



Dianne M. Triplett
DEPUTY GENERAL COUNSEL

May 2, 2023

VIA ELECTRONIC FILING

Adam J. Teitzman, Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: *Petition for approval of amended standard offer contract (Schedule COG-2),
by Duke Energy Florida, LLC; Docket No. 20230044-EQ*

Dear Mr. Teitzman:

Please find enclosed for electronic filing Duke Energy Florida, LLC's Response to Staff's First Data Request.

Thank you for your assistance in this matter and if you have any questions, please feel free to contact me at (727) 820-4692.

Sincerely,

/s/ Dianne M. Triplett

Dianne M. Triplett

DMT/mw
Enclosure

cc: Timothy Sparks, Office of the General Counsel, FPSC, tsparks@psc.state.fl.us
Orlando Wooten, Division of Engineering, FPSC, owooten@psc.state.fl.us

**DUKE ENERGY FLORIDA, LLC’S (DEF), RESPONSE TO
STAFF’S FIRST DATA REQUEST REGARDING DEF’S PETITION FOR APPROVAL OF
AMENDED STANDARD OFFER CONTRACT (SCHEDULE COG-2)**

Docket No. 20230044-EQ

1. Please refer to Sheet No. 9.447 of the standard offer contract. Provide the rationale for the addition in Section II, titled “Project Participants.”

RESPONSE:

The addition of “Decommissioning the Facility” was made to protect DEF customers by ensuring that the decommissioning part of the project’s life cycle has been contemplated by the QF.

2. 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 for each of the five scenarios listed below. For the calculations, assume a renewable generator with a 50 MW output providing firm capacity with an in-service date of January 1, 2024, operating at the minimum capacity factor required for full capacity payments and a contract duration of 20 years. As part of your response, state the capacity factor assumed for the calculations. Please calculate the total Net Present Value (NPV) of all payments in 2024 dollars, and also provide an explanation of the method and rate used to calculate the NPV.

- As-available energy (energy only payments)
- Normal capacity payments
- Levelized payments
- Early payments
- Early levelized payments

Year	Energy (MWh)	Capacity Rate (\$/kw-mo)	Total Capacity Payments (\$)	Energy Rate (\$/MWh)	Total Energy Payments (\$)	Total Payments (\$)
2024						
2025						
2026						
2027						
2028						
2029						
2030						
2031						
2032						

2033						
2034						
2035						
2036						
2007						
2038						
2039						
2040						
2041						
2042						
2043						
Total (Nominal)						
Total (NPV)						

RESPONSE:

When forecasting QF as available rates, DEF uses its system marginal costs adjusted for a reasonable volume of potential solar QF projects in DEF’s generator interconnection queues and consistent with rule 25-17.0825(2)(a). It is important to note that current estimates are only valid and effective as of December 31, 2022 due to the volume of potential QF activity. It is also important to note that with large amounts of QF generators contributing to DEF’s as-available block size, it is anticipated DEF will have increasing amounts of time when required DEF system resources along with potential QF generation may exceed DEF load levels and that excess energy is not fully captured in the estimates herein. Finally, please see the attached spreadsheet for the table values. The NPV values were calculated using monthly values and the discount rate used 6.85% and an assumed capacity factor of 95%.

