



Dianne M. Triplett
DEPUTY GENERAL COUNSEL

April 26, 2021

VIA ELECTRONIC FILING

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

Re: *Duke Energy Florida, LLC's Petition for Approval of Amended Standard Offer Contract (Schedule COG-2); Docket No. 20210065-EQ*

Dear Mr. Teitzman:

Please find enclosed for electronic filing Duke Energy Florida, LLC's Response to Staff's First Data Request (Nos. 1-3).

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

Sincerely,

/s/ Dianne M. Triplett

Dianne M. Triplett

DMT/cmkn
Enclosure

cc: Damian Kistner
Ashley Weisenfeld

**DUKE ENERGY FLORIDA, LLC'S (DEF), RESPONSE TO
STAFF'S FIRST DATA REQUEST (NOS. 1-3) REGARDING DEF'S PETITION FOR
APPROVAL OF AMENDED STANDARD OFFER CONTRACT (SCHEDULE COG-2)**

Docket No. 20210065-EQ

1. Please refer to Sheet No. 9.407 of the standard offer contract. Provide the rationale for the deletion of the dispute definition section.

RESPONSE:

The deletion is a carryover from the changes made to Section 20.9 in 2020. Section 20.9 no longer references the capitalized term, "Dispute;" therefore, it is no longer needed in Section 1. The RF/QF can pursue any remedy to any dispute, suit, action or proceeding available to them under Section 20.9.

2. Please refer to Sheet No. 9.442 of the standard offer contract. Provide the rationale for the additional language in the first paragraph.

RESPONSE:

This additional language creates a placeholder and foundation for any potential negotiated firm QF contracts where on-peak hours may be negotiated to better serve DEF customers. It also creates recognition with the QF, consistent with Section 13, that DEF, on behalf of its customers, can recognize the value of flexible or on-peak QF generation that can perform like DEF's Avoided Unit under a negotiated QF contract. Finally, it provides the transparency that DEF's system on-peak hours or generation needs may change over time.

3. 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 also provide an explanation of the method and rate used to calculate the NPV.

Please provide the completed table for each of the following five scenarios:

- 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 (\$)
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:

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 May 1, 2021, 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 6.70% and an assumed capacity factor of 95%.

As Available Only

	Energy (MWH)	Capacity Rates (\$/kw-month)	Total Capacity Payments (\$000)	Energy Rates (\$/MWh)	Total Energy Payments (\$000)	Total Payments to Renewable Provider (\$000)
2022	416,362	\$ -	\$ -	\$ 20.72	\$ 8,627	\$ 8,627
2023	416,362	\$ -	\$ -	\$ 18.12	\$ 7,544	\$ 7,544
2024	417,503	\$ -	\$ -	\$ 17.17	\$ 7,167	\$ 7,167
2025	416,362	\$ -	\$ -	\$ 18.27	\$ 7,608	\$ 7,608
2026	416,362	\$ -	\$ -	\$ 20.79	\$ 8,657	\$ 8,657
2027	416,362	\$ -	\$ -	\$ 23.24	\$ 9,677	\$ 9,677
2028	417,503	\$ -	\$ -	\$ 27.05	\$ 11,293	\$ 11,293
2029	416,362	\$ -	\$ -	\$ 30.61	\$ 12,746	\$ 12,746
2030	416,362	\$ -	\$ -	\$ 34.05	\$ 14,176	\$ 14,176
2031	416,362	\$ -	\$ -	\$ 34.57	\$ 14,392	\$ 14,392
2032	417,503	\$ -	\$ -	\$ 35.51	\$ 14,828	\$ 14,828
2033	416,362	\$ -	\$ -	\$ 36.44	\$ 15,171	\$ 15,171
2034	416,362	\$ -	\$ -	\$ 38.90	\$ 16,198	\$ 16,198
2035	416,362	\$ -	\$ -	\$ 41.33	\$ 17,207	\$ 17,207
2036	417,503	\$ -	\$ -	\$ 43.51	\$ 18,167	\$ 18,167
2037	416,362	\$ -	\$ -	\$ 44.41	\$ 18,489	\$ 18,489
2038	416,362	\$ -	\$ -	\$ 46.80	\$ 19,487	\$ 19,487
2039	416,362	\$ -	\$ -	\$ 51.67	\$ 21,514	\$ 21,514
2040	417,503	\$ -	\$ -	\$ 55.53	\$ 23,182	\$ 23,182
2041	416,362	\$ -	\$ -	\$ 58.81	\$ 24,485	\$ 24,485
Total	8,332,945		-		290,613	290,613
NPV 2022\$			\$ -		\$ 142,477	\$ 142,477

