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May 4, 2021

-VIA ELECTRONIC FILING-

Mr. Adam Teitzman
Division of Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

RE: Docket No. 20210067-EQ
FPL's Response to Staff's First Data Request

Dear Mr. Teitzman:

Attached is Florida Power & Light Company's response to Staff's First Data Request (Nos. 1-4) in Docket No. 20210067-EQ.

Please contact me should you or your staff have any questions regarding this filing.

Sincerely,

/s/ Joel T. Baker

Joel T. Baker

Fla. Bar No. 0108202

JTB
Enclosure

cc: Donald Phillips, Division of Engineering

QUESTION:

Please refer to Sheet No. 10.311 in the instant docket and to Sheet No. 9.81.11 in Gulf Power Company's (Gulf) petition in Docket No. 20210066-EQ. Please explain the differences in capacity payments between the Utility's filing and Gulf's filing, given that the avoided units are identical.

RESPONSE:

Although the baseline nominal cost inputs for the avoided unit of both FPL and Gulf Power are identical (*e.g.*, the estimated capital cost in 2031 dollars), the resulting capacity values differ by about 2% for the two utilities due to their distinct weighted average cost of capital (WACC). The capacity values are calculations that result in equivalent net present values (NPV) on January 1, 2022. Each utility's WACC is used in discounting the costs for each capacity payment scenario, which results in slightly different capacity values.

QUESTION:

Please refer to Sheet No. 10.311.1 in the instant docket, and to Sheet No. 9.81.13 in Gulf's petition in Docket No. 20210066-EQ. Please explain the differences in economic assumptions given that when the avoided unit is put in service (2031) the companies will be a combined business entity.

RESPONSE:

As explained in FPL's response to Staff's First Data Request No. 1, the FPL and Gulf Power WACCs are different, which shifts factors that result from the time-value analysis. At this time, FPL and Gulf Power do not operate as a single combined business entity, and the determination of whether FPL and Gulf Power may unify their rates has not been made by the Commission. As such, the companies maintain differing WACCs, which, combined with economic assumptions that are based on present-value quantities, result in economic factors that yield slightly different results.

A summary of the time-value based economic assumptions across companies is provided below:

Parameter	FPL Value	Gulf Value	Explanation of Difference
R	7.52%	6.95%	Approved company WACC
K	1.4189	1.4840	Present value of revenue requirements are discounted more heavily at FPL's higher WACC, resulting in a lower K-factor
F	\$416.32/kW	\$416.84/kW	2031 present value of capacity payments are discounted more heavily at FPL's higher WACC, resulting in a lower F-factor
VAC_m	\$5.8956/ kW-mo	\$5.7859/ kW-mo	Value of unit deferral by one year is slightly higher for FPL because of its higher discount factor
O_n	\$14.64/ kW-yr	\$14.76/ kW-yr	The nominal future-year avoided unit O&M assumptions are the same for both companies, but because the annual O&M is not evenly distributed (<i>i.e.</i> , there are variously high- and low-cost years driven by unit outages), a 30-year levelized value is used. The FPL levelized value is slightly lower due to its higher discount rate.
G	\$110.79/kW	\$114.84/kW	2031 present value of annual O&M expenses are discounted more heavily at FPL's higher WACC, resulting in a lower G-factor

QUESTION:

Please identify all terms, conditions, or other language that are non-identical between this filing and Gulf's tariff filing in Docket No. 20210066-EQ, excluding references to company name, logo, tariff page number, or similar.

RESPONSE:

Other than references to company name, logo, tariff page number, or similar; there are four distinct differences between the two SOCs:

- 1) Slight differences to the capacity values and economic factors, as described in FPL's responses to Staff's First Data Request Nos. 1-2.
- 2) The referenced time zone is "Eastern" in FPL's Tariff Sheet Nos. 10.305 and 10.313 versus "Central" in the equivalent Gulf Power Tariff Sheet Nos. 9.81.5 and 9.81.14.
- 3) The "Value of Capacity Location" map on FPL's Tariff Sheet No. 10.312 shows the value at locations corresponding to FPL's generators in peninsular Florida versus the map showing the value at the location of Gulf Power's generators in Florida's panhandle on Gulf Power's Tariff Sheet No. 9.81.12.
- 4) A reference to sections 2.7 and 2.71 of FPL's tariff (FPL Tariff Sheet No. 6.020) was struck from section 14.1 of the Gulf Power version of the Standard Offer Contract (SOC) on Gulf Tariff Sheet No. 9.100.12. These sections do not exist elsewhere in Gulf Power's tariff sheets.