As Avail Only

	Energy (MWH)	Capacity Rates (\$/kw-month)	Total Capacity Payments (\$000)	Energy Rates (\$/MWh)	Total Energy Payments (\$000)	Total Payments to Renewable Provider (\$000)
2024	417,503	\$ -	\$ -	\$ 47.36	\$ 19,772	\$ 19,772
2025	416,362	\$ -	\$ -	\$ 41.28	\$ 17,188	\$ 17,188
2026	416,362	\$ -	\$ -	\$ 40.10	\$ 16,698	\$ 16,698
2027	416,362	\$ -	\$ -	\$ 38.77	\$ 16,142	\$ 16,142
2028	417,503	\$ -	\$ -	\$ 40.51	\$ 16,912	\$ 16,912
2029	416,362	\$ -	\$ -	\$ 39.63	\$ 16,501	\$ 16,501
2030	416,362	\$ -	\$ -	\$ 38.12	\$ 15,872	\$ 15,872
2031	416,362	\$ -	\$ -	\$ 36.75	\$ 15,302	\$ 15,302
2032	417,503	\$ -	\$ -	\$ 35.75	\$ 14,926	\$ 14,926
2033	416,362	\$ -	\$ -	\$ 37.45	\$ 15,594	\$ 15,594
2034	416,362	\$ -	\$ -	\$ 39.58	\$ 16,479	\$ 16,479
2035	416,362	\$ -	\$ -	\$ 42.31	\$ 17,615	\$ 17,615
2036	417,503	\$ -	\$ -	\$ 45.56	\$ 19,021	\$ 19,021
2037	416,362	\$ -	\$ -	\$ 47.66	\$ 19,845	\$ 19,845
2038	416,362	\$ -	\$ -	\$ 50.22	\$ 20,910	\$ 20,910
2039	416,362	\$ -	\$ -	\$ 53.19	\$ 22,147	\$ 22,147
2040	417,503	\$ -	\$ -	\$ 53.92	\$ 22,513	\$ 22,513
2041	416,362	\$ -	\$ -	\$ 54.27	\$ 22,595	\$ 22,595
2042	416,362	\$ -	\$ -	\$ 57.85	\$ 24,085	\$ 24,085
2043	416,362	\$ -	\$ -	\$ 58.99	\$ 24,563	\$ 24,563
Total	8,332,945		-		374,681	374,681
NPV 2024\$			\$ -		\$ 199,751	\$ 199,751

Normal

	Energy (MWH)	Capacity Rates (\$/kw-month)	Total Capacity Payments (\$000)	Energy Rates (\$/MWh)	Total Energy Payments (\$000)	Total Payments to Renewable Provider (\$000)
2024	417,503	\$ -	\$ -	\$ 47.36	\$ 19,772	\$ 19,772
2025	416,362	\$ -	\$ -	\$ 41.28	\$ 17,188	\$ 17,188
2026	416,362	\$ -	\$ -	\$ 40.10	\$ 16,698	\$ 16,698
2027	416,362	\$ -	\$ -	\$ 38.77	\$ 16,142	\$ 16,142
2028	417,503	\$ -	\$ -	\$ 40.51	\$ 16,912	\$ 16,912
2029	416,362	\$ -	\$ -	\$ 39.63	\$ 16,501	\$ 16,501
2030	416,362	\$ -	\$ -	\$ 38.12	\$ 15,872	\$ 15,872
2031	416,362	\$ -	\$ -	\$ 36.75	\$ 15,302	\$ 15,302
2032	417,503	\$ -	\$ -	\$ 35.75	\$ 14,926	\$ 14,926
2033	416,362	\$ -	\$ -	\$ 37.45	\$ 15,594	\$ 15,594
2034	416,362	\$ 5.85	\$ 2,046	\$ 39.58	\$ 16,479	\$ 18,525
2035	416,362	\$ 5.95	\$ 3,571	\$ 42.31	\$ 17,615	\$ 21,185
2036	417,503	\$ 6.06	\$ 3,636	\$ 45.56	\$ 19,021	\$ 22,657
2037	416,362	\$ 6.17	\$ 3,702	\$ 47.66	\$ 19,845	\$ 23,546
2038	416,362	\$ 6.28	\$ 3,769	\$ 50.22	\$ 20,910	\$ 24,679
2039	416,362	\$ 6.40	\$ 3,837	\$ 53.19	\$ 22,147	\$ 25,984
2040	417,503	\$ 6.51	\$ 3,907	\$ 53.92	\$ 22,513	\$ 26,420
2041	416,362	\$ 6.63	\$ 3,978	\$ 54.27	\$ 22,595	\$ 26,572
2042	416,362	\$ 6.75	\$ 4,050	\$ 57.85	\$ 24,085	\$ 28,135
2043	416,362	\$ 6.87	\$ 4,124	\$ 58.99	\$ 24,563	\$ 28,686
Total	8,332,945		36,618		374,681	411,299
NPV 2024\$			\$ 13,501		\$ 199,751	\$ 213,252

