GAINESVILLE REGIONAL UTILITIES



FILED 7/25/2023 DOCUMENT NO. 04270-2023 FPSC - COMMISSION CLERK

July 25, 2023

Greg Davis and Phillip Ellis Florida Public Service Commission Office of Commission Clerk 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

Re: 20230000-OT GRU's Response to TYSP Data Request #4

Dear Mr. Davis and Mr. Ellis,

Gainesville Regional Utilities hereby submits its electronic version of the Public Service Commission's Ten-Year Site Plan Data Request #4. This document will also be emailed to you.

Please let me know if you have any questions regarding this document.

Sincerely,

/s/ Eric Neihaus, P.E. Power Planning Engineer Gainesville Regional Utilities 1. For the following questions, please refer to GRU's Response to Staff's First Data Request No. 20 (GRU's **2022** TYSP) and GRU's Response to Staff's First Data Request No. 22 (GRU's **2023** TYSP).

Year		Number of Public PEV Charging Stations		Cumulative Impact of PEVs		
	Number of PEVs		Number of Public DCFC PEV Charging Stations.	Summer Demand	Winter Demand	Annua Energy
				(MW)	(MW)	(GWh)
0 [2022]*	1,065	85	19	2.7	4.0	3.834
1 [2023]*	1,331	94	23	3.3	5.0	4.793
2 [2024]*	1,664	103	27	4.2	6.2	5.991
3 [2025]*	2,080	113	33	5.2	7.8	7.488
4 [2026]*	2,600	124	39	6.5	9.8	9.360
5 [2027]*	3,250	137	47	8.1	12.2	11.700
6 [2028]*	4,063	151	57	10.2	15.2	14.626
7 [2029]*	5,078	166	68	12.7	19.0	18.282
8 [2030]*	6,348	182	82	15.9	23.8	22.852
9 [2031]*	7,935	200	98	19.8	29.8	28.566
otes						

GRU 2022 TYSP

* Bracketed years added by Commission staff

GRU 2023 TYSP

	Number of PEVs	Number of Public PEV Charging Stations	Number of Public	Cumulative Impact of PEVs		
Year			DCFC PEV Charging Stations.	Summe " Demand	Winter Demand	Annual Energy
				(MW)	(MW)	(GWh)
2023	1,370	94	25	2.05	1.95	4.416
2024	1,868	94	49	4.55	4.45	6.025
2025	2,549	95	50	4.56	4.46	8.237
2026	3,249	96	50	4.56	4.47	11.212
2027	4,141	97	50	4.57	4.47	14.292
2028	5,277	98	50	4.58	4.48	18.215
2029	6,725	99	50	4.58	4.49	23.264
2030	8,570	100	50	4.59	4.50	29.577
2031	10,359	101	50	4.60	4.50	37.693
2032	12,522	102	50	4.61	4.51	45.565
Notes						
Notes Number of PFVs and A	nnual Fn	orm came from	The Energy Auth	ority		

Number of PEVs and Annual Energy came from The Energy Authority. Charging station counts and demand forecasts were developed internally. a. Please explain why GRU's 2023 TYSP projects PEV Summer and Winter Demand to be significantly lower over the planning period than GRU's 2022 TYSP, despite a projected increase in number of PEVs and annual energy consumption.

In preparing this table in 2023, GRU staff utilized a different methodology than was used in 2022. Different individuals completed this Table from year-to-year, so the assumptions changed.

- In 2022, the calculations for Summer and Winter demand were based on number of PEVs.
- In 2023, the calculations for Summer and Winter demand were based on number of public charging stations.

*GRU staff have decided to develop a more formalized procedure for completing this Table in 2024 and future years. A revised Table for 2023 is found below. In phone conversations with PSC staff, GRU was advised to attach this revised Table. Please see revised Table on page 3 of 3-

b. Please explain why GRU's 2023 TYSP projects a significant decrease of public charging stations over the planning period compared to GRU's 2022 TYSP.

In preparing this table in 2023, GRU staff utilized a different methodology than was used in 2022. Different individuals completed this Table from year-to-year, so the assumptions changed.

- In 2022, the preparer of this Table assumed a 10% per year growth rate in number of charging stations (starting with the known count that had already been placed in-service).
- In 2023, the preparer of this Table assumed that the future growth would be from Private installations (i.e. non-Public charging stations would take over).

*GRU staff have decided to develop a more formalized procedure for completing this Table in 2024 and future years. A revised Table for 2023 is found below. In phone conversations with PSC staff, GRU was advised to attach this revised Table. Please see revised Table on page 3 of 3-

TYSP Year	2023
Staff's Data Request #	4
Question No.	22

	Number of PEVs	Number of Public PEV Charging Stations	Number of Public DCFC PEV Charging Stations.	Cumulative Impact of PEVs			
Year				Summer Demand	Winter Demand	Annual Energy	
				(MW)	(MW)	(GWh)	
2023	1,370	94	25	0.54	0.65	4.416	
2024	1,868	94	49	0.74	0.88	6.025	
2025	2,549	170	49	1.01	1.20	8.237	
2026	3,249	217	59	1.29	1.54	11.212	
2027	4,141	276	75	1.64	1.96	14.292	
2028	5,277	352	96	2.09	2.49	18.215	
2029	6,725	448	122	2.66	3.93	23.264	
2030	8,570	571	156	3.39	4.05	29.577	
2031	10,359	691	188	4.10	4.90	37.693	
2032	12,522	835	228	4.96	5.92	45.565	

Notes:

Summer/Winter EV demand shown is coincident of total load peak hour.