GPIP = (0.0050 EAP_{PK1} + 0.0501 EAP_{PK2})$
2		+ 0.0186 EAP _{BAY1} + 0.0144 EAP _{BAY2}
3		+ 0.0438 EAP _{BB4} + 0.5247 HRP _{PK2}
4		+ 0.0445 HRP _{BAY1} + 0.1209 HRP _{BAY2}
5		+ 0.1118 HRP _{BB4} + 0.0662 HRP _{PK1})
6		
7		Where:
8		GPIP = Generating Performance Incentive Points
9		EAP = Equivalent Availability Points awarded/deducted
10		for Polk Units 1 and 2, Bayside Units 1 and 2,
11		and Big Bend Unit 4.
12		HRP = Average Net Heat Rate Points awarded/deducted for
13		Polk Units 1 and 2, Bayside Units 1 and 2, and
14		Big Bend Unit 4.
15		
16	Q.	Have you prepared a document summarizing the GPIF targets
17		for the January 2022 through December 2022 period?
18		
19	A.	Yes. Document No. 2 entitled "Summary of GPIF Targets"
20		provides the availability and heat rate targets for each
21		unit.
22		
23	Q.	Does this conclude your direct testimony?
24		
25	A.	Yes.
ļ		

DOCKET NO. 20210001-EI GPIF 2022 PROJECTION FILING EXHIBIT NO. PAB-2 DOCUMENT NO. 1

EXHIBIT TO THE TESTIMONY

OF

PATRICK A. BOKOR

DOCUMENT NO. 1

GPIF SCHEDULES

JANUARY 2022 - DECEMBER 2022

EXHIBIT NO.____ (PAB-2) TAMPA ELECTRIC COMPANY DOCKET NO. 20210001-EI DOCUMENT NO. 1 PAGE 1 OF 32

TAMPA ELECTRIC COMPANY GENERATING PERFORMANCE INCENTIVE FACTOR JANUARY 2022 - DECEMBER 2022 TARGETS TABLE OF CONTENTS

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GPIF TARGET AND RANGE SUMMARY	4
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EXHIBIT NO. (PAB-2) TAMPA ELECTRIC COMPANY DOCKET NO. 20210001-EI DOCUMENT NO. 1 PAGE 2 OF 32

TAMPA ELECTRIC COMPANY GENERATING PERFORMANCE INCENTIVE FACTOR REWARD / PENALTY TABLE JANUARY 2022 - DECEMBER 2022

GENERATING PERFORMANCE INCENTIVE POINTS (GPIP)	FUEL SAVINGS / (LOSS) (\$000)	GENERATING PERFORMANCE INCENTIVE FACTOR (\$000)
+10	31,877.1	13,796.2
+9	28,689.4	12,416.6
+8	25,501.7	11,037.0
+7	22,314.0	9,657.4
+6	19,126.3	8,277.7
+5	15,938.6	6,898.1
+4	12,750.8	5,518.5
+3	9,563.1	4,138.9
+2	6,375.4	2,759.2
+1	3,187.7	1,379.6
0	0.0	0.0
-1	(3,159.1)	(1,379.6)
-2	(6,318.1)	(2,759.2)
-3	(9,477.2)	(4,138.9)
-4	(12,636.2)	(5,518.5)
-5	(15,795.3)	(6,898.1)
-6	(18,954.4)	(8,277.7)
-7	(22,113.4)	(9,657.4)
-8	(25,272.5)	(11,037.0)
-9	(28,431.5)	(12,416.6)
-10	(31,590.6)	(13,796.2)

EXHIBIT NO.____ (PAB-2) TAMPA ELECTRIC COMPANY DOCKET NO. 20210001-EI DOCUMENT NO. 1 PAGE 3 OF 32

TAMPA ELECTRIC COMPANY GENERATING PERFORMANCE INCENTIVE FACTOR CALCULATION OF MAXIMUM ALLOWED INCENTIVE DOLLARS JANUARY 2022 - DECEMBER 2022

Line 1	Beginning of period balance End of month common equi	e of common equity: ty:	\$	4,003,519,446	
Line 2	Month of January	2022	\$	4,021,748,185	
Line 3	Month of February	2022	\$	4,056,100,618	
Line 4	Month of March	2022	\$	4,090,746,477	
Line 5	Month of April	2022	\$	4,038,461,239	
Line 6	Month of May	2022	\$	4,072,956,429	
Line 7	Month of June	2022	\$	4,107,746,265	
Line 8	Month of July	2022	\$	4,125,833,476	
Line 9	Month of August	2022	\$	4,161,074,971	
Line 10	Month of September	2022	\$	4,196,617,486	
Line 11	Month of October	2022	\$	4,143,592,373	
Line 12	Month of November	2022	\$	4,178,985,558	
Line 13	Month of December	2022	\$	4,214,681,059	
Line 14	(Summation of line 1 through line 13 divided by 13) \$ 4,108,620,276				
Line 15	25 Basis points			0.0025	
Line 16	Revenue Expansion Factor			74.45%	
Line 17	Maximum Allowed Incentive (line 14 times line 15 divided	e Dollars d by line 16)	\$	13,796,217	
Line 18	Jurisdictional Sales			19,807,340	MWH
Line 19	Total Sales			19,807,340	MWH
Line 20	Jurisdictional Separation Fa (line 18 divided by line 19)	actor		100.00%	
Line 21	Maximum Allowed Jurisdicti (line 17 times line 20)	onal Incentive Dollars	\$	13,796,217	
Line 22	Incentive Cap (50% of projected fuel savings at 10 GPIF-point level from Sheet No. 3.515)			15,938,559	
Line 23	Maximum Allowed GPIF Reward (at 10 GPIF-point leve (the lesser of line 21 and line 22)			13,796,217	

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

EXHIBIT NO.____ (PAB-2) TAMPA ELECTRIC COMPANY DOCKET NO. 20210001-EI DOCUMENT NO. 1 PAGE 4 OF 32

TAMPA ELECTRIC COMPANY GPIF TARGET AND RANGE SUMMARY JANUARY 2022 - DECEMBER 2022

EQUIVALENT AVAILABILITY

PLANT / UNIT	WEIGHTING FACTOR (%)	EAF TARGET (%)	EAF RA MAX. (%)	NGE MIN. (%)	MAX. FUEL SAVINGS (\$000)	MAX. FUEL LOSS (\$000)
BIG BEND 4	4.38%	71.7	75.6	64.0	1,396.6	(1,511.6)
POLK 1	0.50%	87.7	89.9	83.4	160.0	(226.0)
POLK 2	5.01%	89.3	90.3	87.5	1,595.5	(1,422.5)
BAYSIDE 1	1.86%	77.4	78.9	74.4	592.7	(66.4)
BAYSIDE 2	1.44%	92.7	93.6	91.0	458.8	(690.7)
GPIF SYSTEM	13.19%					

AVERAGE NET OPERATING HEAT RATE

PLANT / UNIT	WEIGHTING FACTOR (%)	ANOHR Btu/kwh	TARGET NOF	ANOHR MIN.	RANGE MAX.	MAX. FUEL SAVINGS (\$000)	MAX.FUEL LOSS (\$000)
BIG BEND 4	11.18%	10,726	47.8	9,624	11,828	3,563.3	(3,563.3)
POLK 1	6.62%	8,855	79.1	7,271	10,440	2,111.3	(2,111.3)
POLK 2	52.47%	6,841	76.0	5,918	7,764	16,725.7	(16,725.7)
BAYSIDE 1	4.45%	7,339	65.3	7,168	7,510	1,417.9	(1,417.9)
BAYSIDE 2	12.09%	7,695	47.4	7,419	7,971	3,855.2	(3,855.2)
GPIF SYSTEM	86.81%						