QUESTION:

Please complete the following table describing payments to a renewable provider based on the proposed tariffs included in the Utility's revised standard offer contract. Please assume a renewable generator with a 50 MW output providing firm capacity with an in-service date of January 1, 2022, operating at the minimum capacity factor required for full capacity payments and a contract duration of 20 years. Please state the capacity factor assumed for the calculations. Please calculate the total Net Present Value (NPV) of all payments in 2022 dollars, and please also explain the method and rate used to calculate the NPV. Please provide the completed table for each of the following scenarios:

- a. As-available energy (energy only payments)
- b. Normal capacity payments
- c. Levelized payments
- d. Early payments
- e. Early levelized payments

Year	Energy (MWh)	Capacity Rate (\$/kw-mo)	Total Capacity Payments (\$)	Energy Rate (\$/MWh)	Total Energy Payments (\$)	Total Payments (\$)
2022						
2023						
2024						
2025						
2026						
2027						
2028						
2029						
2030						
2031						
2032						
2033						
2034						
2035						
2036						
2037						
2038						
2039						
2040						
2041						
Total (nominal)						
Total (NPV)						

RESPONSE:

Please see Attachment No. 1 to this response.

2031 CC Avoided Unit

Committed Capacity (MW) 50
 Capacity Factor (%) 94%
 Payment Type: **Energy Only**

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Calendar Year (Jan. 1 - Dec. 31)	Energy (MWh)	Capacity Rates (\$/kW-mo)	Total Capacity Payments (\$)	Energy Rates (\$/MWh)	Total Energy Payments (\$)	Total Payments (\$)
2022	411,720	-	-	18.62	7,666,684	7,666,684
2023	411,720	-	-	16.50	6,793,251	6,793,251
2024	412,848	-	-	17.97	7,417,742	7,417,742
2025	411,720	-	-	20.27	8,347,003	8,347,003
2026	411,720	-	-	21.01	8,649,649	8,649,649
2027	411,720	-	-	21.52	8,862,174	8,862,174
2028	412,848	-	-	22.06	9,108,888	9,108,888
2029	411,720	-	-	22.88	9,418,910	9,418,910
2030	411,720	-	-	24.06	9,907,716	9,907,716
2031	411,720	-	-	24.41	10,048,928	10,048,928
2032	412,848	-	-	26.06	10,756,794	10,756,794
2033	411,720	-	-	26.72	11,001,162	11,001,162
2034	411,720	-	-	26.83	11,047,527	11,047,527
2035	411,720	-	-	28.03	11,539,233	11,539,233
2036	412,848	-	-	30.12	12,436,981	12,436,981
2037	411,720	-	-	30.58	12,592,050	12,592,050
2038	411,720	-	-	30.90	12,722,079	12,722,079
2039	411,720	-	-	30.97	12,750,148	12,750,148
2040	412,848	-	-	31.09	12,833,690	12,833,690
2041	411,720	-	-	32.98	13,579,686	13,579,686
Total	8,240,040		-		207,480,297	207,480,297
Total NPV @7.52% Discount Rate					97,386,099	97,386,099

2031 CC Avoided Unit

Committed Capacity (MW) 50
 Capacity Factor (%) 94%
 Payment Type: **Normal**

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Calendar Year (Jan. 1 - Dec. 31)	Energy (MWh)	Capacity Rates (\$/kW-mo)	Total Capacity Payments (\$)	Energy Rates (\$/MWh)	Total Energy Payments (\$)	Total Payments (\$)
2022	411,720	-	-	18.62	7,666,684	7,666,684
2023	411,720	-	-	16.50	6,793,251	6,793,251
2024	412,848	-	-	17.97	7,417,742	7,417,742
2025	411,720	-	-	20.27	8,347,003	8,347,003
2026	411,720	-	-	21.01	8,649,649	8,649,649
2027	411,720	-	-	21.52	8,862,174	8,862,174
2028	412,848	-	-	22.06	9,108,888	9,108,888
2029	411,720	-	-	22.88	9,418,910	9,418,910
2030	411,720	-	-	24.06	9,907,716	9,907,716
2031	411,720	5.90	2,063,448	23.33	9,606,505	11,669,953
2032	412,848	6.02	3,580,743	23.48	9,694,873	13,275,615
2033	411,720	6.15	3,656,070	24.71	10,171,928	13,827,998
2034	411,720	6.28	3,732,997	25.93	10,675,461	14,408,458
2035	411,720	6.41	3,811,557	26.85	11,053,425	14,864,983
2036	412,848	6.54	3,891,786	28.07	11,588,683	15,480,469
2037	411,720	6.68	3,973,720	28.99	11,935,048	15,908,768
2038	411,720	6.82	4,057,395	29.60	12,187,572	16,244,966
2039	411,720	6.96	4,142,848	29.91	12,314,551	16,457,399
2040	412,848	7.11	4,230,118	30.52	12,601,532	16,831,650
2041	411,720	7.26	4,319,244	30.83	12,694,151	17,013,395
Total	8,240,040		41,459,925		200,695,747	242,155,672
Total NPV @7.52% Discount Rate					94,994,502	108,908,636

