

June 18, 2010



## **VIA HAND DELIVERY**

Ms. Ann Cole, Commission Clerk Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850 TO JUN 18 AN 8: 58

Re:

Petition for approval of amended standard offer contract, by Progress Energy Florida;

Docket No. 100168-El

Dear Ms. Cole:

Please find attached for filing an original and five (5) copies of Progress Energy Florida, Inc.'s ("PEF") responses to Staff Data Request No. 2 dated June 2, 2010 in the above referenced docket.

Thank you for your assistance in this matter. Please feel free to call me at (727) 820-5184 should you have any questions.

Sincerely,

dhn T. Burnett

	JTB/lr	ns
COM	Attac	hments
APA		
<b>ECR</b>	cc:	Martha Brown (FPSC)
CCL	1 ,	
RAD	<i>24</i> +1	CD
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FPSC-CCMMISSER FACE FOR

## PROGRESS ENERGY FLORIDA, INC.'S RESPONSES TO STAFF DATA REQUEST NO. 2 DOCKET NO. 100168-EI

Q1. Please provide, on an energy and capacity basis, estimates of payments to a renewable generator from the proposed revised standard offer contract. Please provide payment estimates for the normal, levelized, early, and levelized early payment periods. Assume the renewable generator is a 50 megawatt facility providing firm capacity at the minimum capacity factor required for full capacity payments, with an in-service date of January 1, 2011 and a contract duration of 20 years. Please complete the table below for each scenario and provide an electronic copy in Excel (.xls) format.

<u>Answer</u>: Please see Attachment A in both hard copy and electronic Excel format.

# **Attachment A**

Estimated Payments to 50 MW renewable Resource Providing Firm Capacity

Scenario: Normal C:\Documents and Settings\i61326\Desktop\ FPSC Data Request #2 2010 Standard Offer.xlsx FPSC

Discount Rate 8.10%

Year		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	NPV	Nominal
Capacity	(MW)	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50		
Energy	(MWh)	411,720	412,848	411,720	411,720	411,720	412,848	411,720	411,720	411,720	412,848	411,720	411,720	411,720	412,848	411,720	411,720	411,720	412,848	411,720	411,720		8,240,040
Capacity Factor	(%)	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%		
Payment F	Rates																						
Capacity	(\$/kw-mo)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6.05	\$ 6.23	\$ 6.41	\$ 6.60	\$ 6.79	\$ 6.99		\$ 7.41	\$ 7.63	\$ 7.85					
Energy	(\$/MWh)	\$ 51.56	\$ 57.29	\$ 69.95	\$ 73.00	\$ 84.66				\$ 96.24									\$ 120.74				
Total	(\$/MWh)	\$ 51.56	\$ 57.29	\$ 69.95	\$ 73.00	\$ 84.66	\$ 88.44	\$ 94.99	\$ 109.41	\$ 105.32	\$ 101.39	\$ 98.48	\$ 102.25	\$ 106.51	\$ 116.95	\$ 121.79	\$ 125.12	\$ 133.14	\$ 132.48	\$ 136.34	\$ 140.41		
Paymer	nts																						
Capacity	(\$000)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 3,630	\$ 3,738		\$ 3,960		\$ 4,194		<b>4</b> .,	\$ 4,578		\$ 4,848		\$ 5,136		
Energy	(\$000)	\$ 21,228	\$ 23,652	\$ 28,800	\$ 30,056	\$ 34,856	\$ 36,512	\$ 39,109	\$ 41,415	\$ 39,624	\$ 38,011	\$ 36,585	\$ 38,022	\$ 39,657	\$ 43,964	\$ 45,697	\$ 46,936	\$ 50,106	\$ 49,847	\$ 51,144	\$ 52,675	\$ 377,229	· ,
Total	(\$000)	\$ 21,228	\$ 23,652	\$ 28,800	\$ 30,056	\$ 34,856	\$ 36,512	\$ 39,109	\$ 45,045	\$ 43,362	\$ 41,857	\$ 40,545	\$ 42,096	\$ 43,851	\$ 48,284	\$ 50,143	\$ 51,514	\$ 54,816	\$ 54,695	\$ 56,136	\$ 57,811	\$ 397,979	\$ 844,370