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

EQUIVALENT AVAILABIL	TY (%)
----------------------	--------

COMPARISON OF	GFIF TARGETS	S VS FRIOR FERIOD	ACTUAL FERFORM	ANGE

PLANT / UNIT	WEIGHTING FACTOR (%)	NORMALIZED WEIGHTING FACTOR	TA JA POF	RGET PERIO N 22 - DEC EUOF	OD 22 EUOR	ACTUA JA POF	L PERFORM N 20 - DEC 2 EUOF	IANCE 20 EUOR	ACTUA JA POF	L PERFORM N 19 - DEC EUOF	MANCE 19 EUOR	ACTUA JA POF	L PERFOR N 18 - DEC EUOF	MANCE 18 EUOR
BIG BEND 4	4.38%	33.2%	12.1	16.2	18.4	39.1	24.8	40.6	16.5	28.0	39.8	19.1	20.6	26.6
POLK 1	0.50%	3.8%	1.9	10.3	10.5	5.3	22.4	33.3	6.7	14.9	22.8	28.1	10.7	16.3
POLK 2	5.01%	38.0%	7.9	2.7	2.9	3.2	10.4	10.1	4.5	3.7	3.8	2.0	3.3	3.2
BAYSIDE 1	1.86%	14.1%	20.3	2.4	3.0	7.8	3.4	3.9	11.1	6.7	7.4	5.3	1.6	1.7
BAYSIDE 2	1.44%	10.9%	3.8	3.4	3.6	4.3	5.9	6.3	12.8	4.0	4.5	19.6	2.5	3.1
GPIF SYSTEM	13.19%	100.0%	10.4	7.5	8.5	16.0	14.1	19.8	10.4	12.6	17.1	11.1	9.0	11.3
GPIF SYSTEM WEIGHTED EQU	IVALENT AVAILA	ABILITY (%)		<u>82.1</u>			<u>69.9</u>			<u>77.0</u>			<u>79.9</u>	
			3 PE	RIOD AVER	AGE	3 PE	RIOD AVER/	AGE						

POF EUOF EUOR EAF 12.5 11.9 16.0 75.6

AVERAGE NET OPERATING HEAT RATE (Btu/kWh)

PLANT / UNIT	WEIGHTING FACTOR (%)	NORMALIZED WEIGHTING FACTOR	TARGET HEAT RATE JAN 22 - DEC 22	ADJUSTED ACTUAL PERFORMANCE HEAT RATE JAN 20 - DEC 20	ADJUSTED ACTUAL PERFORMANCE HEAT RATE JAN 19 - DEC 19	ADJUSTED ACTUAL PERFORMANCE HEAT RATE JAN 18 - DEC 18
BIG BEND 4	11.18%	12.9%	10,726	11,017	10,986	10,959
POLK 1	6.62%	7.6%	8,855	8,774	8,757	10,367
POLK 2	52.47%	60.4%	6,841	6,640	7,458	6,983
BAYSIDE 1	4.45%	5.1%	7,339	7,363	7,361	7,378
BAYSIDE 2	12.09%	13.9%	7,695	7,619	7,726	7,594
GPIF SYSTEM	86.81%	100.0%				
GPIF SYSTEM WEIGHTED AVE	RAGE HEAT RAT	E (Btu/kWh)	7,639	7,540	8,044	7,859

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EXHIBIT NO.____ (PAB-2) TAMPA ELECTRIC COMPANY DOCKET NO. 20210001-EI DOCUMENT NO. 1 PAGE 6 OF 32

TAMPA ELECTRIC COMPANY DERIVATION OF WEIGHTING FACTORS JANUARY 2022 - DECEMBER 2022 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	487,019.89	485,623.26	1,396.63	4.38%
EA ₁ POLK 1	487,019.89	486,859.87	160.02	0.50%
EA ₂ POLK 2	487,019.89	485,424.37	1,595.52	5.01%
EA ₃ BAYSIDE 1	487,019.89	486,427.17	592.72	1.86%
EA ₄ BAYSIDE 2	487,019.89	486,561.10	458.79	1.44%
AVERAGE HEAT RATE				
AHR ₃ BIG BEND 4	487,019.89	483,456.56	3,563.33	11.18%
AHR ₁ POLK 1	487,019.89	484,908.57	2,111.32	6.62%
AHR ₂ POLK 2	487,019.89	470,294.19	16,725.70	52.47%
AHR ₃ BAYSIDE 1	487,019.89	485,601.97	1,417.92	4.45%
AHR ₄ BAYSIDE 2	487,019.89	483,164.72	3,855.17	12.09%
TOTAL SAVINGS		-	31,877.12	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.

EXHIBIT NO.____ (PAB-2) TAMPA ELECTRIC COMPANY DOCKET NO. 20210001-EI DOCUMENT NO. 1 PAGE 7 OF 32

GPIF TARGET AND RANGE SUMMARY

JANUARY 2022 - DECEMBER 2022

BIG BEND 4

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	1,396.6	75.6	+10	3,563.3	9,624
+9	1,257.0	78.0	+9	3,207.0	9,727
+8	1,117.3	80.5	+8	2,850.7	9,829
+7	977.6	82.9	+7	2,494.3	9,932
+6	838.0	85.3	+6	2,138.0	10,035
+5	698.3	87.8	+5	1,781.7	10,137
+4	558.7	90.2	+4	1,425.3	10,240
+3	419.0	92.7	+3	1,069.0	10,343
+2	279.3	95.1	+2	712.7	10,446
+1	139.7	97.6	+1	356.3	10,548
					10,651
0	0.0	100.0	0	0.0	10,726
					10,801
-1	(151.2)	96.4	-1	(356.3)	10,904
-2	(302.3)	92.8	-2	(712.7)	11,007
-3	(453.5)	89.2	-3	(1,069.0)	11,109
-4	(604.6)	85.6	-4	(1,425.3)	11,212
-5	(755.8)	82.0	-5	(1,781.7)	11,315
-6	(906.9)	78.4	-6	(2,138.0)	11,418
-7	(1,058.1)	74.8	-7	(2,494.3)	11,520
-8	(1,209.3)	71.2	-8	(2,850.7)	11,623
-9	(1,360.4)	67.6	-9	(3,207.0)	11,726
-10	(1,511.6)	64.0	-10	(3,563.3)	11,828
	Weighting Factor =	4.38%		Weighting Factor =	11.18%

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TAMPA ELECTRIC COMPANY

GPIF TARGET AND RANGE SUMMARY

JANUARY 2022 - DECEMBER 2022

POLK 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	160.0	89.9	+10	2,111.3	7,271
+9	144.0	89.7	+9	1,900.2	7,422
+8	128.0	89.5	+8	1,689.1	7,573
+7	112.0	89.3	+7	1,477.9	7,724
+6	96.0	89.0	+6	1,266.8	7,875
+5	80.0	88.8	+5	1,055.7	8,026
+4	64.0	88.6	+4	844.5	8,177
+3	48.0	88.4	+3	633.4	8,327
+2	32.0	88.2	+2	422.3	8,478
+1	16.0	88.0	+1	211.1	8,629
					8,780
0	0.0	87.7	0	0.0	8,855
					8,930
-1	(22.6)	87.3	-1	(211.1)	9,081
-2	(45.2)	86.9	-2	(422.3)	9,232
-3	(67.8)	86.4	-3	(633.4)	9,383
-4	(90.4)	86.0	-4	(844.5)	9,534
-5	(113.0)	85.6	-5	(1,055.7)	9,685
-6	(135.6)	85.1	-6	(1,266.8)	9,836
-7	(158.2)	84.7	-7	(1,477.9)	9,987
-8	(180.8)	84.3	-8	(1,689.1)	10,138
-9	(203.4)	83.8	-9	(1,900.2)	10,289
-10	(226.0)	83.4	-10	(2,111.3)	10,440
	Weighting Factor =	0.50%		Weighting Factor =	6.62%

EXHIBIT NO.____ (PAB-2) TAMPA ELECTRIC COMPANY DOCKET NO. 20210001-EI DOCUMENT NO. 1 PAGE 9 OF 32

TAMPA ELECTRIC COMPANY

GPIF TARGET AND RANGE SUMMARY

JANUARY 2022 - DECEMBER 2022

POLK 2

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	1,595.5	90.3	+10	16,725.7	5,918
+9	1,436.0	90.2	+9	15,053.1	6,003
+8	1,276.4	90.1	+8	13,380.6	6,088
+7	1,116.9	90.0	+7	11,708.0	6,173
+6	957.3	89.9	+6	10,035.4	6,257
+5	797.8	89.8	+5	8,362.9	6,342
+4	638.2	89.7	+4	6,690.3	6,427
+3	478.7	89.6	+3	5,017.7	6,512
+2	319.1	89.5	+2	3,345.1	6,596
+1	159.6	89.4	+1	1,672.6	6,681
					6,766
0	0.0	89.3	0	0.0	6,841
					6,916
-1	(142.3)	89.2	-1	(1,672.6)	7,001
-2	(284.5)	89.0	-2	(3,345.1)	7,086
-3	(426.8)	88.8	-3	(5,017.7)	7,170
-4	(569.0)	88.6	-4	(6,690.3)	7,255
-5	(711.3)	88.4	-5	(8,362.9)	7,340
-6	(853.5)	88.2	-6	(10,035.4)	7,425
-7	(995.8)	88.0	-7	(11,708.0)	7,510
-8	(1,138.0)	87.8	-8	(13,380.6)	7,594
-9	(1,280.3)	87.6	-9	(15,053.1)	7,679
-10	(1,422.5)	87.5	-10	(16,725.7)	7,764
	Weighting Factor =	5.01%		Weighting Factor =	52.47%

