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FPSC - COMMISSION CLERK

21 West Church Street
Jacksonville, Florida 32202-3139

July 17, 2019

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

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Commission Clerk:

Pursuant to Commission's request, below is JEA's response to DN 20190000-OT - Ten-Year Site Plans Supplemental Data Request #2.

1. **Please refer to Schedules 2.2 "History and Forecast of Energy Consumption and Number of Customers by Customer Class" presented in JEA's 2019 Ten Year Site Plan (TYSP), page 24; 2018 TYSP, page 23; 2017 TYSP, page 21; and 2016 TYSP, page 20. With respect to the history, or actual, data in column (13) "Total Sales to Ultimate Customers," please explain why the numbers reported in 2019 TYSP are different from what the Company reported in its previous TYSPs as indicated in Table 1 below; and provide the correct history sales data for the period 2009 through 2018.**

   Schedule 2 Revisions (See Schedules below):
   The 2019 TYSP data for Industrial Sales and Utility Use and Losses have been corrected to reflect 2018 and previous year's data. In the April 1, 2019 filing the Industrial Sales included energy from unbilled revenue that should have been listed in Utility Use and Losses. This correction was made in both history and forecast. The historical Industrial Number of Customers, however, were found to be shifted one year in the 2018 TYSP and previous TYSP filings and was corrected in the 2019 filing.

   Schedule 3 Revisions (See Schedules below):
   The Total Demand for Summer and Winter were corrected for 2019 - 2028 per the original 2019 TYSP; formula error.

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2. **With respect to the forecasting methodology, procedure, and accuracy associated with JEA's forecast of "Total Sales to Ultimate Customers," please specify all the differences/ modifications/ improvements, if any, between JEA's 2018 TYSP and 2019 TYSP.**

   There has been no methodology change in JEA's Total Sales to Ultimate Customers from 2018 to 2019.

Flood Mitigation

3. **Please explain the Utility's planning process for flood mitigation for current and proposed power plant sites and transmission/distribution substations.**

For the existing JEA power plants, flood mitigation planning and response is included in the Electric Production Storm Response Procedure of each facility. The specific actions required are dependent on the location of the plant, equipment at risk and the probability of flooding during different storm intensities.

In general flood mitigation for power plants consist of:

1. Installing flood curtains at doors and access points
2. Sandbagging
3. Removing and relocating equipment out of potential flood areas
4. Installation and operations of temporary portable submersible pumps

Flood mitigation for substation consists of:

1. Sandbagging
2. Installation and operations of temporary portable submersible pumps

All new installation designed to the "100-year flood plan" by FEMA Design Guide.

If you have any questions, please contact me at (904) 665-8765 (landsg@jea.com) or Mary Moran at (904) 665-6216 (GuytML@jea.com).

Sincerely,

Stephany Landaeta Gutierrez
Associate Engineer
JEA, Generation Planning

Schedule 2.1: History and Forecast of Energy Consumption and Number of Customers By Class

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Rural and Residential			Commercial			Industrial		
	GWH Sales	Average Number of Customers	Average kWh/ Customer	GWH Sales	Average Number of Customers	Average kWh/ Customer	GWH Sales	Average Number of Customers	Average kWh/ Customer
2009	5,319	368,111	14,448	4,024	45,748	87,957	**2,643**	**226**	11,694,690
2010	5,747	369,051	15,572	4,071	46,192	88,137	**2,720**	**223**	12,192,753
2011	5,237	369,761	14,163	3,927	46,605	84,255	**2,682**	**215**	12,469,585
2012	4,880	372,430	13,102	3,852	47,127	81,735	**2,598**	**218**	11,908,327
2013	4,852	377,326	12,860	3,777	47,691	79,204	**2,589**	**219**	11,812,928
2014	5,162	383,998	13,443	3,882	49,364	78,642	**2,564**	**215**	11,951,824
2015	5,197	391,219	13,285	4,001	50,821	78,733	**2,579**	**207**	12,438,487
2016	5,351	398,387	13,431	4,064	51,441	78,994	**2,457**	**202**	12,159,793
2017	5,199	404,806	12,842	4,011	51,970	77,176	**2,532**	**202**	12,510,027
2018	5,460	412,070	13,251	4,042	52,525	76,954	**2,524**	**196**	12,853,285
2019	5,273	418,407	12,602	4,117	53,462	77,002	**2,636**	197	13,381,002
2020	5,305	424,939	12,484	4,143	54,101	76,585	**2,644**	197	13,419,308
2021	5,331	431,420	12,356	4,178	54,735	76,327	**2,647**	197	13,435,434
2022	5,363	437,973	12,245	4,210	55,360	76,051	**2,651**	197	13,458,984
2023	5,400	444,544	12,147	4,240	55,976	75,754	**2,653**	197	13,467,742
2024	5,434	450,901	12,050	4,267	56,587	75,411	**2,653**	197	13,465,143
2025	5,472	457,010	11,973	4,294	57,194	75,069	**2,654**	197	13,473,457
2026	5,518	462,846	11,922	4,320	57,796	74,739	**2,636**	197	13,382,349
2027	5,571	468,446	11,892	4,345	58,394	74,414	**2,669**	197	13,547,028
2028	5,631	473,963	11,881	4,371	58,988	74,105	**2,674**	197	13,573,227

Schedule 2.2: History and Forecast of Energy Consumption and Number of Customers By Class