Note:

Avoided Unit-based capacity and energy rates begin on June 1st (the COD day of the avoided unit) of each year and continue for 12 months. In the table above total capacity and energy payments in each calendar year are determined with the prior year's rate for January through May and the current year's rate for June through December. Small differences in the Net Present Value of payments exist between the Normal, Early, Levelized, and Early Levelized payment scenarios because capacity rates are calculated for equivalence to the Normal rate using a mid-year discounting convention per 25-17 F.A.C., whereas for this data request payments are discounted to the 1st day of the PPA (January 1, 2022) in the example.

2031 CC Avoided Unit

Committed Capacity (MW) 50
 Capacity Factor (%) 94%
 Payment Type: **Levelized**

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Calendar Year (Jan. 1 - Dec. 31)	Energy (MWh)	Capacity Rates (\$/kW-mo)	Total Capacity Payments (\$)	Energy Rates (\$/MWh)	Total Energy Payments (\$)	Total Payments (\$)
2022	411,720	-	-	18.62	7,666,684	7,666,684
2023	411,720	-	-	16.50	6,793,251	6,793,251
2024	412,848	-	-	17.97	7,417,742	7,417,742
2025	411,720	-	-	20.27	8,347,003	8,347,003
2026	411,720	-	-	21.01	8,649,649	8,649,649
2027	411,720	-	-	21.52	8,862,174	8,862,174
2028	412,848	-	-	22.06	9,108,888	9,108,888
2029	411,720	-	-	22.88	9,418,910	9,418,910
2030	411,720	-	-	24.06	9,907,716	9,907,716
2031	411,720	6.41	2,242,276	23.33	9,606,505	11,848,781
2032	412,848	6.41	3,843,902	23.48	9,694,873	13,538,775
2033	411,720	6.41	3,843,902	24.71	10,171,928	14,015,830
2034	411,720	6.41	3,843,902	25.93	10,675,461	14,519,363
2035	411,720	6.41	3,843,902	26.85	11,053,425	14,897,328
2036	412,848	6.41	3,843,902	28.07	11,588,683	15,432,585
2037	411,720	6.41	3,843,902	28.99	11,935,048	15,778,950
2038	411,720	6.41	3,843,902	29.60	12,187,572	16,031,474
2039	411,720	6.41	3,843,902	29.91	12,314,551	16,158,453
2040	412,848	6.41	3,843,902	30.52	12,601,532	16,445,434
2041	411,720	6.41	3,843,902	30.83	12,694,151	16,538,053
Total	8,240,040		40,681,297		200,695,747	241,377,044
Total NPV @7.52% Discount Rate					94,994,502	108,838,534

Note:

Avoided Unit-based capacity and energy rates begin on June 1st (the COD day of the avoided unit) of each year and continue for 12 months. In the table above total capacity and energy payments in each calendar year are determined with the prior year's rate for January through May and the current year's rate for June through December. Small differences in the Net Present Value of payments exist between the Normal, Early, Levelized, and Early Levelized payment scenarios because capacity rates are calculated for equivalence to the Normal rate using a mid-year discounting convention per 25-17 F.A.C., whereas for this data request payments are discounted to the 1st day of the PPA (January 1, 2022) in the example.

