21 West Church Street
Jacksonville, Florida 32202-3139

July 25th, 2023

ELECTRIC
WATER
SEWER

Commission Clerk
Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

Commission Clerk:

On behalf of JEA, please accept the 2023 Ten-Year Site Plan Data Request #4.
If you have any questions, please contact me by email at landsg@jea.com.

Sincerely,

Stephany Landaeta Gutierrez
Associate Engineer
JEA

Staff's Data Request #4 to JEA

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

JEA 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	4,220	110		2.67	0.24	17
2023	5,477	124		3.73	0.34	24
2024	6,939	139		4.97	0.45	32
2025	8,589	155		6.37	0.57	41
2026	10,419	172		7.93	0.71	51
2027	12,441	190		9.65	0.87	62
2028	14,689	209		11.57	1.04	75
2029	17,187	229		18.33	1.23	88
2030	19,951	251		21.48	1.45	104
2031	22,993	274		24.96	1.68	120
Notes						
(Include Notes Here)						

JEA 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	5,739	145		2.05	0.53	23,826
2024	7,651	170		2.96	0.77	34,460
2025	9,782	197		3.98	1.04	46,335
2026	12,150	226		5.12	1.34	59,564
2027	14,772	258		6.38	1.66	74,234
2028	17,653	292		7.76	2.03	90,390
2029	20,803	328		13.54	2.42	108,085
2030	24,222	367		15.95	2.86	127,330
2031	27,920	408		18.56	3.32	148,186
2032	31,905	452		21.38	3.83	170,696
Notes						
(Include Notes Here)						

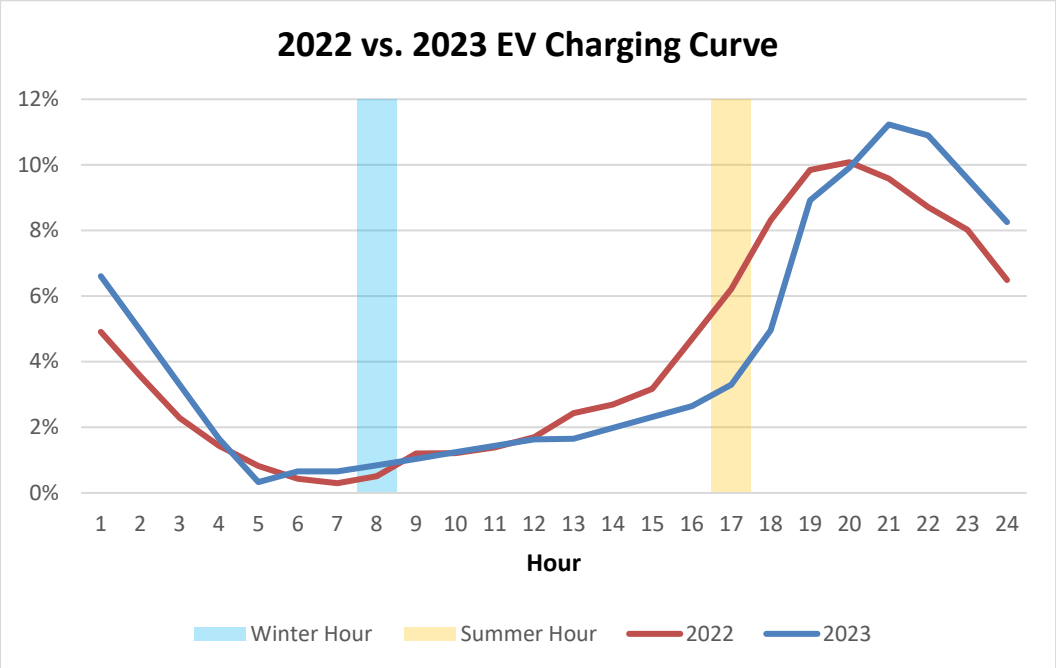
Staff's Data Request #4 to JEA

a. Please explain why JEA's 2023 TYSP projects a significant increase in PEV public charging stations over the planning period, compared to JEA's projection in last year's TYSP.

JEA projects the cumulative number of charging stations based on the last 10 years of historical actual number of charging stations, trending with the historical and forecasted number of EVs in Duval County. The actual number of charging stations in 2022 is higher than JEA's 2022 forecasted number. In addition, JEA's 2023 forecasted number of EVs is higher than the 2022 forecasted number of EVs. Hence, together they resulted in JEA's 2023 forecast for PEV public charging stations to be higher.

b. Please explain why JEA's 2023 TYSP projects a significant increase in PEV Winter Demand over the planning period compared to JEA's projection in last year's TYSP.

JEA updated the EV charging curve with its contractor's latest charging profile for Residential customers. See graph below. JEA's Winter peak typically occurs at Hour 8. Hence, the 2023 TYSP's PEV Winter Demand using the updated curve resulted in its projection being higher than last year's TYSP.



c. Please explain why JEA's 2023 TYSP projects PEV Summer Demand to be lower over the planning period than JEA's 2022 TYSP, despite a projected increase in number of PEVs operating in JEA's service territory.

As mentioned in question b., JEA updated the EV charging curve with its contractor's latest charging profile for Residential customers. Please see graph in the question above. JEA's Summer peak typically occurs at Hour 17. Hence, the 2023 TYSP's PEV Summer Demand using the updated curve resulted in its projection being lower than last year's TYSP.

d. Please confirm that the Cumulative Annual Energy Consumption totals in JEA's 2023 TYSP are in MWh units and not GWh units as the chart depicts.

Yes, the annual energy is in MWh. Please see the correction in the table below in GWh units.

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	5,739	145		2.05	0.53	24
2024	7,651	170		2.96	0.77	34
2025	9,782	197		3.98	1.04	46
2026	12,150	226		5.12	1.34	60
2027	14,772	258		6.38	1.66	74
2028	17,653	292		7.76	2.03	90
2029	20,803	328		13.54	2.42	108
2030	24,222	367		15.95	2.86	127
2031	27,920	408		18.56	3.32	148
2032	31,905	452		21.38	3.83	171
Notes						
(Include Notes Here)						

2. JEA's 2023 TYSP, Schedule 2.2, column (13) Total Sales to Ultimate Consumers, indicates that JEA's 2022 retail sales reached a peak for the past 10-year period. Please identify the major contributor(s) to this incremental annual sales increase.

JEA sees a ~1% growth across all the customer classes. Residential has the highest growth rate with the main driver being the housing growth in JEA's service territory. JEA is observing that sales are gradually returning to pre-COVID levels, and recent economic projections for Duval County from Moody's Analytics are also returning to pre-COVID levels. In addition, JEA has new industrial customers moving into its service territory. Hence, there is an increase in the Total Sales to Ultimate Customers.