EXHIBIT NO. (PAB-2) TAMPA ELECTRIC COMPANY DOCKET NO. 20210001-EI DOCUMENT NO. 1 PAGE 10 OF 32

TAMPA ELECTRIC COMPANY

GPIF TARGET AND RANGE SUMMARY

JANUARY 2022 - DECEMBER 2022

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	592.7	78.9	+10	1,417.9	7,168
+9	533.4	78.7	+9	1,276.1	7,178
+8	474.2	78.6	+8	1,134.3	7,188
+7	414.9	78.4	+7	992.5	7,197
+6	355.6	78.3	+6	850.8	7,207
+5	296.4	78.1	+5	709.0	7,216
+4	237.1	78.0	+4	567.2	7,226
+3	177.8	77.8	+3	425.4	7,236
+2	118.5	77.7	+2	283.6	7,245
+1	59.3	77.5	+1	141.8	7,255
					7,264
0	0.0	77.4	0	0.0	7,339
					7,414
-1	(6.6)	77.1	-1	(141.8)	7,424
-2	(13.3)	76.8	-2	(283.6)	7,434
-3	(19.9)	76.5	-3	(425.4)	7,443
-4	(26.5)	76.2	-4	(567.2)	7,453
-5	(33.2)	75.9	-5	(709.0)	7,462
-6	(39.8)	75.6	-6	(850.8)	7,472
-7	(46.5)	75.3	-7	(992.5)	7,482
-8	(53.1)	75.0	-8	(1,134.3)	7,491
-9	(59.7)	74.7	-9	(1,276.1)	7,501
-10	(66.4)	74.4	-10	(1,417.9)	7,510
	Weighting Factor =	1.86%		Weighting Factor =	4.45%

EXHIBIT NO. (PAB-2) TAMPA ELECTRIC COMPANY DOCKET NO. 20210001-EI DOCUMENT NO. 1 PAGE 11 OF 32

TAMPA ELECTRIC COMPANY

GPIF TARGET AND RANGE SUMMARY

JANUARY 2022 - DECEMBER 2022

BAYSIDE 2

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	458.8	93.6	+10	3,855.2	7,419
+9	412.9	93.5	+9	3,469.7	7,439
+8	367.0	93.4	+8	3,084.1	7,459
+7	321.2	93.4	+7	2,698.6	7,479
+6	275.3	93.3	+6	2,313.1	7,499
+5	229.4	93.2	+5	1,927.6	7,519
+4	183.5	93.1	+4	1,542.1	7,540
+3	137.6	93.0	+3	1,156.6	7,560
+2	91.8	92.9	+2	771.0	7,580
+1	45.9	92.8	+1	385.5	7,600
					7,620
0	0.0	92.7	0	0.0	7,695
					7,770
-1	(69.1)	92.6	-1	(385.5)	7,790
-2	(138.1)	92.4	-2	(771.0)	7,810
-3	(207.2)	92.2	-3	(1,156.6)	7,830
-4	(276.3)	92.0	-4	(1,542.1)	7,850
-5	(345.3)	91.9	-5	(1,927.6)	7,870
-6	(414.4)	91.7	-6	(2,313.1)	7,891
-7	(483.5)	91.5	-7	(2,698.6)	7,911
-8	(552.5)	91.3	-8	(3,084.1)	7,931
-9	(621.6)	91.2	-9	(3,469.7)	7,951
-10	(690.7)	91.0	-10	(3,855.2)	7,971
	Weighting Factor =	1.44%		Weighting Factor =	12.09%

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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-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug 22	Sep-22	Oct-22	Nov-22	Dec-22	2022
1. EAF (%)	81.6	81.6	81.6	43.5	81.6	81.6	81.6	81.6	81.6	7.9	76.1	81.6	71.7
2. POF	0.0	0.0	0.0	46.7	0.0	0.0	0.0	0.0	0.0	90.3	6.7	0.0	12.1
3. EUOF	18.4	18.4	18.4	9.8	18.4	18.4	18.4	18.4	18.4	1.8	17.2	18.4	16.2
4. EUOR	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4
5. PH	744	672	744	720	744	720	744	744	720	744	720	744	8,760
6. SH	673	608	542	477	673	651	673	673	651	66	608	673	6,968
7. RSH	0	0	0	0	0	0	0	0	0	0	0	0	0
8. UH	71	64	202	243	71	69	71	71	69	678	112	71	1,792
9. POH	0	0	0	336	0	0	0	0	0	672	48	0	1,056
10. EFOH	65	59	65	34	65	63	65	65	63	9	59	65	673
II. EMOH	72	65	72	37	72	70	72	72	70	7	65	72	747
12. OPER BTU (GBTU)	1,470	1,266	1,123	983	1,416	1,430	1,509	1,577	1,613	167	1,251	1,398	15,204
13. NET GEN (MWH)	137,010	117,830	104,500	91,550	131,920	133,370	140,840	147,300	150,960	15,670	116,460	130,100	1,417,510
14. ANOHR (Btu/kwh)	10,730	10,743	10,745	10,740	10,734	10,722	10,716	10,703	10,685	10,678	10,740	10,744	10,726
15. NOF (%)	47.1	44.9	44.6	45.5	46.4	48.5	49.6	51.9	55.0	56.3	45.4	44.7	47.8
16. NPC (MW)	432	432	432	422	422	422	422	422	422	422	422	432	425
17. ANOHR EQUATION	ANOF	-IR = NOF(-5.752	+ (11,001								

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TAMPA ELECTRIC COMPANY ESTIMATED UNIT PERFORMANCE DATA

JANUARY 2022 - DECEMBER 2022

EXHIBIT NO.____ (PAB-2) TAMPA ELECTRIC COMPANY DOCKET NO. 20210001-EI DOCUMENT NO. 1 PAGE 13 OF 32

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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 1	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	2022
1. EAF (%)	89.5	89.5	89.5	89.5	69.3	89.5	89.5	89.5	89.5	89.5	89.5	89.5	87.7
2. POF	0.0	0.0	0.0	0.0	22.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9
3. EUOF	10.5	10.5	10.5	10.5	8.2	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.3
4. EUOR	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
5. PH	744	672	744	720	744	720	744	744	720	744	720	744	8,760
6. SH	64	32	114	185	154	276	406	334	444	501	272	144	2,926
7. RSH	0	0	0	0	0	0	0	0	0	0	0	0	0
8. UH	680	640	630	535	590	444	338	410	276	243	448	600	5,834
9. POH	0	0	0	0	168	0	0	0	0	0	0	0	168
10. EFOH	0	0	0	0	0	0	0	0	0	0	0	0	-
II. EMOH	78	71	78	76	61	76	78	78	76	78	76	78	905
12. OPER BTU (GBTU)	26	48	168	271	230	421	615	496	691	781	395	213	4,438
13. NET GEN (MWH)	10,860	5,340	18,740	30,630	26,020	47,770	69,780	56,150	78,730	88,920	44,490	23,720	501,150
14. ANOHR (Btu/kwh)	8,930	8,947	8,962	8,858	8,836	8,808	8,816	8,841	8,780	8,778	8,872	8,960	8,855
15. NOF (%)	73.8	72.6	71.5	78.8	80.5	82.4	81.8	80.1	84.4	84.5	6.77	71.6	79.1
16. NPC (MW)	230	230	230	210	210	210	210	210	210	210	210	230	217
17. ANOHR EQUATION	ANOF	-IR = NOF(-14.091	+ (696'6								