		Early				Total
	Energy (MWH)	Capacity Rates (\$/kw-month)	Total Capacity Payments (\$000)	Energy Rates (\$/MWh)	Total Energy Payments (\$000)	Payments to Renewable Provider (\$000)
2024	417,503	\$ -	\$ -	\$ 47.36	\$ 19,772	\$ 19,772
2025	416,362	\$ -	\$ -	\$ 41.28	\$ 17,188	\$ 17,188
2026	416,362	\$ -	\$ -	\$ 40.10	\$ 16,698	\$ 16,698
2027	416,362	\$ -	\$ -	\$ 38.77	\$ 16,142	\$ 16,142
2028	417,503	\$ -	\$ -	\$ 40.51	\$ 16,912	\$ 16,912
2029	416,362	\$ -	\$ -	\$ 39.63	\$ 16,501	\$ 16,501
2030	416,362	\$ -	\$ -	\$ 38.12	\$ 15,872	\$ 15,872
2031	416,362	\$ -	\$ -	\$ 36.75	\$ 15,302	\$ 15,302
2032	417,503	\$ 4.23	\$ 2,535	\$ 35.75	\$ 14,926	\$ 17,461
2033	416,362	\$ 4.30	\$ 2,581	\$ 37.45	\$ 15,594	\$ 18,175
2034	416,362	\$ 4.38	\$ 2,628	\$ 39.58	\$ 16,479	\$ 19,107
2035	416,362	\$ 4.46	\$ 2,676	\$ 42.31	\$ 17,615	\$ 20,290
2036	417,503	\$ 4.54	\$ 2,724	\$ 45.56	\$ 19,021	\$ 21,745
2037	416,362	\$ 4.62	\$ 2,774	\$ 47.66	\$ 19,845	\$ 22,618
2038	416,362	\$ 4.71	\$ 2,824	\$ 50.22	\$ 20,910	\$ 23,734
2039	416,362	\$ 4.79	\$ 2,875	\$ 53.19	\$ 22,147	\$ 25,023
2040	417,503	\$ 4.88	\$ 2,928	\$ 53.92	\$ 22,513	\$ 25,441
2041	416,362	\$ 4.97	\$ 2,981	\$ 54.27	\$ 22,595	\$ 25,575
2042	416,362	\$ 5.06	\$ 3,035	\$ 57.85	\$ 24,085	\$ 27,120
2043	416,362	\$ 5.15	\$ 3,090	\$ 58.99	\$ 24,563	\$ 27,653
Total	8,332,945		33,650		374,681	408,331
NPV 2024\$			\$ 13,501		\$ 199,751	\$ 213,252