Normal Capacity Payments

	Energy (MWH)	Capacity Rates (\$/kw-month)	Total Capacity Payments (\$000)	Energy Rates (\$/MWh)	Total Energy Payments (\$000)	Total Payments to Renewable Provider (\$000)
2022	416,362	\$ -	\$ -	\$ 20.72	\$ 8,627	\$ 8,627
2023	416,362	\$ -	\$ -	\$ 18.12	\$ 7,544	\$ 7,544
2024	417,503	\$ -	\$ -	\$ 17.17	\$ 7,167	\$ 7,167
2025	416,362	\$ -	\$ -	\$ 18.27	\$ 7,608	\$ 7,608
2026	416,362	\$ -	\$ -	\$ 20.79	\$ 8,657	\$ 8,657
2027	416,362	\$ 5.41	\$ 1,893	\$ 23.24	\$ 9,677	\$ 11,569
2028	417,503	\$ 5.46	\$ 3,276	\$ 27.05	\$ 11,293	\$ 14,568
2029	416,362	\$ 5.51	\$ 3,307	\$ 30.61	\$ 12,746	\$ 16,053
2030	416,362	\$ 5.56	\$ 3,339	\$ 34.05	\$ 14,176	\$ 17,515
2031	416,362	\$ 5.62	\$ 3,371	\$ 34.57	\$ 14,392	\$ 17,763
2032	417,503	\$ 5.67	\$ 3,404	\$ 35.51	\$ 14,828	\$ 18,231
2033	416,362	\$ 5.73	\$ 3,436	\$ 36.44	\$ 15,171	\$ 18,607
2034	416,362	\$ 5.78	\$ 3,470	\$ 38.90	\$ 16,198	\$ 19,668
2035	416,362	\$ 5.84	\$ 3,503	\$ 41.33	\$ 17,207	\$ 20,710
2036	417,503	\$ 5.89	\$ 3,537	\$ 43.51	\$ 18,167	\$ 21,704
2037	416,362	\$ 5.95	\$ 3,571	\$ 44.41	\$ 18,489	\$ 22,060
2038	416,362	\$ 6.01	\$ 3,606	\$ 46.80	\$ 19,487	\$ 23,093
2039	416,362	\$ 6.07	\$ 3,641	\$ 51.67	\$ 21,514	\$ 25,155
2040	417,503	\$ 6.13	\$ 3,676	\$ 55.52	\$ 23,182	\$ 26,858
2041	416,362	\$ 6.19	\$ 3,712	\$ 58.81	\$ 24,485	\$ 28,197
Total	8,332,945		50,740		290,613	341,354
NPV 2022\$			\$ 22,896		\$ 142,477	\$ 165,374