Year	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
	Street & Highway Lighting	Other Sales to Ultimate Customers	Total Sales to Ultimate Customers	Sales For Resale	Utility Use & Losses	Net Energy For Load	Other Customers	Total Number of Customers
	GWH	GWH	GWH	GWH	GWH	GWH	(Avg. Number)	
2009	120	0	12,105	591	**458**	13,155	2	414,086
2010	122	0	12,660	617	**569**	13,846	2	415,468
2011	123	0	11,968	589	**424**	12,980	2	416,583
2012	123	0	11,452	585	**374**	12,411	2	419,777
2013	122	0	11,340	395	**550**	12,286	2	425,238
2014	105	0	11,713	472	**473**	12,658	2	433,578
2015	87	0	11,864	392	**612**	12,868	2	442,249
2016	77	0	11,949	490	**498**	12,937	2	450,032
2017	63	0	11,805	288	**578**	12,672	2	456,981
2018	59	0	12,085	82	**646**	12,813	1	464,793
2019	53	0	12,078	42	**575**	12,696	1	472,067
2020	52	0	12,144	42	**578**	12,765	1	479,238
2021	51	0	12,206	43	**583**	12,832	1	486,353
2022	52	0	12,276	43	**587**	12,907	1	493,531
2023	53	0	12,346	43	**593**	12,982	1	500,719
2024	53	0	12,407	43	**598**	13,048	1	507,686
2025	54	0	12,474	44	**603**	13,120	1	514,402
2026	55	0	12,529	44	**626**	13,199	1	520,840
2027	56	0	12,641	44	**597**	13,282	1	527,039
2028	56	0	12,732	44	**589**	13,366	1	533,149

Schedule 3.1: History and Forecast of Summer Peak Demand

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		(12)	
Calendar Year	Total Demand	Interruptible Load	PEV	Load Management		QF Load Served by QF Generation	Cumulative Conservation		Net Firm Peak Demand	Time Of Peak			
				Residential	Comm/Ind.		Residential	Comm/Ind.		Month	Day	H.E.	Temp
2009	2,754	0	0	0	0	0	0	0	2,754	6	22	1600	98
2010	2,817	0	0	0	0	0	0	0	2,817	6	18	1700	102
2011	2,756	0	0	0	0	0	0	0	2,756	8	11	1700	98
2012	2,616	0	0	0	0	0	0	0	2,616	7	25	1700	95
2013	2,596	0	0	0	0	0	0	0	2,596	8	14	1600	93
2014	2,646	0	0	0	0	0	0	0	2,646	8	22	1600	99
2015	2,683	0	0	0	0	0	0	0	2,683	6	17	1600	97
2016	2,763	0	0	0	0	0	0	0	2,763	7	7	1700	98
2017	2,682	0	0	0	0	0	0	0	2,682	8	16	1700	96
2018	2,557	0	0	0	0	0	0	0	2,557	8	8	1500	90
2019	**2,664**	105	1	0	0	0	2	2	2,556	---	---	---	----
2020	**2,678**	105	2	0	0	0	5	3	2,567	---	---	---	----
2021	**2,692**	105	2	0	0	0	7	5	2,577	---	---	---	----
2022	**2,707**	105	2	0	0	0	10	6	2,588	---	---	---	----
2023	**2,722**	105	3	0	0	0	12	8	2,600	---	---	---	----
2024	**2,735**	105	4	0	0	0	14	10	2,610	---	---	---	----
2025	**2,747**	105	4	0	0	0	17	11	2,619	---	---	---	----
2026	**2,758**	105	5	0	0	0	19	13	2,627	---	---	---	----
2027	**2,772**	105	6	0	0	0	22	14	2,637	---	---	---	----
2028	**2,787**	105	7	0	0	0	24	16	2,649	---	---	---	----

Schedule 3.2: History and Forecast of Winter Peak Demand

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		(12)	
Calendar Year	Total Demand	Interruptible Load	PEV	Load Management		QF Load Served by QF Generation	Cumulative Conservation		Net Firm Peak Demand	Time Of Peak			
				Residential	Comm/Ind.		Residential	Comm/Ind.		Month	Day	H.E.	Temp
2009	3,064	0	0	0	0	0	0	0	3,064	2	6	800	23
2010	3,224	0	0	0	0	0	0	0	3,224	1	11	800	20
2011	3,062	0	0	0	0	0	0	0	3,062	1	14	800	23
2012	2,665	0	0	0	0	0	0	0	2,665	1	4	800	22
2013	2,559	0	0	0	0	0	0	0	2,559	2	18	800	24
2014	2,823	0	0	0	0	0	0	0	2,823	1	7	800	22
2015	2,863	0	0	0	0	0	0	0	2,863	2	20	800	24
2016	2,674	0	0	0	0	0	0	0	2,674	1	20	800	28
2017	2,480	0	0	0	0	0	0	0	2,480	1	9	800	30
2018	3,080	0	0	0	0	0	0	0	3,080	1	8	800	26
2019	**2,819**	102	0	0	0	0	2	1	2,715	---	---	---	----
2020	**2,843**	102	0	0	0	0	4	2	2,735	---	---	---	----
2021	**2,863**	102	0	0	0	0	6	4	2,752	---	---	---	----
2022	**2,882**	102	1	0	0	0	8	5	2,768	---	---	---	----
2023	**2,904**	102	1	0	0	0	10	6	2,787	---	---	---	----
2024	**2,922**	102	1	0	0	0	11	7	2,802	---	---	---	----
2025	**2,939**	102	1	0	0	0	13	8	2,816	---	---	---	----
2026	**2,957**	102	1	0	0	0	15	10	2,832	---	---	---	----
2027	**2,977**	102	2	0	0	0	17	11	2,849	---	---	---	----
2028	**3,000**	102	2	0	0	0	19	12	2,869	---	---	---	----