#### Estimated Payments to 50 MW Renewable Resource Providing Firm Capacity

Scenario: Early Discount Rate 8.10%

Yea	ar	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	NPV	Nominal
Capacity	(MW)	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50		
Energy	(MWh)	411,720	412,848	411,720	411,720	411,720	412,848	411,720	411,720	411,720	412,848	411,720	411,720	411,720	412,848	411,720	411,720	411,720	412,848	411,720	411,720		8,240,040
<b>Capacity Factor</b>	(%)	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%		
Payment		i																					
Capacity	(\$/kw-mo)	\$ 2.64	\$ 2.72	\$ 2.80	\$ 2.88	\$ 2.97	\$ 3.06	\$ 3.15	\$ 3.24	\$ 3.33	\$ 3.43	\$ 3.53	\$ 3.64	\$ 3.74	\$ 3.85	\$ 3.97	\$ 4.08	\$ 4.20	\$ 4.33	\$ 4.46	\$ 4.59		
Energy	(\$/MWh)	\$ 51.56	\$ 57.29	\$ 69.95	\$ 73.00	\$ 84.66	\$ 88.44		\$ 100.59	\$ 96.24						\$ 110.99							
Total	(\$/MWh)	\$ 55.41	\$ 61.24	\$ 74.03	\$ 77.20	\$ 88.99	\$ 92,89	\$ 99.58	\$ 105.31	\$ 101.09	\$ 97.05	\$ 94.00	\$ 97.65	\$ 101.77	\$ 112.09	\$ 116.78	\$ 119.95	\$ 127.82	\$ 127.03	\$ 130.72	\$ 134.63		
Paymo	ents		. <u> </u>									,											
Capacity	(\$000)	\$ 1,584	\$ 1,632		\$ 1,728	\$ 1,782	\$ 1,836			\$ 1,998				\$ 2,244		\$ 2,382		\$ 2,520		\$ 2,676	\$ 2,754	\$ 20,741	\$ 42,366
Energy	(\$000)	\$ 21,228	\$ 23,652	\$ 28,800	\$ 30,056	\$ 34,856	\$ 36,512	\$ 39,109	\$ 41,415	\$ 39,624	\$ 38,011	\$ 36,585	\$ 38,022	\$ 39,657	\$ 43,964	\$ 45,697	\$ 46,936	\$ 50,106	\$ 49,847	\$ 51,144	\$ 52,675	\$ 377,229	\$ 787,898
Total	(\$000)	\$ 22,812	\$ 25,284	\$ 30,480	\$ 31,784	\$ 36,638	\$ 38,348	\$ 40,999	\$ 43,359	\$ 41,622	\$ 40,069	\$ 38,703	\$ 40,206	\$ 41,901	\$ 46,274	\$ 48,079	\$ 49,384	\$ 52,626	\$ 52,445	\$ 53,820	\$ 55,429	\$ 397,970	\$ 830,264