Levelized Capacity Payments

	Energy (MWH)	Capacity Rates (\$/kw-month)	Total Capacity Payments (\$000)	Energy Rates (\$/MWh)	Total Energy Payments (\$000)	Total Payments to Renewable Provider (\$000)
2022	416,362	\$ -	\$ -	\$ 20.72	\$ 8,627	\$ 8,627.25
2023	416,362	\$ -	\$ -	\$ 18.12	\$ 7,544	\$ 7,544.41
2024	417,503	\$ -	\$ -	\$ 17.17	\$ 7,167	\$ 7,166.93
2025	416,362	\$ -	\$ -	\$ 18.27	\$ 7,608	\$ 7,607.79
2026	416,362	\$ -	\$ -	\$ 20.79	\$ 8,657	\$ 8,656.86
2027	416,362	\$ 5.70	\$ 1,997	\$ 23.24	\$ 9,677	\$ 11,673.27
2028	417,503	\$ 5.71	\$ 3,426	\$ 27.05	\$ 11,293	\$ 14,718.27
2029	416,362	\$ 5.71	\$ 3,429	\$ 30.61	\$ 12,746	\$ 16,174.85
2030	416,362	\$ 5.72	\$ 3,431	\$ 34.05	\$ 14,176	\$ 17,607.82
2031	416,362	\$ 5.72	\$ 3,434	\$ 34.57	\$ 14,392	\$ 17,826.17
2032	417,503	\$ 5.73	\$ 3,438	\$ 35.51	\$ 14,828	\$ 18,265.03
2033	416,362	\$ 5.73	\$ 3,441	\$ 36.44	\$ 15,171	\$ 18,611.26
2034	416,362	\$ 5.74	\$ 3,444	\$ 38.90	\$ 16,198	\$ 19,641.84
2035	416,362	\$ 5.75	\$ 3,447	\$ 41.33	\$ 17,207	\$ 20,654.03
2036	417,503	\$ 5.75	\$ 3,451	\$ 43.51	\$ 18,167	\$ 21,617.86
2037	416,362	\$ 5.76	\$ 3,454	\$ 44.41	\$ 18,489	\$ 21,942.67
2038	416,362	\$ 5.76	\$ 3,458	\$ 46.80	\$ 19,487	\$ 22,944.37
2039	416,362	\$ 5.77	\$ 3,461	\$ 51.67	\$ 21,514	\$ 24,975.27
2040	417,503	\$ 5.77	\$ 3,465	\$ 55.52	\$ 23,182	\$ 26,646.73
2041	416,362	\$ 5.78	\$ 3,469	\$ 58.81	\$ 24,485	\$ 27,953.43
Total	8,332,945		50,243		290,613	\$ 340,856.11
NPV 2022\$			\$ 22,896		\$ 142,477	\$ 165,373.73

Early Capacity Payments

	Energy (MWH)	Capacity Rates (\$/kw-month)	Total Capacity Payments (\$000)	Energy Rates (\$/MWh)	Total Energy Payments (\$000)	Total Payments to Renewable Provider (\$000)
2022	416,362	\$ -	\$ -	\$ 20.72	\$ 8,627	\$ 8,627
2023	416,362	\$ -	\$ -	\$ 18.12	\$ 7,544	\$ 7,544
2024	417,503	\$ -	\$ -	\$ 17.17	\$ 7,167	\$ 7,167
2025	416,362	\$ 4.22	\$ 2,529	\$ 18.27	\$ 7,608	\$ 10,137
2026	416,362	\$ 4.26	\$ 2,553	\$ 20.79	\$ 8,657	\$ 11,210
2027	416,362	\$ 4.30	\$ 2,578	\$ 23.24	\$ 9,677	\$ 12,254
2028	417,503	\$ 4.34	\$ 2,603	\$ 27.05	\$ 11,293	\$ 13,895
2029	416,362	\$ 4.38	\$ 2,628	\$ 30.61	\$ 12,746	\$ 15,374
2030	416,362	\$ 4.42	\$ 2,653	\$ 34.05	\$ 14,176	\$ 16,829
2031	416,362	\$ 4.46	\$ 2,679	\$ 34.57	\$ 14,392	\$ 17,070
2032	417,503	\$ 4.51	\$ 2,704	\$ 35.51	\$ 14,828	\$ 17,532
2033	416,362	\$ 4.55	\$ 2,731	\$ 36.44	\$ 15,171	\$ 17,901
2034	416,362	\$ 4.59	\$ 2,757	\$ 38.90	\$ 16,198	\$ 18,955
2035	416,362	\$ 4.64	\$ 2,784	\$ 41.33	\$ 17,207	\$ 19,991
2036	417,503	\$ 4.68	\$ 2,811	\$ 43.51	\$ 18,167	\$ 20,978
2037	416,362	\$ 4.73	\$ 2,838	\$ 44.41	\$ 18,489	\$ 21,327
2038	416,362	\$ 4.78	\$ 2,865	\$ 46.80	\$ 19,487	\$ 22,352
2039	416,362	\$ 4.82	\$ 2,893	\$ 51.67	\$ 21,514	\$ 24,407
2040	417,503	\$ 4.87	\$ 2,921	\$ 55.52	\$ 23,182	\$ 26,103
2041	416,362	\$ 4.92	\$ 2,950	\$ 58.81	\$ 24,485	\$ 27,435
Total	8,332,945		46,476		290,613	337,089
NPV 2022\$			\$ 22,896		\$ 142,477	\$ 165,373