ESTIMATED UNIT PERFORMANCE DATA

TAMPA ELECTRIC COMPANY

JANUARY 2022 - DECEMBER 2022

TAMPA ELECTRIC COMPANY

ESTIMATED UNIT PERFORMANCE DATA

JANUARY 2022 - DECEMBER 2022

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-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	2022
1. EAF (%)	97.1	97.1	21.9	97.1	97.1	97.1	97.1	97.1	97.I	97.1	97.1	81.4	89.3
2. POF	0.0	0.0	77.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	7.9
3. EUOF	2.9	2.9	0.7	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.5	2.7
4. EUOR	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
5. РН	744	672	744	720	744	720	744	744	720	744	720	744	8,760
6. SH	719	650	593	703	726	703	726	726	703	726	703	596	8,274
7. RSH	0	0	0	0	0	0	0	0	0	0	0	0	0
8. UH	25	22	151	17	18	17	18	18	17	18	17	148	486
9. POH	0	0	576	0	0	0	0	0	0	0	0	120	696
10. EFOH	12	11	ŝ	12	12	12	12	12	12	12	12	10	133
11. EMOH	10	6	5	6	10	6	10	10	6	10	6	∞	105
12. OPER BTU (GBTU)	4,695	4,226	3,737	3,758	4,269	4,304	4,429	4,402	4,192	4,220	2,349	1,971	47,610
13. NET GEN (MWH)	706,640	634,120	549,650	539,980	651,230	679,030	696,250	688,390	646,460	638,210	290,900	238,550	6,959,410
14. ANOHR (Btu/kwh)	6,644	6,664	6,799	6,960	6,555	6,339	6,361	6,395	6,485	6,612	8,074	8,262	6,841
15. NOF (%)	81.9	81.3	77.2	72.4	84.5	91.0	90.4	89.4	86.7	82.9	39.0	33.4	76.0
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	ANOF	JR = NOF(-33.331	+ (9,373								

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TAMPA ELECTRIC COMPANY

ESTIMATED UNIT PERFORMANCE DATA

JANUARY 2022 - DECEMBER 2022

PLANT/UNIT	MONTH OF:	PERIOD											
BAYSIDE 1	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	2022
1. EAF (%)	0.70	97.0	97.0	97.0	97.0	97.0	97.0	97.0	29.1	0.0	25.9	97.0	77.4
2. POF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	70.0	100.0	73.3	0.0	20.3
3. EUOF	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0	0.0	0.8	3.0	2.4
4. EUOR	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	0.0	3.0	3.0	3.0
5. PH	744	672	744	720	744	720	744	744	720	744	720	744	8,760
6. SH	687	645	718	694	714	694	717	718	209	0	76	676	6,548
7. RSH	35	7	4	5	œ	5	5	4	П	0	110	46	230
8. UH	22	20	22	21	22	21	22	22	510	744	534	22	1,982
9. POH	0	0	0	0	0	0	0	0	504	744	528	0	1,776
10. EFOH	15	14	15	15	15	15	15	15	4	0	4	15	145
11. EMOH	7	9	7	9	7	9	7	7	6	0	6	7	61
12. OPER BTU (GBTU)	2,242	1,961	2,540	2,554	2,741	2,913	3,031	2,796	756	0	114	1,226	22,953
13. NET GEN (MWH)	302,630	263,750	344,540	350,150	377,110	403,700	420,270	385,060	103,560	0	14,950	161,680	3,127,400
14. ANOHR (Btu/kwh)	7,407	7,435	7,372	7,293	7,269	7,216	7,212	7,261	7,302	0	7,599	7,584	7,339
15. NOF (%)	55.6	51.6	60.6	72.0	75.3	83.0	83.6	76.5	70.7	0.0	28.1	30.2	65.3
16. NPC (MW)	792	792	792	701	701	701	701	101	101	701	701	792	731
17. ANOHR EQUATION	ANOF	HR = NOF(-6.975	+ (7,795								

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PLANT/UNIT	MONTH OF:	PERIOD											
BAYSIDE 2	Jan-22	Feb-22	Mar-22	Apr-22	May-22	Jun-22	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	2022
1. EAF (%)	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	0.06	59.1	92.7
2. POF	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	38.7	3.8
3. EUOF	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.3	2.2	3.4
4. EUOR	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
5. PH	744	672	744	720	744	720	744	744	720	744	720	744	8,760
6. SH	699	623	700	691	716	694	717	716	694	717	514	172	7,623
7. RSH	49	25	18	e	0	0	-	6	0	1	134	268	502
8. UH	26	24	26	26	26	26	26	26	26	26	72	304	635
9. POH	0	0	0	0	0	0	0	0	0	0	48	288	336
10. EFOH	9	9	9	9	9	9	9	9	9	9	9	4	70
11. EMOH	20	18	20	20	20	20	20	20	20	20	18	12	229
12. OPER BTU (GBTU)	1,542	1,328	2,176	2,371	2,735	3,086	3,165	2,862	2,946	3,024	889	424	26,920
13. NET GEN (MWH)	190,460	163,160	275,920	308,720	361,910	420,290	430,350	381,650	397,300	407,300	108,630	52,670	3,498,360
14. ANOHR (Btu/kwh)	8,094	8,137	7,888	7,681	7,557	7,344	7,355	7,498	7,414	7,423	8,182	8,054	7,695
15. NOF (%)	27.2	25.0	37.6	48.1	54.4	65.2	64.6	57.4	61.6	61.1	22.7	29.2	47.4
16. NPC (MW)	1,047	1,047	1,047	929	929	929	929	929	929	929	929	1,047	968
17. ANOHR EQUATION	ANOF	IR = NOF(-19.753	+ (8,631								

TAMPA ELECTRIC COMPANY ESTIMATED UNIT PERFORMANCE DATA

JANUARY 2022 - DECEMBER 2022

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EXHIBIT NO.____ (PAB-2) TAMPA ELECTRIC COMPANY DOCKET NO. 20210001-EI DOCUMENT NO. 1 PAGE 17 OF 32

TAMPA ELECTRIC COMPANY ESTIMATED PLANNED OUTAGE SCHEDULE GPIF UNITS JANUARY 2022 - DECEMBER 2022

PLANT / UNIT	PLANNED OUTAGE DATES	OUTAGE DESCRIPTION
BIG BEND 4 +	Apr 01 - Apr 14 Oct 04 - Nov 02	Fuel System Clean High Energy Piping Hanger Installation
POLK 1	May 18 - May 24	Combined Cycle Planned Outage
POLK 2	Mar 03 - Mar 26	Combined Cycle Planned Outage
	Dec 13 - Dec 17	Combined Cycle Planned Outage
+ BAYSIDE 1	Sep 10 - Nov 22	CT 1A Major and AGP upgrade CT 1B Major and AGP upgrade CT 1C Major and AGP upgrade Mark Vie DCS and LCI Upgrades Steam Turbine valve overhauls Unit 1 CW Inlet structural refurbishment CW Tunnel liner replacement Steam Turbine 1 Exciter replacement
BAYSIDE 2	Nov 29 - Dec 12	Combined Cycle Planned Outage

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

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TAMPA ELECTRIC COMPANY CRITICAL PATH METHOD DIAGRAMS GPIF UNITS > FOUR WEEKS JANUARY 2022 - DECEMBER 2022



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TAMPA ELECTRIC COMPANY CRITICAL PATH METHOD DIAGRAMS GPIF UNITS > FOUR WEEKS JANUARY 2022 - DECEMBER 2022



PLANNED OUTAGE 2022 PROJECTED CPM
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Big	Bend	Unit	4
-	EMOR	ł	



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Polk	Unit	1
E	EMOR	



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

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EXHIBIT NO. (PAB-2) TAMPA ELECTRIC COMPANY DOCKET NO. 20210001-EI DOCUMENT NO. 1 PAGE 29 OF 32

