



April 26, 2011

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VIA HAND DELIVERY

Ms. Ann Cole, Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: *Petition for approval of amended standard offer contract, by Progress Energy Florida;
Docket No. 110092-EI*

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. 1 dated April 13, 2011 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,

John T. Burnett
John T. Burnett

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**PROGRESS ENERGY FLORIDA, INC.'S RESPONSES TO STAFF DATA REQUEST NO. 1
DOCKET NO. 110092-EI**

Q1. Please complete the tables below describing payments to a renewable provider based on the parameters included in PEF's revised standard offer contract. Please assume the renewable generator is a 50 MW facility providing firm capacity at the minimum capacity factor required for full capacity payments. Additionally, please assume an in-service date of January 1, 2012 and a contract duration of 20 years. Please provide this information for the following scenarios:

- Normal payments
- Levelized Payments
- Early Payments
- Early Levelized Payments

Answer: Please see Attachment A.

Q2. Please refer to paragraph 11.1, Section No. IX, Fourth Revised Sheet Nos. 9.423 and 9.424, Table 2 which lists the initial amounts of the Eligible Collateral the RF/QF shall deliver to PEF for 2011.

- a. Please explain the reasons for the decrease in per MW amounts of Eligible Collateral for Credit Classes A- and Above, BBB-, and Below BBB-.**

Answer: The methodology used to determine the amounts listed in Table 2 are based upon the capacity payment schedule in the Standard Offer Contract. The calculations use average capacity costs (those costs which would have to be incurred to secure power in the event of a renewable resource default) and take into account the amount of unsecured credit which would be granted to a company based on their creditworthiness. The capacity payment schedule for the current Standard Offer Contract is slightly lower than the capacity payment schedule for last year's Standard Offer Contract. Please refer to Attachment B for the methodology used to determine the Eligible Collateral requirements.

- b. Please explain why there is no change in the MW amount of Eligible Collateral for Credit Class BBB+ to BBB.**

Answer: Please refer to Attachment C for the methodology used to determine the Eligible Collateral requirements for the 2010 Standard Offer Contract. This method

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shows that the Eligible Collateral required for Credit Class BBB+ to BBB should be \$111,000 to \$112,000 per MW. However, PEF felt that a requirement of \$80,000 per MW was more indicative of the market at the time.

Q3. Please refer to Section No. IX, Fourth Revised Sheet No. 9.457.

Please explain why the “estimated incremental avoided energy costs for the next four semi-annual periods” all show an increase in the Average cents/KWH, yet the “estimated unit fuel costs” all show a decrease in \$/MMBTU based on current estimates of the price of natural gas.

Answer: When comparing the 2010 SOC with the 2011 SOC filing, and as a result of the Natural Gas forecasts decreasing, the “estimated incremental avoided energy costs for the next four semi-annual periods” have actually decreased, not increased. The chart below illustrates the decrease for the overlapping periods of April 1, 2011 – September 30, 2011 and October 1, 2011 – March 31, 2012.

	2010 Filing	2011 Filing
<u>Applicable Period</u>	<u>Average ¢/KWH</u>	<u>Average ¢/KWH</u>
April 1, 2010 - September 30, 2010	5.0	
October 1, 2010 – March 31, 2011	4.2	
April 1, 2011 – September 30, 2011	5.2	5.1
October 1, 2011 – March 31, 2012	5.1	4.5
April 1, 2012 – September 30, 2012		5.7
October 1, 2012 – March 31, 2013		4.8