Early Levelized Capacity Payments

	Energy (MWH)	Capacity Rates (\$/kw-month)	Total Capacity Payments (\$000)	Energy Rates (\$/MWh)	Total Energy Payments (\$000)	Total Payments to Renewable Provider (\$000)
2022	416,362	\$ -	\$ -	\$ 20.72	\$ 8,627	\$ 8,627
2023	416,362	\$ -	\$ -	\$ 18.12	\$ 7,544	\$ 7,544
2024	417,503	\$ -	\$ -	\$ 17.17	\$ 7,167	\$ 7,167
2025	416,362	\$ 4.46	\$ 2,678	\$ 18.27	\$ 7,608	\$ 10,286
2026	416,362	\$ 4.47	\$ 2,681	\$ 20.79	\$ 8,657	\$ 11,337
2027	416,362	\$ 4.47	\$ 2,683	\$ 23.24	\$ 9,677	\$ 12,359
2028	417,503	\$ 4.47	\$ 2,685	\$ 27.05	\$ 11,293	\$ 13,978
2029	416,362	\$ 4.48	\$ 2,687	\$ 30.61	\$ 12,746	\$ 15,434
2030	416,362	\$ 4.48	\$ 2,690	\$ 34.05	\$ 14,176	\$ 16,866
2031	416,362	\$ 4.49	\$ 2,692	\$ 34.57	\$ 14,392	\$ 17,084
2032	417,503	\$ 4.49	\$ 2,695	\$ 35.51	\$ 14,828	\$ 17,522
2033	416,362	\$ 4.50	\$ 2,697	\$ 36.44	\$ 15,171	\$ 17,868
2034	416,362	\$ 4.50	\$ 2,700	\$ 38.90	\$ 16,198	\$ 18,898
2035	416,362	\$ 4.50	\$ 2,702	\$ 41.33	\$ 17,207	\$ 19,909
2036	417,503	\$ 4.51	\$ 2,705	\$ 43.51	\$ 18,167	\$ 20,872
2037	416,362	\$ 4.51	\$ 2,708	\$ 44.41	\$ 18,489	\$ 21,197
2038	416,362	\$ 4.52	\$ 2,711	\$ 46.80	\$ 19,487	\$ 22,198
2039	416,362	\$ 4.52	\$ 2,714	\$ 51.67	\$ 21,514	\$ 24,228
2040	417,503	\$ 4.53	\$ 2,717	\$ 55.52	\$ 23,182	\$ 25,898
2041	416,362	\$ 4.53	\$ 2,720	\$ 58.81	\$ 24,485	\$ 27,204
Total	8,332,945		45,863		290,613	336,476
NPV 2022\$			\$ 22,896		\$ 142,477	\$ 165,373