EXHIBIT NO.____ (PAB-2) TAMPA ELECTRIC COMPANY DOCKET NO. 20210001-EI DOCUMENT NO. 1 PAGE 30 OF 32

TAMPA ELECTRIC COMPANY GENERATING UNITS IN GPIF TABLE 4.2 JANUARY 2022 - DECEMBER 2022

PLANT / UNIT		ANNUAL GROSS MDC (MW)	ANNUAL NET NDC (MW)
BIG BEND 4		458	425
POLK 1		225	217
POLK 2		1,130	1,107
BAYSIDE 1		740	731
BAYSIDE 2		979	968
	GPIF TOTAL	<u>3,533</u>	<u>3,449</u>
	SYSTEM TOTAL	5,153	5,025
	% OF SYSTEM TOTAL	68.6%	68.6%

EXHIBIT NO. (PAB-2) TAMPA ELECTRIC COMPANY DOCKET NO. 20210001-EI DOCUMENT NO. 1 PAGE 31 OF 32

TAMPA ELECTRIC COMPANY UNIT RATINGS JANUARY 2022 - DECEMBER 2022

PLANT / UNIT		ANNUAL GROSS MDC (MW)	ANNUAL NET NDC (MW)
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		0	0
BIG BEND 2		363	343
BIG BEND 3		368	348
BIG BEND 4		458	425
BIG BEND CT4		59	58
	BIG BEND TOTAL	<u>1,249</u>	<u>1,175</u>
POLK 1		225	217
POLK 2		1,130	1,107
	POLK TOTAL	<u>1,355</u>	<u>1,324</u>
SOLAR		596	596
	SOLAR TOTAL	<u>596</u>	<u>596</u>

EXHIBIT NO.____ (PAB-2) TAMPA ELECTRIC COMPANY DOCKET NO. 20210001-EI DOCUMENT NO. 1 PAGE 32 OF 32

TAMPA ELECTRIC COMPANY PERCENT GENERATION BY UNIT JANUARY 2022 - DECEMBER 2022

PLANT	UNIT	NET OUTPUT MWH	PERCENT OF PROJECTED OUTPUT	PERCENT CUMULATIVE PROJECTED OUTPUT
POLK	2	6,959,410	37.07%	37.07%
BAYSIDE	2	3,498,360	18.64%	55.71%
BAYSIDE	1	3,127,400	16.66%	72.37%
SOLAR		1,544,800	8.23%	80.60%
BIG BEND	4	1,417,510	7.55%	88.15%
BIG BEND	1	756,930	4.03%	92.19%
POLK	1	501,150	2.67%	94.86%
BIG BEND	3	375,250	2.00%	96.85%
BIG BEND	5	256,820	1.37%	98.22%
BIG BEND	6	192,610	1.03%	99.25%
BAYSIDE	5	31,110	0.17%	99.41%
BAYSIDE	6	30,020	0.16%	99.57%
BAYSIDE	3	27,280	0.15%	99.72%
BIG BEND CT	4	26,660	0.14%	99.86%
BAYSIDE	4	25,860	0.14%	100.00%
BIG BEND	2	-	0.00%	100.00%

TOTAL GENERATION		18,771,170	100.00%		
GENERATION BY COAL UNITS:	1,417,510 MWH	GENERATION BY NATURAL GAS UNIT	TS: <u>15</u>	5,808,860	MWH
% GENERATION BY COAL UNITS	7.55%	% GENERATION BY NATURAL GAS U	NITS:	84.22%	
GENERATION BY SOLAR UNITS:	1,544,800_MWH	GENERATION BY GPIF UNITS:	15	5,503,830	MWH
% GENERATION BY SOLAR UNIT	8.23%	% GENERATION BY GPIF UNITS:		82.59%	

EXHIBIT TO THE TESTIMONY

OF

PATRICK A. BOKAR

DOCUMENT NO. 2

SUMMARY OF GPIF TARGETS

JANUARY 2022 - DECEMBER 2022

EXHIBIT NO.____ (PAB-2) TAMPA ELECTRIC COMPANY DOCKET NO. 20210001-EI DOCUMENT NO. 2 PAGE 1 OF 1

TAMPA ELECTRIC COMPANY SUMMARY OF GPIF TARGETS JANUARY 2022 - DECEMBER 2022

	Availability			Net
Unit	EAF	POF	EUOF	Heat Rate
Big Bend 4 ¹	71.7	12.1	16.2	10,726
Polk 1 ²	87.7	1.9	10.3	8,855
Polk 2 ³	89.3	7.9	2.7	6,841
Bayside 1 ⁴	77.4	20.3	2.4	7,339
Bayside 2 ⁵	92.7	3.8	3.4	7,695

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

5 Original Sheet 8.401.20E, Page 16



BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20210001-EI FUEL & PURCHASED POWER COST RECOVERY AND CAPACITY COST RECOVERY

PROJECTIONS

JANUARY 2022 THROUGH DECEMBER 2022

TESTIMONY

OF

JOHN C. HEISEY

FILED: SEPTEMBER 3, 2021

TAMPA ELECTRIC COMPANY DOCKET NO. 20210001-EI FILED: 09/03/2021

	BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
	PREPARED DIRECT TESTIMONY
	OF
	JOHN C. HEISEY
Q.	Please state your name, address, occupation, and
	employer.
A.	My name is John C. Heisey. My business address is 702 N.
	Franklin Street, Tampa, Florida 33602. I am employed by
	Tampa Electric Company ("Tampa Electric" or "company") as
	Director, Origination and Trading.
Q.	Have you previously filed testimony in Docket No.
	20210001-EI?
A.	Yes, I submitted direct testimony on April 2, 2021 and
	July 27, 2021.
Q.	Has your job description, education, or professional
	experience changed since your most recent testimony?
A.	Yes. My position is Director, Origination and Trading, as
	of August 2021.
	Q. A. Q. A.

Please describe your duties and responsibilities in that 1 Q. 2 position. 3 I am responsible for directing all activities associated Α. 4 5 with the procurement and delivery of energy commodities 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 11 Optimization Mechanism. 12 What is the purpose of your testimony? 13 Q. 14 The purpose of my testimony is to discuss Tampa Electric's Α. 15 16 fuel mix, fuel price forecasts, potential impacts to fuel prices, and the company's fuel procurement strategies. 17 18 Fuel Mix and Procurement Strategies 19 20 Q. What fuels do Tampa Electric's generating stations use? 21 Tampa Electric's generation portfolio includes natural 22 Α. 23 gas, solar, coal, and, as a backup fuel, oil powered units. Big Bend Unit 2 operates on natural gas, and Big 24 Bend Units 3 and 4 can operate on coal or natural gas. 25

Big Bend Modernization project's first phase, Big Bend 1 combustion turbine Units 5 and 6, is expected to be in 2 3 service in December 2021 and will operate on natural gas. The second phase of the Big Bend Modernization project 4 5 includes the addition of the Heat Recovery Steam Generator ("HRSG") in December 2022 and will result in the unit's 6 operation in combined cycle mode. Polk Unit 1 can operate 7 on natural gas or a blend of petroleum coke and coal. 8 Currently, the company is operating Big Bend Unit 2, Big 9 Bend Unit 3, and Polk Unit 1 on natural gas and Big Bend 10 11 Unit 4 on coal. Polk Unit 2 combined cycle uses natural gas as a primary fuel and oil as a secondary fuel; and 12 Bayside Station combined cycle units and the company's 13 14 collection of peakers (i.e., aero-derivative combustion turbines) all utilize natural gas. Since it serves as a 15 backup fuel, oil consumption is primarily for testing, 16 and oil is a negligible percentage of system generation. 17 Based upon the 2021 actual-estimate projections, the 18 company expects 2021 total system generation, excluding 19 20 purchased power, to be 85 percent natural gas, 7.5 percent solar, and 7.5 percent coal. 21

Likewise, in 2022, natural gas-fired and solar generation are expected to be 83 percent and 10 percent of total generation, respectively, with coal-fired generation

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1		making up 7 percent of total generation.
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3	Q.	Please describe Tampa Electric's fuel supply procurement
4		strategy.
5		
6	A.	Tampa Electric emphasizes flexibility and options in its
7		fuel procurement strategy for all its fuel needs. The
8		company strives to maintain many creditworthy and viable
9		suppliers. Similarly, the company endeavors to maintain
10		multiple delivery path options. Tampa Electric also
11		attempts to diversify the locations from which its supply
12		is sourced. Having a greater number of fuel supply and
13		delivery options provides increased reliability and
14		flexibility to pursue lower cost options for Tampa
15		Electric customers.
16		
17	Natu	aral Gas Supply Strategy
18	Q.	How does Tampa Electric's natural gas procurement and
19		transportation strategy achieve competitive natural gas
20		purchase prices for long- and short-term deliveries?
21		
22	A.	Tampa Electric uses a portfolio approach to natural gas
23		procurement. This approach consists of a blend of pre-
24		arranged base, intermediate, and swing natural gas supply
25		contracts complemented with shorter term spot and
	I	

seasonal purchases. The contracts have various time 1 2 lengths to help secure needed supply at competitive prices while maintaining the flexibility to adapt to any changing 3 fuel needs. Tampa Electric purchases its physical natural 4 5 gas supply from creditworthy counterparties, enhancing the liquidity and diversification of its natural gas 6 supply portfolio. Tampa Electric targets natural gas 7 supply that is reliable and resistant to the impacts of 8 extreme weather. The natural gas prices are based on 9 monthly and daily price indices, further increasing 10 11 pricing diversification.