PEF 2011 Standard Offer

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

	Energy (MWh)	Capacity Rates (\$/kw- month)	Total Capacity Payments (\$000)	Energy Rates (\$/MWh)	Total Energy Payments (\$000)	Total Payments to Renewable Provider (\$000)
2012	412,848	\$ -	\$ -	\$ 45.30	\$ 18,703	\$ 18,703
2013	411,720	\$ -	\$ -	\$ 50.91	\$ 20,961	\$ 20,961
2014	411,720	\$ -	\$ -	\$ 52.01	\$ 21,412	\$ 21,412
2015	411,720	\$ -	\$ -	\$ 55.72	\$ 22,943	\$ 22,943
2016	412,848	\$ -	\$ -	\$ 60.26	\$ 24,880	\$ 24,880
2017	411,720	\$ -	\$ -	\$ 62.97	\$ 25,925	\$ 25,925
2018	411,720	\$ -	\$ -	\$ 64.48	\$ 26,549	\$ 26,549
2019	411,720	\$ -	\$ -	\$ 71.50	\$ 29,439	\$ 29,439
2020	412,848	\$ 5.69	\$ 1,992	\$ 69.78	\$ 28,810	\$ 30,801
2021	411,720	\$ 5.80	\$ 3,480	\$ 64.35	\$ 26,493	\$ 29,973
2022	411,720	\$ 5.92	\$ 3,552	\$ 62.04	\$ 25,545	\$ 29,097
2023	411,720	\$ 6.04	\$ 3,624	\$ 54.89	\$ 22,599	\$ 26,223
2024	412,848	\$ 6.16	\$ 3,696	\$ 60.00	\$ 24,770	\$ 28,466
2025	411,720	\$ 6.28	\$ 3,768	\$ 68.09	\$ 28,035	\$ 31,803
2026	411,720	\$ 6.40	\$ 3,840	\$ 68.49	\$ 28,198	\$ 32,038
2027	411,720	\$ 6.53	\$ 3,918	\$ 71.66	\$ 29,504	\$ 33,422
2028	412,848	\$ 6.66	\$ 3,996	\$ 74.70	\$ 30,840	\$ 34,836
2029	411,720	\$ 6.80	\$ 4,080	\$ 76.36	\$ 31,441	\$ 35,521
2030	411,720	\$ 6.93	\$ 4,158	\$ 81.26	\$ 33,456	\$ 37,614
2031	411,720	\$ 7.07	\$ 4,242	\$ 84.08	\$ 34,615	\$ 38,857

PEF 2011 Standard Offer

Committed Capacity (MW) 50
Capacity Factor (%) 94%
Payment Type Levelized

	Energy (MWh)	Capacity Rates (\$/kw- month)	Total Capacity Payments (\$000)	Energy Rates (\$/MWh)	Total Energy Payments (\$000)	Total Payments to Renewable Provider (\$000)
2012	412,848	\$ -	\$ -	\$ 45.30	\$ 18,703	\$ 18,703
2013	411,720	\$ -	\$ -	\$ 50.91	\$ 20,961	\$ 20,961
2014	411,720	\$ -	\$ -	\$ 52.01	\$ 21,412	\$ 21,412
2015	411,720	\$ -	\$ -	\$ 55.72	\$ 22,943	\$ 22,943
2016	412,848	\$ -	\$ -	\$ 60.26	\$ 24,880	\$ 24,880
2017	411,720	\$ -	\$ -	\$ 62.97	\$ 25,925	\$ 25,925
2018	411,720	\$ -	\$ -	\$ 64.48	\$ 26,549	\$ 26,549
2019	411,720	\$ -	\$ -	\$ 71.50	\$ 29,439	\$ 29,439
2020	412,848	\$ 6.23	\$ 2,177	\$ 69.78	\$ 28,810	\$ 30,987
2021	411,720	\$ 6.23	\$ 3,738	\$ 64.35	\$ 26,493	\$ 30,231
2022	411,720	\$ 6.24	\$ 3,744	\$ 62.04	\$ 25,545	\$ 29,289
2023	411,720	\$ 6.24	\$ 3,744	\$ 54.89	\$ 22,599	\$ 26,343
2024	412,848	\$ 6.25	\$ 3,750	\$ 60.00	\$ 24,770	\$ 28,520
2025	411,720	\$ 6.26	\$ 3,756	\$ 68.09	\$ 28,035	\$ 31,791
2026	411,720	\$ 6.27	\$ 3,762	\$ 68.49	\$ 28,198	\$ 31,960
2027	411,720	\$ 6.28	\$ 3,768	\$ 71.66	\$ 29,504	\$ 33,272
2028	412,848	\$ 6.29	\$ 3,774	\$ 74.70	\$ 30,840	\$ 34,614
2029	411,720	\$ 6.30	\$ 3,780	\$ 76.36	\$ 31,441	\$ 35,221
2030	411,720	\$ 6.31	\$ 3,786	\$ 81.26	\$ 33,456	\$ 37,242
2031	411,720	\$ 6.32	\$ 3,792	\$ 84.08	\$ 34,615	\$ 38,407

