



Joel T. Baker
Principal Attorney
Florida Power & Light Company
700 Universe Boulevard
Juno Beach, FL 33408-0420
(561) 691-7255
(561) 691-7135 (Facsimile)
Joel.Baker@fpl.com

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-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. 20210066-EQ
Gulf Power Company's Response to Staff's First Data Request

Attached is Gulf Power Company's response to Staff's First Data Request (Nos. 1-4) in Docket No. 20210066-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. 9.81.11 in the instant docket and to Sheet No. 10.311 in Florida Power & Light Company's (FPL) petition in Docket No. 20210067-EQ. Please explain the differences in capacity payments between Gulf's filing and FPL'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. 9.81.13 in the instant docket, and to Sheet No. 10.311.1 in FPL's petition in Docket No. 20210067-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 Gulf Power'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 FPL's tariff filing in Docket No. 20210067-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 SOC's:

- 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. As part of your answer, 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**

Gulf Power Company
Docket No. 20210066-EQ
Staff's First Data Request
Request No. 4
Attachment No. 1
Page 1 of 5

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 @6.95% Discount Rate					102,380,777	102,380,777

2031 CC Avoided Unit

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

Gulf Power Company
Docket No. 20210066-EQ
Staff's First Data Request
Request No. 4
Attachment No. 1
Page 2 of 5

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	5.79	2,025,048	23.33	9,606,505	11,631,553
2032	412,848	5.91	3,514,165	23.48	9,694,873	13,209,037
2033	411,720	6.03	3,588,192	24.71	10,171,928	13,760,120
2034	411,720	6.16	3,663,793	25.93	10,675,461	14,339,254
2035	411,720	6.29	3,741,002	26.85	11,053,425	14,794,428
2036	412,848	6.42	3,819,854	28.07	11,588,683	15,408,537
2037	411,720	6.56	3,900,383	28.99	11,935,048	15,835,431
2038	411,720	6.70	3,982,627	29.60	12,187,572	16,170,199
2039	411,720	6.84	4,066,621	29.91	12,314,551	16,381,172
2040	412,848	6.98	4,152,404	30.52	12,601,532	16,753,936
2041	411,720	7.13	4,240,013	30.83	12,694,151	16,934,164
Total	8,240,040		40,694,102		200,695,747	241,389,849
Total NPV @6.95% Discount Rate					99,802,342	114,580,815

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**

Gulf Power Company
Docket No. 20210066-EQ
Staff's First Data Request
Request No. 4
Attachment No. 1
Page 3 of 5

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	6.29	2,202,809	23.33	9,606,505	11,809,314
2032	412,848	6.29	3,776,244	23.48	9,694,873	13,471,117
2033	411,720	6.29	3,776,244	24.71	10,171,928	13,948,172
2034	411,720	6.29	3,776,244	25.93	10,675,461	14,451,705
2035	411,720	6.29	3,776,244	26.85	11,053,425	14,829,670
2036	412,848	6.29	3,776,244	28.07	11,588,683	15,364,927
2037	411,720	6.29	3,776,244	28.99	11,935,048	15,711,292
2038	411,720	6.29	3,776,244	29.60	12,187,572	15,963,816
2039	411,720	6.29	3,776,244	29.91	12,314,551	16,090,795
2040	412,848	6.29	3,776,244	30.52	12,601,532	16,377,776
2041	411,720	6.29	3,776,244	30.83	12,694,151	16,470,395
Total	8,240,040		39,965,251		200,695,747	240,660,998
Total NPV @6.95% Discount Rate					99,802,342	114,504,740

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**

Gulf Power Company
Docket No. 20210066-EQ
Staff's First Data Request
Request No. 4
Attachment No. 1
Page 4 of 5

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	3.44	1,202,680	21.52	8,862,174	10,064,854
2028	412,848	3.51	2,087,069	22.06	9,108,888	11,195,958
2029	411,720	3.58	2,131,029	22.88	9,418,910	11,549,939
2030	411,720	3.66	2,175,915	24.06	9,907,716	12,083,631
2031	411,720	3.74	2,221,746	23.33	9,606,505	11,828,251
2032	412,848	3.81	2,268,542	23.48	9,694,873	11,963,415
2033	411,720	3.89	2,316,325	24.71	10,171,928	12,488,253
2034	411,720	3.98	2,365,113	25.93	10,675,461	13,040,574
2035	411,720	4.06	2,414,929	26.85	11,053,425	13,468,355
2036	412,848	4.15	2,465,795	28.07	11,588,683	14,054,478
2037	411,720	4.23	2,517,732	28.99	11,935,048	14,452,780
2038	411,720	4.32	2,570,763	29.60	12,187,572	14,758,334
2039	411,720	4.41	2,624,910	29.91	12,314,551	14,939,461
2040	412,848	4.51	2,680,199	30.52	12,601,532	15,281,731
2041	411,720	4.60	2,736,652	30.83	12,694,151	15,430,803
Total	8,240,040		34,779,399		200,695,747	235,475,146
Total NPV @6.95% Discount Rate					99,802,342	114,350,165

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**

Gulf Power Company
Docket No. 20210066-EQ
Staff's First Data Request
Request No. 4
Attachment No. 1
Page 5 of 5

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	3.86	1,351,233	21.52	8,862,174	10,213,407
2028	412,848	3.86	2,316,400	22.06	9,108,888	11,425,289
2029	411,720	3.86	2,316,400	22.88	9,418,910	11,735,310
2030	411,720	3.86	2,316,400	24.06	9,907,716	12,224,116
2031	411,720	3.86	2,316,400	23.33	9,606,505	11,922,905
2032	412,848	3.86	2,316,400	23.48	9,694,873	12,011,273
2033	411,720	3.86	2,316,400	24.71	10,171,928	12,488,328
2034	411,720	3.86	2,316,400	25.93	10,675,461	12,991,861
2035	411,720	3.86	2,316,400	26.85	11,053,425	13,369,826
2036	412,848	3.86	2,316,400	28.07	11,588,683	13,905,083
2037	411,720	3.86	2,316,400	28.99	11,935,048	14,251,448
2038	411,720	3.86	2,316,400	29.60	12,187,572	14,503,972
2039	411,720	3.86	2,316,400	29.91	12,314,551	14,630,951
2040	412,848	3.86	2,316,400	30.52	12,601,532	14,917,932
2041	411,720	3.86	2,316,400	30.83	12,694,151	15,010,551
Total	8,240,040		33,780,837		200,695,747	234,476,584
Total NPV @6.95% Discount Rate					99,802,342	114,282,610

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.