Levelized

	Energy (MWH)	Capacity Rates (\$/kw-month)	Total Capacity Payments (\$000)	Energy Rates (\$/MWh)	Total Energy Payments (\$000)	Total Payments to Renewable Provider (\$000)
2024	417,503	\$ -	\$ -	\$ 47.36	\$ 19,772	\$ 19,772
2025	416,362	\$ -	\$ -	\$ 41.28	\$ 17,188	\$ 17,188
2026	416,362	\$ -	\$ -	\$ 40.10	\$ 16,698	\$ 16,698
2027	416,362	\$ -	\$ -	\$ 38.77	\$ 16,142	\$ 16,142
2028	417,503	\$ -	\$ -	\$ 40.51	\$ 16,912	\$ 16,912
2029	416,362	\$ -	\$ -	\$ 39.63	\$ 16,501	\$ 16,501
2030	416,362	\$ -	\$ -	\$ 38.12	\$ 15,872	\$ 15,872
2031	416,362	\$ -	\$ -	\$ 36.75	\$ 15,302	\$ 15,302
2032	417,503	\$ -	\$ -	\$ 35.75	\$ 14,926	\$ 14,926
2033	416,362	\$ -	\$ -	\$ 37.45	\$ 15,594	\$ 15,594
2034	416,362	\$ 6.28	\$ 2,199	\$ 39.58	\$ 16,479	\$ 18,677
2035	416,362	\$ 6.29	\$ 3,773	\$ 42.31	\$ 17,615	\$ 21,387
2036	417,503	\$ 6.29	\$ 3,777	\$ 45.56	\$ 19,021	\$ 22,798
2037	416,362	\$ 6.30	\$ 3,781	\$ 47.66	\$ 19,845	\$ 23,626
2038	416,362	\$ 6.31	\$ 3,785	\$ 50.22	\$ 20,910	\$ 24,696
2039	416,362	\$ 6.32	\$ 3,790	\$ 53.19	\$ 22,147	\$ 25,937
2040	417,503	\$ 6.32	\$ 3,794	\$ 53.92	\$ 22,513	\$ 26,307
2041	416,362	\$ 6.33	\$ 3,799	\$ 54.27	\$ 22,595	\$ 26,393
2042	416,362	\$ 6.34	\$ 3,803	\$ 57.85	\$ 24,085	\$ 27,888
2043	416,362	\$ 6.35	\$ 3,808	\$ 58.99	\$ 24,563	\$ 28,371
Total	8,332,945		36,309		374,681	410,990
NPV 2024\$			\$ 13,501		\$ 199,751	\$ 213,252

Early Levelized

	Energy (MWH)	Capacity Rates (\$/kw-month)	Total Capacity Payments (\$000)	Energy Rates (\$/MWh)	Total Energy Payments (\$000)	Total Payments to Renewable Provider (\$000)
2024	417,503	\$ -	\$ -	\$ 47.36	\$ 19,772	\$ 19,772
2025	416,362	\$ -	\$ -	\$ 41.28	\$ 17,188	\$ 17,188
2026	416,362	\$ -	\$ -	\$ 40.10	\$ 16,698	\$ 16,698
2027	416,362	\$ -	\$ -	\$ 38.77	\$ 16,142	\$ 16,142
2028	417,503	\$ -	\$ -	\$ 40.51	\$ 16,912	\$ 16,912
2029	416,362	\$ -	\$ -	\$ 39.63	\$ 16,501	\$ 16,501
2030	416,362	\$ -	\$ -	\$ 38.12	\$ 15,872	\$ 15,872
2031	416,362	\$ -	\$ -	\$ 36.75	\$ 15,302	\$ 15,302
2032	417,503	\$ 4.58	\$ 2,751	\$ 35.75	\$ 14,926	\$ 17,677
2033	416,362	\$ 4.59	\$ 2,753	\$ 37.45	\$ 15,594	\$ 18,347
2034	416,362	\$ 4.59	\$ 2,756	\$ 39.58	\$ 16,479	\$ 19,235
2035	416,362	\$ 4.60	\$ 2,759	\$ 42.31	\$ 17,615	\$ 20,374
2036	417,503	\$ 4.60	\$ 2,762	\$ 45.56	\$ 19,021	\$ 21,783
2037	416,362	\$ 4.61	\$ 2,765	\$ 47.66	\$ 19,845	\$ 22,610
2038	416,362	\$ 4.61	\$ 2,768	\$ 50.22	\$ 20,910	\$ 23,679
2039	416,362	\$ 4.62	\$ 2,772	\$ 53.19	\$ 22,147	\$ 24,919
2040	417,503	\$ 4.63	\$ 2,775	\$ 53.92	\$ 22,513	\$ 25,288
2041	416,362	\$ 4.63	\$ 2,779	\$ 54.27	\$ 22,595	\$ 25,373
2042	416,362	\$ 4.64	\$ 2,782	\$ 57.85	\$ 24,085	\$ 26,867
2043	416,362	\$ 4.64	\$ 2,786	\$ 58.99	\$ 24,563	\$ 27,348
Total	8,332,945		33,208		374,681	407,889
NPV 2024\$			\$ 13,501		\$ 199,751	\$ 213,252