AUSLEY MCMULLEN

Attorneys and Counselors at Law
123 South Calhoun Street
P.O. Box 391 32302
Tallahassee, FL 32301
P: (850) 224-9115
F: (850) 222-7560
ausley.com

July 26, 2023

VIA: ELECTRONIC FILING

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

Re: Review of Tampa Electric Company's 2023 Ten-Year Site Plan
Staff's Fourth Data Request (Nos. 1-2)
Undocketed 20230000-OT

Dear Mr. Teitzman:

Attached for filing are Tampa Electric Company's responses to Staff's Fourth Data Request (Nos. 1-2) regarding the company's 2023 Ten-Year Site Plan, propounded on July 5, 2023.

Thank you for your assistance in connection with this matter.

Sincerely,

Malcolm N. Means

Malcolm N. Means

MNM/bml
Attachments
cc: Greg Davis (GDavis@psc.state.fl.us)
Phillip Ellis (PEllis@psc.state.fl.us)
TECO Regulatory Department

TAMPA ELECTRIC COMPANY
UNDOCKETED: REVIEW OF TYSP'S
STAFF'S FOURTH DATA REQUEST
REQUEST NO. 1
BATES PAGE(S):1-3
FILED: JULY 26, 2023

1. For the following questions, please refer to TECO's Response to Staff's First Data Request No. 20 (TECO's **2022** TYSP) and TECO's Response to Staff's First Data Request No. 22 (TECO's **2023** TYSP).

TECO 2022
TYSP

Year	Number of PEVs	Number of Public PEV Charging Stations	Number of Public DCFC PEV Charging Stations.	Cumulative Impact of PEVs		
				Summer Demand	Winter Demand	Annual Energy
				(MW)	(MW)	(GWh)
2022	12,218	461	97	26.6	11.5	34.6
2023	14,890	512	107	31.7	13.9	45.5
2024	17,742	562	118	37.1	16.4	57.3
2025	20,785	613	128	42.8	19.0	70.3
2026	24,119	664	139	48.9	21.9	84.6
2027	27,808	714	150	55.6	25.0	100.8
2028	31,977	765	160	63.0	28.5	118.3
2029	36,561	815	171	71.0	32.4	137.9
2030	41,599	866	181	79.7	36.5	159.5
2031	47,156	917	192	89.2	41.0	183.0

Notes

Cumulative counts provided.
The number of public "quick-charge" PEV charging stations is a subset of the number of Public EV Charging Stations.
Home charging load estimated at 20% of residential EV demand at time of summer retail peak and at 10% of residential EV demand at time of winter retail peak.
Public charging station load estimated at 84% of commercial EV demand at time of summer retail peak and at 24% of commercial EV demand at time of winter retail peak.
Forecast ties to TYSP filed April 1, 2022.

TECO 2023 TYSP

Year	Number of PEVs	Number of Public PEV Charging Stations	Number of Public DCFC PEV Charging Stations.	Cumulative Impact of PEVs		
				Summer Demand	Winter Demand	Annual Energy
				(MW)	(MW)	(GWh)
2023	33,935	870	148	20.3	5.6	171.6
2024	47,775	993	169	23.7	6.7	219.2
2025	62,272	1,126	191	27.5	7.9	272.2
2026	77,456	1,270	216	31.7	9.2	331.0
2027	93,214	1,425	242	36.3	10.7	395.6
2028	109,526	1,591	270	41.1	12.2	463.8
2029	126,757	1,767	300	46.3	13.9	538.1
2030	145,373	1,955	332	51.9	15.7	620.2
2031	165,432	2,154	366	57.9	17.6	710.7
2032	187,198	2,363	401	64.3	19.8	810.6

Notes

Cumulative counts provided.
The number of public "quick-charge" PEV charging stations is a subset of the number of Public EV Charging Stations.
Home charging load estimated at 20% of residential EV demand at time of summer retail peak and at 10% of residential EV demand at time of winter retail peak.
Public charging station load estimated at 84% of commercial EV demand at time of summer retail peak and at 24% of commercial EV demand at time of winter retail peak.
Forecast ties to TYSP filed April 1, 2023.

a. Comparing TECO's 2022 and 2023 TYSP's, the Company has significantly increased its PEV forecast over the planning period (see chart/calculations below). Please identify and explain the major drivers/factors in TECO's PEV forecasting models that have contributed to this significant increase over the planning period.

Year	2023 TYSP Forecasted Number of PEVs	2022 TYSP Forecasted Number of PEVs	2023 vs. 2022 Forecast Variance	Incremental Percentage Increase
	(1)	(2)	(3)= (1) - (2)	(3)/(2)
2022		12,218		
2023	33,935	14,890	19,045	127.91%
2024	47,775	17,742	30,033	169.28%
2025	62,272	20,785	41,486	199.60%
2026	77,456	24,119	53,336	221.14%
2027	93,214	27,808	65,406	235.20%
2028	109,526	31,977	77,549	242.52%
2029	126,757	36,561	90,196	246.70%
2030	145,373	41,599	103,774	249.46%
2031	165,432	47,156	118,276	250.82%
2032	187,198			

b. Please explain why TECO's 2023 TYSP projects lower PEV Summer and Winter Demand over the planning period compared to last year's TYSP, despite a projected large increase in PEVs and annual energy consumption.

A.

a. The major drivers in TECO's PEV forecasting models that have contributed to the significant increase in PEV counts over the planning period include stronger actual counts during 2020 [7,145] than forecasted previously [5,459] and a stronger Energy Information Administration [EIA] forecast of EV sales as a percentage of all car sales than compared to the prior year's forecast. EIA's EV sales as a percentage of all car sales is used as an input to calculate the number of PEVs over the forecast horizon.

b. TECO's 2023 TYSP projects lower PEV Summer and Winter Demand over the planning period compared to last year's TYSP, despite a large projected increase in PEVs and annual energy consumption, due to a change in assumption sources for demand data. We moved to using NREL [National Renewable Energy Laboratory] as our source which was based on more advanced research than our prior forecast.

2. TECO's 2023 TYSP, Schedule 2.2, column (8) Total Sales to Ultimate Consumers, indicates that TECO's 2022 retail sales reached a peak for the past 10-year period. Please identify the major contributor(s) to this significant incremental annual sales increase.

A. The major contributor to the significant incremental annual sales increase during 2022 was record-breaking weather that increased average usage.