Tampa Electric diversifies its pipeline transportation 13 14 assets, including receipt points. The company also utilizes pipeline and storage services to enhance access 15 to natural gas supply during hurricanes, extreme weather 16 or other events that constrain supply. Such actions 17 improve the reliability and cost-effectiveness of the 18 physical delivery of natural gas to the company's power 19 20 plants. Furthermore, Tampa Electric strives daily to obtain reliable supplies of natural gas at favorable 21 prices to mitigate costs for its customers. 22

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Q. Please describe Tampa Electric's diversified natural gas
 transportation agreements.

Tampa Electric currently receives natural gas directly Α. 1 via the Florida Gas Transmission ("FGT") and Gulfstream 2 Natural Gas System, LLC ("Gulfstream") pipelines. Tampa 3 Electric also receives a portion of its gas via the 4 5 recently constructed Sabal Trail Transmission ("Sabal Trail") gas pipeline (via Gulfstream backhaul). The 6 ability to deliver natural gas from three pipelines 7 increases the fuel delivery reliability for Bayside Power 8 Station, which is composed of two large natural gas 9 combined-cycle units and four aero-derivative combustion 10 11 turbines. Natural gas can also be delivered to Big Bend Station from Gulfstream and Sabal Trail to support the 12 station's steam generating units, aero-derivative 13 14 combustion turbine, and upcoming Big Bend Modernization project. Later this year, the first phase of a new gas 15 pipeline lateral will be completed that allows natural 16 gas to be delivered to the Big Bend Station from FGT under 17 certain conditions, such as a Gulfstream outage. This 18 lateral increases the fuel delivery reliability for Big 19 Bend Station. Polk Station receives natural gas from FGT 20 to support natural gas consumption in Polk Units 1 and 2. 21 22 23 Q. Are there any significant changes to Tampa Electric's 24 expected natural gas usage?

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A.	Tampa Electric's natural gas usage is expected to remain
	steady in 2022. Though the additional solar generation
	and the retirement of Big Bend Unit 2 will result in a
	reduction in natural gas usage in the period, they will
	be offset by increased natural gas usage at the efficient
	Big Bend Modernization project. The strategy of burning
	economical natural gas in dual-fueled units continues to
	provide lower overall costs to customers.
Q.	What actions does Tampa Electric take to enhance the
	reliability of its natural gas supply?
A.	Tampa Electric maintains natural gas storage capacity
	with Bay Gas Storage near Mobile, Alabama, and Southern
	Pines Energy Center in Eastern Mississippi to provide
	operational flexibility and reliability of natural gas
	supply. The company reserves 2,000,000 MMBtu of long-term
	storage capacity in these two locations. This storage was
	used during Storm Uri in February 2021 to replace
	interrupted supply and to mitigate costs for our
	customers.
	In addition to storage, Tampa Electric maintains
	diversified natural gas supply receipt points in FGT Zones
	1, 2, and 3. Diverse receipt points reduce the company's
	А. Q.

vulnerability to hurricane impacts and provide access to potentially lower priced gas supply.

Tampa Electric also reserves capacity on the Southeast 4 5 Supply Header ("SESH"), Gulf South pipeline ("Gulf South"), and Transco's Mobile Bay Lateral ("Transco"). 6 SESH, Gulf South, and Transco connect the receipt points 7 of FGT, Gulfstream, and other Mobile Bay area pipelines 8 supply in the mid-continent with natural gas and 9 Mid-continent and northeast natural northeast. 10 qas 11 production, specifically shale production, has grown and continues to increase. Thus, SESH, Gulf South, and Transco 12 Electric 13 capacity give Tampa access to secure, 14 competitively priced onshore gas supply for a portion of its portfolio. All receipt points in the portfolio are 15 reviewed annually to ensure access to reliable supply 16 basins. 17

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19 Q. Has Tampa Electric acquired additional natural gas 20 transportation for 2021 and 2022 due to greater use of 21 natural gas?

A. Yes, with the company's growing demand for natural gas
 for electric generation purposes, the company acquires
 daily, seasonal, and longer-term pipeline capacity to

support the company's portfolio of gas-fired generation 1 2 assets. In 2021, Tampa Electric acquired short-term 3 capacity on FGT in January and February to increase the reliability of the portfolio for its projected winter 4 5 peak. In addition, a power purchase was executed for January as a lower cost solution compared to acquiring 6 additional short-term pipeline capacity, as mentioned in 7 the testimony of Tampa Electric witness Benjamin F. Smith, 8 In the summer of 2021, Tampa Electric acquired II. 9 additional pipeline capacity on Sabal Trail. This 10 11 capacity provides additional transportation for the portfolio as Tampa Electric continues to transition from 12 coal-fired generation to cleaner burning natural gas-13 14 fired generation. For 2022, Tampa Electric modified and extended existing Gulf South transportation. 15 As contractual requirement at the end of 2022, Tampa Electric 16 will replace its Sabal Trail capacity with Gulfstream 17 capacity to supply the Big Bend Modernization project and 18 other portfolio gas requirements. 19

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Coal Supply Strategy

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

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A. Like its natural gas strategy, Tampa Electric uses a

portfolio approach to coal procurement. The steam turbine units at Big Bend Station are designed to burn high-sulfur Illinois Basin coal and are fully scrubbed for sulfur dioxide and nitrogen oxides, and the units have been 5 upgraded to operate on natural gas. Polk Unit 1 can burn a blend of petroleum coke and low sulfur coal, or natural 6 gas. Each plant has varying operational and environmental restrictions and requires solid fuel with custom quality characteristics such as ash content, fusion temperature, 9 sulfur content, heat content, and chlorine content.

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Coal is not a homogenous product. The fuel's chemistry 12 and contents vary based on many factors, 13 including 14 geography. The variability of the product dictates that Electric select its fuel based on 15 Tampa multiple parameters. Those parameters include unique coal quality 16 characteristics, price, availability, deliverability, and 17 credit worthiness of the supplier. 18

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

of daily and weekly publications, independent research 1 2 analyses from industry experts, discussions with 3 suppliers, and coal solicitations aid the company in monitoring the coal market. This market intelligence also 4 5 helps shape the company's coal procurement strategy to reflect short- and long-term market conditions. Tampa 6 Electric's strategy provides a stable supply of reliable 7 fuel sources. In addition, this strategy allows the 8 company the flexibility to take advantage of favorable 9 spot market opportunities and address operational needs. 10 11 Please summarize how Tampa Electric will manage its solid 12 Q. fuel supply contracts through 2022. 13 14 Α. Since the company is projected to use less coal and more 15 16 natural gas in 2022 compared to previous years, Tampa Electric will supply the Big Bend and Polk Stations with 17 solid fuel through a combination of existing inventory, 18 short-term contracts, and, as necessary, spot purchases 19 20 in support of the most economic commitment and dispatch

for the generation fleet. Short-term and spot purchases allow the company to adjust supply to reflect changing coal quality and quantity needs, operational changes, and pricing opportunities.

