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May 6, 2016

Ms. Carlotta Stauffer, Commission Clerk  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee FL 32399-0850

Re: Docket No. 160072-EQ – Petition for Approval of Renewable Standard Offer  
Contract and Tariff Schedule REF-1

Dear Ms. Stauffer:

Attached for electronic filing is Gulf Power Company's response to Staff's First Data Request in Docket 160072-EQ.

Sincerely,

A handwritten signature in blue ink that reads "Robert L. McGee, Jr." The signature is fluid and cursive.

Robert L. McGee, Jr  
Regulatory and Pricing Manager

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Attachments

cc: Beggs & Lane  
Jeffrey A. Stone, Esq.  
Office of General Counsel  
Bianca Lherisson

1. Please complete the following tables describing payments to a renewable provider based on the proposed tariffs included in GULF'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, 2017, 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 provide an Excel spreadsheet in support of the calculation, and provide the total Net Present Value (NPV) of all payments in 2017 dollars, with an explanation of the method and rate used to calculate the NPV.

Please provide the completed table for the following five scenarios:

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

RESPONSE:

See pages 2 through 6. For each scenario, Gulf assumed a 50 MW renewable generator operating at 90% capacity factor and meeting the minimum Equivalent Availability Factor specified in Gulf's Schedule REF-1 needed to receive full capacity payments. For each early scenario, Gulf assumed an in-service date of January 1, 2017. Gulf uses the Excel formula to determine the NPV of each payment stream. The annual discount rate used in the NPV calculation is 6.34%

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As- Available Energy	Energy	Capacity Rates	Total Capacity Payments	Energy Rates	Total Energy Payments	Total Payments
Year	(MWh)	(\$/kW-mo)	(\$)	(\$/MWh)	(\$)	(\$)
2017	394,200	0.00	0	28.61	11,278,062	11,278,062
2018	394,200	0.00	0	33.64	13,260,888	13,260,888
2019	394,200	0.00	0	36.55	14,408,010	14,408,010
2020	395,280	0.00	0	39.66	15,676,805	15,676,805
2021	394,200	0.00	0	41.77	16,465,734	16,465,734
2022	394,200	0.00	0	43.51	17,151,642	17,151,642
2023	394,200	0.00	0	46.58	18,361,836	18,361,836
2024	395,280	0.00	0	48.37	19,119,694	19,119,694
2025	394,200	0.00	0	50.41	19,871,622	19,871,622
2026	394,200	0.00	0	53.52	21,097,584	21,097,584
2027	394,200	0.00	0	56.59	22,307,778	22,307,778
2028	395,280	0.00	0	59.01	23,325,473	23,325,473
2029	394,200	0.00	0	62.32	24,566,544	24,566,544
2030	394,200	0.00	0	63.35	24,972,570	24,972,570
2031	394,200	0.00	0	65.57	25,847,694	25,847,694
2032	392,940	0.00	0	68.17	26,786,720	26,786,720
2033	394,200	0.00	0	71.77	28,291,734	28,291,734
2034	394,200	0.00	0	75.69	29,836,998	29,836,998
2035	394,200	0.00	0	78.48	30,936,816	30,936,816
2036	395,280	0.00	0	82.84	32,744,995	32,744,995
<b>Total (Nominal)</b>			0		436,309,199	436,309,199
<b>Total NPV (2017 \$)</b>			0		220,435,925	220,435,925