2031 CC Avoided Unit

Committed Capacity (MW) 50
 Capacity Factor (%) 94%
 Payment Type: **Early**

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Calendar Year (Jan. 1 - Dec. 31)	Energy (MWh)	Capacity Rates (\$/kW-mo)	Total Capacity Payments (\$)	Energy Rates (\$/MWh)	Total Energy Payments (\$)	Total Payments (\$)
2022	411,720	-	-	18.62	7,666,684	7,666,684
2023	411,720	-	-	16.50	6,793,251	6,793,251
2024	412,848	-	-	17.97	7,417,742	7,417,742
2025	411,720	-	-	20.27	8,347,003	8,347,003
2026	411,720	-	-	21.01	8,649,649	8,649,649
2027	411,720	3.46	1,209,957	21.52	8,862,174	10,072,131
2028	412,848	3.53	2,099,663	22.06	9,108,888	11,208,551
2029	411,720	3.60	2,143,828	22.88	9,418,910	11,562,738
2030	411,720	3.68	2,188,922	24.06	9,907,716	12,096,639
2031	411,720	3.76	2,234,965	23.33	9,606,505	11,841,470
2032	412,848	3.84	2,281,976	23.48	9,694,873	11,976,849
2033	411,720	3.92	2,329,977	24.71	10,171,928	12,501,905
2034	411,720	4.00	2,378,986	25.93	10,675,461	13,054,447
2035	411,720	4.08	2,429,027	26.85	11,053,425	13,482,452
2036	412,848	4.17	2,480,120	28.07	11,588,683	14,068,803
2037	411,720	4.26	2,532,288	28.99	11,935,048	14,467,336
2038	411,720	4.35	2,585,553	29.60	12,187,572	14,773,125
2039	411,720	4.44	2,639,939	29.91	12,314,551	14,954,490
2040	412,848	4.53	2,695,469	30.52	12,601,532	15,297,001
2041	411,720	4.63	2,752,166	30.83	12,694,151	15,446,317
Total	8,240,040		34,982,837		200,695,747	235,678,584
Total NPV @7.52% Discount Rate					94,994,502	108,692,548

Note:

Avoided Unit-based capacity and energy rates begin on June 1st (the COD day of the avoided unit) of each year and continue for 12 months. In the table above total capacity and energy payments in each calendar year are determined with the prior year's rate for January through May and the current year's rate for June through December. Small differences in the Net Present Value of payments exist between the Normal, Early, Levelized, and Early Levelized payment scenarios because capacity rates are calculated for equivalence to the Normal rate using a mid-year discounting convention per 25-17 F.A.C., whereas for this data request payments are discounted to the 1st day of the PPA (January 1, 2022) in the example.

2031 CC Avoided Unit

Committed Capacity (MW) 50
 Capacity Factor (%) 94%
 Payment Type: **Early Levelized**

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2022	411,720	-	-	18.62	7,666,684	7,666,684
2023	411,720	-	-	16.50	6,793,251	6,793,251
2024	412,848	-	-	17.97	7,417,742	7,417,742
2025	411,720	-	-	20.27	8,347,003	8,347,003
2026	411,720	-	-	21.01	8,649,649	8,649,649
2027	411,720	3.88	1,356,815	21.52	8,862,174	10,218,989
2028	412,848	3.88	2,325,968	22.06	9,108,888	11,434,857
2029	411,720	3.88	2,325,968	22.88	9,418,910	11,744,878
2030	411,720	3.88	2,325,968	24.06	9,907,716	12,233,685
2031	411,720	3.88	2,325,968	23.33	9,606,505	11,932,473
2032	412,848	3.88	2,325,968	23.48	9,694,873	12,020,841
2033	411,720	3.88	2,325,968	24.71	10,171,928	12,497,896
2034	411,720	3.88	2,325,968	25.93	10,675,461	13,001,429
2035	411,720	3.88	2,325,968	26.85	11,053,425	13,379,394
2036	412,848	3.88	2,325,968	28.07	11,588,683	13,914,651
2037	411,720	3.88	2,325,968	28.99	11,935,048	14,261,016
2038	411,720	3.88	2,325,968	29.60	12,187,572	14,513,540
2039	411,720	3.88	2,325,968	29.91	12,314,551	14,640,519
2040	412,848	3.88	2,325,968	30.52	12,601,532	14,927,501
2041	411,720	3.88	2,325,968	30.83	12,694,151	15,020,119
Total	8,240,040		33,920,372		200,695,747	234,616,119
Total NPV @7.52% Discount Rate					94,994,502	108,631,028

Note:

Avoided Unit-based capacity and energy rates begin on June 1st (the COD day of the avoided unit) of each year and continue for 12 months. In the table above total capacity and energy payments in each calendar year are determined with the prior year's rate for January through May and the current year's rate for June through December. Small differences in the Net Present Value of payments exist between the Normal, Early, Levelized, and Early Levelized payment scenarios because capacity rates are calculated for equivalence to the Normal rate using a mid-year discounting convention per 25-17 F.A.C., whereas for this data request payments are discounted to the 1st day of the PPA (January 1, 2022) in the example.