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Coal Transportation

Q. Please describe Tampa Electric's solid fuel transportation arrangements.

5 Α. Tampa Electric can receive coal at its Big Bend Station via waterborne or rail delivery. Once delivered to Big 6 Bend Station, solid fuel is consumed onsite, or blended 7 and trucked to Polk Station for consumption in Polk Unit 8 1. As a result of declining solid fuel burns over the 9 last few years, Tampa Electric now purchases delivered 10 11 coal, where waterborne coal supply and transportation are arranged by the supplier. Procuring delivered waterborne 12 coal continues to provide customers with competitive coal 13 14 prices through a simplified process. Commodity and transportation of coal by rail is still being arranged 15 separately, as necessary. 16

Q. Why does the company maintain multiple coal transportation options in its portfolio?

A. Bimodal solid fuel transportation to Big Bend Station
affords the company and its customers various benefits.
Those benefits include 1) access to more potential coal
suppliers, which results in a more competitively priced,
and diverse, delivered coal portfolio; 2) the opportunity

to switch to either water or rail in the event of a 1 2 transportation breakdown or interruption on the other 3 mode; and 3) competition among transporters for future solid fuel transportation contracts. 4 5 Will Tampa Electric continue to receive coal deliveries 6 0. via rail in 2021 and 2022? 7 8 Yes. Tampa Electric expects to receive coal for use at 9 Α. Big Bend Station through the Big Bend rail facility during 10 11 2021 and is evaluating how much coal to receive by rail in 2022. 12 13 14 Q. Please describe Tampa Electric's expectations regarding waterborne coal deliveries. 15 16 Tampa Electric expects to receive solid fuel supply from 17 Α. waterborne deliveries to its unloading facilities at Big 18 Bend Station. These deliveries come via the Mississippi 19 20 River System or from foreign sources. The ultimate supply source is dependent upon quality, operational needs, and 21 lowest overall delivered cost. 22 23 Do you have any other updates to provide regarding Tampa Ο. 24 Electric's solid fuel transportation portfolio? 25

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1	A.	Yes. Tampa Electric continues to burn natural gas as the
2		economic fuel in Big Bend Unit 3 and Polk Unit 1. Big
3		Bend Unit 4 is projected to burn coal in 2022. In
4		addition, the company's strategy of utilizing short-term
5		and spot delivered solid fuel purchases allows Tampa
6		Electric to maintain flexibility in its solid fuel
7		portfolio while reducing solid fuel deliveries going
8		forward, which aligns well with the economical use of
9		natural gas. As a result, Tampa Electric will contract
10		for fewer tons of solid fuel supply and transportation in
11		the remainder of 2021 and 2022 than in previous years.
12		
13	Q.	Has Tampa Electric reasonably managed its fuel
14		procurement practices for the benefit of its retail
15		customers?
16		
17	A.	Yes. Tampa Electric diligently manages its mix of long-
18		term, intermediate, and short-term purchases of fuel in
19		a manner designed to reduce overall fuel costs while
20		maintaining electric service reliability. The company's
21		fuel activities and transactions are reviewed and audited
22		on a recurring basis by the Commission. In addition, the
23		company monitors its rights under contracts with fuel
24		suppliers to detect and prevent any breach of those
25		rights. Tampa Electric continually strives to improve its

knowledge of fuel markets and to take advantage 1 of 2 opportunities to minimize the costs of fuel. 3 there any other pertinent aspects of Q. how Are Tampa 4 5 Electric manages its fuel supply portfolio? 6 Yes. As part of Tampa Electric's 2017 Amended and Restated 7 Α. Agreement Stipulation and Settlement approved 8 by Commission Order PSC-2017-0456-S-EI, 9 No. issued on November 27, 2017 in Docket No. 20170210-EI, Tampa 10 11 Electric has been operating under an Asset Optimization January 1, 2018. Mechanism since This Optimization 12 Mechanism encourages Tampa Electric to market temporarily 13 14 unused fuel supply assets to capture cost mitigation benefits for customers. These benefits have come through 15 economic power purchases, economic power sales, resale of 16 unneeded fuel supply, an asset management agreement for 17 natural gas storage, and utilization of natural gas and 18 solid fuel storage and transportation assets. 19 20 Projected 2022 Fuel Prices 21 How does Tampa Electric project fuel prices? 22 Q. 23 Tampa Electric reviews fuel price forecasts from sources 24 Α. widely used in the industry, including the New York 25

Mercantile Exchange ("NYMEX"), S&P Scenario Planning 1 Service Annual Guidebook (originally produced by PIRA 2 3 Energy Group), the Energy Information Administration, and other energy market information sources. Future prices 4 5 for energy commodities as traded on NYMEX, averaged over five consecutive business days ending in July 2021, form 6 the basis of the natural gas and No. 2 oil market 7 commodity price forecasts. The price projections for 8 these two commodities are then adjusted to incorporate 9 expected transportation costs and location differences. 10 11 Coal commodity and transportation prices are projected 12 using contracted pricing and information from industry 13 14 recognized consultants and published indices, such as IHS Markit and Argus Coal Daily. Also, the price projections 15 are specific to the quality and mined location of coal 16 utilized by Tampa Electric's Big Bend Station and Polk 17 Unit 1. Final as-burned prices are derived using expected 18 commodity prices and associated transportation costs. 19 20 How do the 2022 projected fuel prices compare to the fuel 21 Q. prices projected for 2021 in the company's mid-course 22 23 correction filing? 24 Large quantities of domestic shale-related production are 25 Α.

keeping natural gas prices relatively low. However, 1 in 2 2021, demand outpaced supply as the post COVID-19 economic 3 recovery drove domestic gas demand through increased LNG exports, increased natural gas exports to Mexico, and 4 5 increased industrial demand. Strong gas demand from power generation early in the summer decreased storage 6 inventory levels below the five-year average while gas 7 production remained static. Natural gas prices started 8 rising in the second half of 2021 and are expected to 9 remain elevated through the first quarter of 2022 until 10 11 increased production helps to balance the market. Additionally, there is uncertainty associated 12 with natural gas prices for 2022 due to the ongoing pandemic. 13 14

The commodity price for natural gas during 2022 15 is projected to be slightly lower (\$3.16 per MMBtu) than the 16 2021 price (\$3.21 per MMBtu) projected in the company's 17 mid-course correction fuel filing. The 2022 delivered 18 coal price projection is slightly lower (\$62.28 per ton) 19 20 than the price projected for 2021 (\$63.42 per ton) during preparation of the 2021 mid-course correction fuel clause 21 factors. 22

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Q. Does this conclude your direct testimony?

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20210001-EI FUEL & PURCHASED POWER COST RECOVERY AND CAPACITY COST RECOVERY

PROJECTIONS

JANUARY 2022 THROUGH DECEMBER 2022

TESTIMONY

OF

BENJAMIN F. SMITH II

FILED: SEPTEMBER 3, 2021

TAMPA ELECTRIC COMPANY DOCKET NO. 20210001-EI FILED: 09/03/2021

	BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION
	PREPARED DIRECT TESTIMONY
	OF
	BENJAMIN F. SMITH II
Q.	Please state your name, address, occupation, and
	employer.
A.	My name is Benjamin F. Smith II. My business address is
	702 North Franklin Street, Tampa, Florida 33602. I am
	employed by Tampa Electric Company ("Tampa Electric" or
	"company") as Manager, Gas and Power Origination within
	the Fuel and Planning Services Department.
Q.	Please provide a brief outline of your educational
	background and business experience.
A.	I received a Bachelor of Science degree in Electric
	Engineering in 1991 from the University of South Florida
	in Tampa, Florida, and a Master of Business Administration
	degree in 2015 from Saint Leo University in Saint Leo,
	Florida. I am also a registered Professional Engineer
	within the State of Florida and a Certified Energy Manager
	through the Association of Energy Engineers. I joined
	Tampa Electric in 1990 as a cooperative education student.
	Q. A.
During my years with the company, I have worked in the 1 2 areas of transmission engineering, distribution 3 engineering, resource planning, retail marketing, and wholesale power marketing. I am currently the Manager, 4 5 Gas and Power Origination within the Fuel and Planning Services Department. My responsibilities are to evaluate 6 short and long-term power purchase and sale opportunities 7 within the wholesale power market, assist in wholesale 8 power and gas transportation origination and contract 9 structures, and assist in combustion byproduct contract 10 11 administration and market opportunities. In this capacity, I interact with wholesale power 12 market participants such as utilities, municipalities, electric 13 14 cooperatives, power marketers, other wholesale developers and independent power producers, as well as with natural 15 gas pipeline owners and transporters. 16 17

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

20

A. Yes. I have submitted written testimony in the annual fuel docket since 2003, and I have testified before this Commission in Docket Nos. 20030001-EI, 20040001-EI, and 20080001-EI regarding the appropriateness and prudence of 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

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

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

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

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

Commission.