### Estimated Payments to 50 MW renewable Resource Providing Firm Capacity

Scenario: Levelized Discount Rate 8.10%

	Year		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	NPV	Nominal
Capacity		(MW)	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50		
Energy		(MWh)	411,720	412,848	411,720	411,720	411,720	412,848	411,720	411,720	411,720	412,848	411,720	411,720	411,720	412,848	411,720	411,720	411,720	412,848	411,720	411,720		8,240,040
Capacity Fa	actor	(%)	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%		
Pay	ment Rate	9\$																					<u>-</u>	
Capacity	(	\$/kw-mo)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 6.98	\$ 6.98	\$ 6.99	\$ 7.00	\$ 7.01	\$ 7.02	\$ 7.02	\$ 7.03	\$ 7.04	\$ 7.05	\$ 7.06	\$ 7.07	\$ 7.08		
Energy		(\$/MWh)	\$ 51.56	\$ 57.29	\$ 69.95				\$ 94.99								\$ 110.99							
Total		(\$/MWh)	\$ 51.56	\$ 57.29	\$ 69.95	\$ 73.00	\$ 84.66	\$ 88.44	\$ 94.99	<b>\$ 1</b> 10.76	\$ 106.41	\$ 102.23	\$ 99.06	\$ 102.57	\$ 106.55	\$ 116.69	\$ 121.23	\$ 124.26	\$ 131.97	\$ 131.00	\$ 134.52	\$ 138.26		
F	Payments																							
Capacity		(\$000)	\$ -	\$	\$	\$ -	\$ -	\$ -	\$ -	\$ 4,188	\$ 4,188	. ,	\$ 4,200			. ,		, , , , , ,	,				\$ 20,747	*
Energy		(\$000)	\$ 21,228	\$ 23,652	\$ 28,800	\$ 30,056											\$ 45,697						\$ 377,229	
Total		(\$000)	\$ 21,228	\$ 23,652	\$ 28,800	\$ 30,056	\$ 34,856	\$ 36,512	\$ 39,109	\$ 45,603	\$ 43,812	\$ 42,205	\$ 40,785	\$ 42,228	\$ 43,869	\$ 48,176	\$ 49,915	\$ 51,160	\$ 54,336	\$ 54,083	\$ 55,386	\$ 56,923	\$ 397,976	\$ 842,696

### Estimated Payments to 50 MW renewable Resource Providing Firm Capacity

Scenario: Early Levelized Discount Rate 8.10%

Year		2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029_	2030	NPV	_ N	lominal
Capacity	(MW)	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50			
Energy	(MWh)	411,720	412,848	411,720	411,720	411,720	412,848	411,720	411,720	411,720	412,848	411,720	411,720	411,720	412,848	411,720	411,720	411,720	412,848	411,720	411,720		8	240,040
Capacity Factor	(%)	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%	94%			
Payment R	Rates																							
Capacity	(\$/kw-mo)	\$ 3.26	\$ 3.26	\$ 3.26	\$ 3.27	\$ 3.27	\$ 3.27	\$ 3.28		\$ 3.28		\$ 3.29	\$ 3.30			\$ 3.31	\$ 3.31	*	\$ 3.32				Ϊ	
Energy	(\$/MWh)	\$ 51.56	\$ 57.29	\$ 69.95	\$ 73.00					\$ 96.24			\$ 92.35			\$ 110.99								
Total	(\$/MWh)	\$ 56.31	\$ 62.03	\$ 74.70	\$ 77.77	\$ 89.43	\$ 93.19	\$ 99.77	\$ 105.37	\$ 101.02	\$ 96.85	\$ 93.65	\$ 97.16	\$ 101.13	\$ 111.29	\$ 115.81	\$ 118.82	\$ 126.54	\$ 125.57	\$ 129.07	\$ 132,79			
Paymen	its																							
Capacity	(\$000)	\$ 1,956	\$ 1,956	\$ 1,956		\$ 1,962	\$ 1,962	\$ <u>1,</u> 968							\$ 1,980					\$ 1,998			1 \$	39,498
Energy	(\$000)	\$ 21,228	\$ 23,652	\$ 28,800	\$ 30,056	\$ 34,856	\$ 36,512	\$ 39,109	\$ 41,415	\$ 39,624	\$ 38,011	\$ 36,585	\$ 38,022	\$ 39,657	\$ 43,964	\$ 45,697	\$ 46,936	\$ 50,106	\$ 49,847	\$ 51,144	\$ 52,675	\$ 377,22		787,898
Total	(\$000)	\$ 23,184	\$ 25,608	\$ 30,756	\$ 32,018	\$ 36,818	\$ 38,474	\$ 41,077	\$ 43,383	\$ 41,592	\$ 39,985	\$ 38,559	\$ 40,002	\$ 41,637	\$ 45,944	\$ 47,683	\$ 48,922	\$ 52,098	\$ 51,839	\$ 53,1 <u>42</u>	\$ 54,673	\$ 397,98	0 \$	827,396
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