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Normal	Energy	Capacity Rates <sup>(1)</sup>	Total Capacity Payments	Energy Rates <sup>(2)</sup>	Total Energy Payments	Total Payments
Year	(MWh)	(\$/kW-mo)	(\$)	(\$/MWh)	(\$)	(\$)
2017	394,200	0.00	0	28.61	11,278,062	11,278,062
2018	394,200	0.00	0	33.64	13,260,888	13,260,888
2019	394,200	0.00	0	36.55	14,408,010	14,408,010
2020	395,280	0.00	0	39.66	15,676,805	15,676,805
2021	394,200	0.00	0	41.77	16,465,734	16,465,734
2022	394,200	0.00	0	43.51	17,151,642	17,151,642
2023	394,200	4.34	1,518,724	46.58	18,361,836	19,880,560
2024	395,280	4.43	2,659,936	48.37	19,119,694	21,779,630
2025	394,200	4.56	2,733,195	50.41	19,871,622	22,604,817
2026	394,200	4.68	2,808,471	53.52	21,097,584	23,906,055
2027	394,200	4.81	2,885,821	56.59	22,307,778	25,193,599
2028	395,280	4.94	2,965,302	59.01	23,325,473	26,290,775
2029	394,200	5.08	3,046,971	62.32	24,566,544	27,613,515
2030	394,200	5.22	3,130,890	63.35	24,972,570	28,103,460
2031	394,200	5.36	3,217,120	65.57	25,847,694	29,064,814
2032	392,940	5.51	3,305,725	68.17	26,786,720	30,092,445
2033	394,200	5.66	3,396,770	71.77	28,291,734	31,688,504
2034	394,200	5.82	3,490,322	75.69	29,836,998	33,327,320
2035	394,200	5.98	3,586,452	78.48	30,936,816	34,523,268
2036	395,280	6.14	3,685,229	82.84	32,744,995	36,430,224
<b>Total (Nominal)</b>			42,430,927		436,309,199	478,740,126
<b>Total NPV (2017 \$)</b>			18,342,825		220,435,925	238,778,750

(1) Capacity rate effective as of avoided unit's June 1, 2023 in-service date.

(2) Projected as-available energy rates shown prior the avoided unit's June 1, 2023 in-service date. The lower of the projected as-available energy rate or the projected avoided unit energy rate shown as of in-service date.

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Levelized	Energy	Capacity Rates <sup>(1)</sup>	Total Capacity Payments	Energy Rates <sup>(2)</sup>	Total Energy Payments	Total Payments
Year	(MWh)	(\$/kW-mo)	(\$)	(\$/MWh)	(\$)	(\$)
2017	394,200	0.00	0	28.61	11,278,062	11,278,062
2018	394,200	0.00	0	33.64	13,260,888	13,260,888
2019	394,200	0.00	0	36.55	14,408,010	14,408,010
2020	395,280	0.00	0	39.66	15,676,805	15,676,805
2021	394,200	0.00	0	41.77	16,465,734	16,465,734
2022	394,200	0.00	0	43.51	17,151,642	17,151,642
2023	394,200	4.87	1,704,587	46.58	18,361,836	20,066,423
2024	395,280	4.90	2,937,854	48.37	19,119,694	22,057,548
2025	394,200	4.93	2,958,251	50.41	19,871,622	22,829,873
2026	394,200	4.97	2,979,210	53.52	21,097,584	24,076,794
2027	394,200	5.00	3,000,746	56.59	22,307,778	25,308,524
2028	395,280	5.04	3,022,875	59.01	23,325,473	26,348,348
2029	394,200	5.08	3,045,614	62.32	24,566,544	27,612,158
2030	394,200	5.11	3,068,978	63.35	24,972,570	28,041,548
2031	394,200	5.15	3,092,987	65.57	25,847,694	28,940,681
2032	392,940	5.20	3,117,656	68.17	26,786,720	29,904,376
2033	394,200	5.24	3,143,005	71.77	28,291,734	31,434,739
2034	394,200	5.28	3,169,053	75.69	29,836,998	33,006,051
2035	394,200	5.33	3,195,817	78.48	30,936,816	34,132,633
2036	395,280	5.37	3,223,319	82.84	32,744,995	35,968,314
<b>Total (Nominal)</b>			41,659,952		436,309,199	477,969,151
<b>Total NPV (2017\$)</b>			18,342,824		220,435,925	238,778,749

(1) Capacity rate effective as of avoided unit's June 1, 2023 in-service date.

(2) Projected as-available energy rates shown prior the avoided unit's June 1, 2023 in-service date. The lower of the projected as-available energy rate or the projected avoided unit energy rate shown as of in-service date.