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

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Q. Please describe Tampa Electric's 2021 wholesale power purchases.

A. Tampa Electric assessed the wholesale power market and entered into short- and long-term purchases based on price and availability of supply. Approximately 10 percent of the company's expected needs for 2021 will be met using

purchased power. This includes economy energy purchases, reliability purchases, as-available purchases from qualifying facilities, and forward purchases from Duke Energy Florida ("DEF"), the Florida Municipal Power Agency ("FMPA"), Florida Power & Light ("FPL"), and the Orlando Utilities Commission ("OUC").

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Presently, Tampa Electric has seven forward purchases applicable to the year 2021. Four of them have terms that carried over from 2020 as described in my 2020 testimony and summarized in the following bullet points.

Three (3) firm peaking call options for the period 12 December 2020 through February 2021: 160 MW from FPL, 13 14 100 MW from OUC, and 150 MW from FMPA. Ninety-five megawatts (95 MW) of the FMPA 150 MW were to meet the 15 company's 20 percent firm reserve margin criteria 16 during the 2021 winter season. The balance of the 17 purchases was for economic reasons. The company secured 18 these purchase agreements during the fourth quarter of 19 20 2019 at an estimated savings to customers (excluding the reliability portion of the FMPA purchase) of \$325.6 21 thousand for 2021. These savings flowed through the 22 23 company's optimization mechanism and benefited customers in accordance with the methodology approved 24 by the Commission in Order No. 2017-0456-S-EI, issued 25

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on November 27, 2017.

A non-firm purchase from DEF, which was an extension 2 3 of Tampa Electric's previous contract to purchase nonfirm energy from DEF. The extension covered the period 4 5 March 2020 through February 2021. The energy volume available under the contract remained at a maximum of 6 515 MW per hour. The DEF extension did not have a must-7 take obligation. The extension provided Tampa Electric 8 the flexibility to schedule the energy when beneficial 9 to customers. In February 2021, Tampa Electric and DEF 10 11 extended the contract again for the period March through November 2021 and thus far, for the period 12 January through July 2021, and thus far, the purchase 13 14 has provided \$1.4 million in projected savings to optimization customers, which flow through the 15 mechanism. 16

The company's remaining three forward purchases are from OUC and FPL, executed in December 2020 and February 2021, respectively. A description of the purchases follows.

• A 200 MW, firm, peaking call option from OUC for the month of January 2021. The purchase was a reliability purchase to ensure energy service to customers in the event Tampa Electric experienced cold weather.

The purchase helped reduce the company's exposure to natural gas supply risk during its winter peak. Natural gas risks and mitigation are discussed in the testimony of Tampa Electric witness John C. Heisey, filed concurrently in this docket.

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Two economy, non-firm, must-take energy purchases from FPL. Each purchase is for 150 MW. One covers the period March through November 2021. The other covers the period April through October 2021. The purchases provide a projected \$3.4 million of savings to customers, which flow through the optimization mechanism.

13Tampa Electric has not secured other forward purchases14for 2021 at this time. However, the company constantly15searches for economic purchase opportunities that benefit16customers. As other purchase opportunities materialize,17the company evaluates each product to determine the18viability of making it part of the supply portfolio Tampa19Electric uses to serve customers.

21 Q. Does Tampa Electric anticipate entering into new 22 wholesale power purchases for 2022 and beyond? 23

24 A. Tampa Electric currently has no forward purchases for

2022. However, the company expects to incur capacity costs
and has included them in its 2022 Capacity Cost Recovery
Clause projection. The projected capacity clause costs
total \$5.9 million and support firm purchases for the Big
Bend Modernization Project testing, if needed, as well as
economic forward purchases. A further explanation of
these transmission costs is below.

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The final phase of the Big Bend Modernization Project 9 construction occurs in 2022. Testing of the project's 10 11 combined cycle operation will occur during the period July 2022, through October and the project team 12 will periodically need operational control of the new Big Bend 13 14 combustion turbines, Units 5 and 6, that will drive the combined cycle. Depending on key factors-such 15 as projected load, unit availabilities, and planned 16 maintenance-the company may purchase energy to 17 due limited availability of the new Big Bend combustion 18 intermittency turbines or the potential of their 19 20 generation during times of combined cycle testing.

Tampa Electric included \$3.1 million in its 2022 capacity clause costs for the cost of firm transmission purchases during the Big Bend Modernization Project test period, to secure the path for firm power products during the

project's testing. The amount is based on 330 MW per month which equates to the size of one Big Bend combustion turbine, for the four months of July through October, at an assumed firm transmission rate of \$ 2.35354/KW per month. Tampa Electric's transmission cost rate applied in this estimate is the current Florida Power & Light firm monthly point-to-point transmission rate.

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Additionally, over the past several years, noted 9 as previously with the economic purchases from FPL in 2021, 10 11 Tampa Electric has identified forward, season-long economy energy purchases that produced savings 12 for customers, and it expects to make such purchases again in 13 14 2022. While these agreements will be negotiated closer to time they are needed, the company's projected 15 the transmission costs are based on recent history and market 16 expectations. While Tampa Electric has yet to identify 17 and secure economic purchase opportunities for 2022, the 18 company included in its projection the dollars associated 19 with these transmission costs. 20

The terms of the company's recent forward economy purchases were generally in the April through November timeframe and for about 300 MW. In 2022, the company will continue to identify and evaluate monthly and seasonal

forward purchase opportunities that bring value 1 to customers. Because 330 MW of transmission costs for Big 2 3 Bend Modernization Project testing are already included for July through October, these additional transmission 4 5 costs for economy purchases are for the months of April, May, June, and November only. The transmission costs for 6 these months are estimated to be \$2.8 million. This amount 7 is based on the 300 MW per month for the four months at 8 an assumed firm transmission rate of \$ 2.35354/KW per 9 month. The transmission cost rate applied in this estimate 10 11 is the current Florida Power & Light firm monthly pointto-point transmission rate. 12 13 14 Q. How does Tampa Electric mitigate the risk of disruptions to its purchased power supplies during major weather-15 related events, such as hurricanes? 16 17 During hurricane season, Tampa Electric continues 18 Α. to utilize a purchased power risk management strategy to 19 20 minimize potential power supply disruptions. The strategy includes monitoring storm activity; evaluating the impact 21 of storms on existing forward purchases and the rest of 22 23 the wholesale power market; communicating with suppliers about their storm preparations and potential impacts to 24 existing transactions, purchasing additional power on the 25

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1		forward market, if appropriate, for reliability and
2		economics; evaluating transmission availability and the
3		geographic location of electric resources; reviewing
4		sellers' fuel sources and dual-fuel capabilities; and
5		focusing on fuel-diversified purchases. Absent the threat
6		of a hurricane, and for all other months of the year, the
7		company evaluates economic combinations of short- and
8		long-term purchase opportunities in the marketplace.
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10	Q.	Please describe Tampa Electric's wholesale energy sales
11		for 2021 and 2022.
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13	A.	Tampa Electric entered into various non-separated (e.g.,
14		next-hour and next-day sales) wholesale sales in 2021,
15		and the company anticipates making additional non-
16		separated sales during the balance of 2021 and 2022. The
17		gains from these sales are shared between Tampa Electric
18		and its customers through the company's optimization
19		mechanism.
20		
21	Q.	Please summarize your direct testimony.
22		
23	A.	Tampa Electric monitors and assesses the wholesale power
24		market to identify and take advantage of opportunities in
25		the marketplace, and these efforts benefit the company's

1		customers. Tampa Electric's energy supply strategy
2		includes self-generation and short- and long-term power
3		purchases. The company purchases in both physical forward
4		and spot wholesale power markets to provide customers with
5		a reliable supply at the lowest possible cost. In addition
6		to the cost benefits, this purchased power approach
7		employs a diversified physical power supply strategy that
8		enhances reliability. The company also enters wholesale
9		sales that benefit customers when market conditions
10		allow.
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12	Q.	Does this conclude your direct testimony?
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14	A.	Yes.
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