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Early	Energy	Capacity Rates <sup>(1)</sup>	Total Capacity Payments	Energy Rates <sup>(2)</sup>	Total Energy Payments	Total Payments
Year	(MWh)	(\$/kW-mo)	(\$)	(\$/MWh)	(\$)	(\$)
2017	394,200	2.21	1,324,934	28.61	11,278,062	12,602,996
2018	394,200	2.27	1,361,425	33.64	13,260,888	14,622,313
2019	394,200	2.33	1,398,921	36.55	14,408,010	15,806,931
2020	395,280	2.40	1,437,449	39.66	15,676,805	17,114,254
2021	394,200	2.46	1,477,039	41.77	16,465,734	17,942,773
2022	394,200	2.53	1,517,719	43.51	17,151,642	18,669,361
2023	394,200	2.60	1,559,520	46.58	18,361,836	19,921,356
2024	395,280	2.67	1,602,471	48.37	19,119,694	20,722,165
2025	394,200	2.74	1,646,606	50.41	19,871,622	21,518,228
2026	394,200	2.82	1,691,956	53.52	21,097,584	22,789,540
2027	394,200	2.90	1,738,556	56.59	22,307,778	24,046,334
2028	395,280	2.98	1,786,438	59.01	23,325,473	25,111,911
2029	394,200	3.06	1,835,640	62.32	24,566,544	26,402,184
2030	394,200	3.14	1,886,197	63.35	24,972,570	26,858,767
2031	394,200	3.23	1,938,146	65.57	25,847,694	27,785,840
2032	392,940	3.32	1,991,525	68.17	26,786,720	28,778,245
2033	394,200	3.41	2,046,375	71.77	28,291,734	30,338,109
2034	394,200	3.50	2,102,736	75.69	29,836,998	31,939,734
2035	394,200	3.60	2,160,649	78.48	30,936,816	33,097,465
2036	395,280	3.70	2,220,157	82.84	32,744,995	34,965,152
<b>Total (Nominal)</b>			34,724,458		436,309,199	471,033,657
<b>Total NPV (2017\$)</b>			18,342,829		220,435,925	238,778,754

(1) Capacity rate effective as of January 1, 2017.

(2) Projected as-available energy rates shown prior the avoided unit's June 1, 2023 in-service date. The lower of the projected as-available energy rate or the projected avoided unit energy rate shown as of in-service date.

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Early Levelized	Energy	Capacity Rates <sup>(1)</sup>	Total Capacity Payments	Energy Rates <sup>(2)</sup>	Total Energy Payments	Total Payments
Year	(MWh)	(\$/kW-mo)	(\$)	(\$/MWh)	(\$)	(\$)
2017	394,200	2.59	1,555,559	28.61	11,278,062	12,833,621
2018	394,200	2.61	1,565,644	33.64	13,260,888	14,826,532
2019	394,200	2.63	1,576,006	36.55	14,408,010	15,984,016
2020	395,280	2.64	1,586,653	39.66	15,676,805	17,263,458
2021	394,200	2.66	1,597,594	41.77	16,465,734	18,063,328
2022	394,200	2.68	1,608,836	43.51	17,151,642	18,760,478
2023	394,200	2.70	1,620,387	46.58	18,361,836	19,982,223
2024	395,280	2.72	1,632,257	48.37	19,119,694	20,751,951
2025	394,200	2.74	1,644,454	50.41	19,871,622	21,516,076
2026	394,200	2.76	1,656,986	53.52	21,097,584	22,754,570
2027	394,200	2.78	1,669,864	56.59	22,307,778	23,977,642
2028	395,280	2.81	1,683,096	59.01	23,325,473	25,008,569
2029	394,200	2.83	1,696,693	62.32	24,566,544	26,263,237
2030	394,200	2.85	1,710,665	63.35	24,972,570	26,683,235
2031	394,200	2.88	1,725,021	65.57	25,847,694	27,572,715
2032	392,940	2.90	1,739,772	68.17	26,786,720	28,526,492
2033	394,200	2.92	1,754,930	71.77	28,291,734	30,046,664
2034	394,200	2.95	1,770,506	75.69	29,836,998	31,607,504
2035	394,200	2.98	1,786,510	78.48	30,936,816	32,723,326
2036	395,280	3.00	1,802,955	82.84	32,744,995	34,547,950
<b>Total (Nominal)</b>			33,384,388		436,309,199	469,693,587
<b>Total NPV (2017\$)</b>			18,342,822		220,435,925	238,778,747

(1) Capacity rate effective as of January 1, 2017.

(2) Projected as-available energy rates shown prior the avoided unit's June 1, 2023 in-service date. The lower of the projected as-available energy rate or the projected avoided unit energy rate shown as of in-service date.