PEF 2011 Standard Offer

Committed Capacity (MW) 50
Capacity Factor (%) 94%
Payment Type Early

	Energy (MWh)	Capacity Rates (\$/kw- month)	Total Capacity Payments (\$000)	Energy Rates (\$/MWh)	Total Energy Payments (\$000)	Total Payments to Renewable Provider (\$000)
2012	412,848	\$ 2.26	\$ 1,356	\$ 45.30	\$ 18,703	\$ 20,059
2013	411,720	\$ 2.30	\$ 1,380	\$ 50.91	\$ 20,961	\$ 22,341
2014	411,720	\$ 2.34	\$ 1,404	\$ 52.01	\$ 21,412	\$ 22,816
2015	411,720	\$ 2.39	\$ 1,434	\$ 55.72	\$ 22,943	\$ 24,377
2016	412,848	\$ 2.44	\$ 1,464	\$ 60.26	\$ 24,880	\$ 26,344
2017	411,720	\$ 2.49	\$ 1,494	\$ 62.97	\$ 25,925	\$ 27,419
2018	411,720	\$ 2.55	\$ 1,530	\$ 64.48	\$ 26,549	\$ 28,079
2019	411,720	\$ 2.60	\$ 1,560	\$ 71.50	\$ 29,439	\$ 30,999
2020	412,848	\$ 2.65	\$ 1,590	\$ 69.78	\$ 28,810	\$ 30,400
2021	411,720	\$ 2.71	\$ 1,626	\$ 64.35	\$ 26,493	\$ 28,119
2022	411,720	\$ 2.77	\$ 1,662	\$ 62.04	\$ 25,545	\$ 27,207
2023	411,720	\$ 2.82	\$ 1,692	\$ 54.89	\$ 22,599	\$ 24,291
2024	412,848	\$ 2.88	\$ 1,728	\$ 60.00	\$ 24,770	\$ 26,498
2025	411,720	\$ 2.94	\$ 1,764	\$ 68.09	\$ 28,035	\$ 29,799
2026	411,720	\$ 3.00	\$ 1,800	\$ 68.49	\$ 28,198	\$ 29,998
2027	411,720	\$ 3.07	\$ 1,842	\$ 71.66	\$ 29,504	\$ 31,346
2028	412,848	\$ 3.13	\$ 1,878	\$ 74.70	\$ 30,840	\$ 32,718
2029	411,720	\$ 3.20	\$ 1,920	\$ 76.36	\$ 31,441	\$ 33,361
2030	411,720	\$ 3.26	\$ 1,956	\$ 81.26	\$ 33,456	\$ 35,412
2031	411,720	\$ 3.33	\$ 1,998	\$ 84.08	\$ 34,615	\$ 36,613

PEF 2011 Standard Offer

Committed Capacity (MW) 50
Capacity Factor (%) 94%
Payment Type 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)
2012	412,848	\$ 2.62	\$ 1,572	\$ 45.30	\$ 18,703	\$ 20,275
2013	411,720	\$ 2.62	\$ 1,572	\$ 50.91	\$ 20,961	\$ 22,533
2014	411,720	\$ 2.62	\$ 1,572	\$ 52.01	\$ 21,412	\$ 22,984
2015	411,720	\$ 2.62	\$ 1,572	\$ 55.72	\$ 22,943	\$ 24,515
2016	412,848	\$ 2.62	\$ 1,572	\$ 60.26	\$ 24,880	\$ 26,452
2017	411,720	\$ 2.63	\$ 1,578	\$ 62.97	\$ 25,925	\$ 27,503
2018	411,720	\$ 2.63	\$ 1,578	\$ 64.48	\$ 26,549	\$ 28,127
2019	411,720	\$ 2.63	\$ 1,578	\$ 71.50	\$ 29,439	\$ 31,017
2020	412,848	\$ 2.64	\$ 1,584	\$ 69.78	\$ 28,810	\$ 30,394
2021	411,720	\$ 2.64	\$ 1,584	\$ 64.35	\$ 26,493	\$ 28,077
2022	411,720	\$ 2.65	\$ 1,590	\$ 62.04	\$ 25,545	\$ 27,135
2023	411,720	\$ 2.65	\$ 1,590	\$ 54.89	\$ 22,599	\$ 24,189
2024	412,848	\$ 2.65	\$ 1,590	\$ 60.00	\$ 24,770	\$ 26,360
2025	411,720	\$ 2.66	\$ 1,596	\$ 68.09	\$ 28,035	\$ 29,631
2026	411,720	\$ 2.66	\$ 1,596	\$ 68.49	\$ 28,198	\$ 29,794
2027	411,720	\$ 2.67	\$ 1,602	\$ 71.66	\$ 29,504	\$ 31,106
2028	412,848	\$ 2.67	\$ 1,602	\$ 74.70	\$ 30,840	\$ 32,442
2029	411,720	\$ 2.67	\$ 1,602	\$ 76.36	\$ 31,441	\$ 33,043
2030	411,720	\$ 2.68	\$ 1,608	\$ 81.26	\$ 33,456	\$ 35,064
2031	411,720	\$ 2.68	\$ 1,608	\$ 84.08	\$ 34,615	\$ 36,223

Year	Avoided Unit Capacity Payments \$/ KW-Month*	
2011		
2012		
2013		
2014		
2015		
2016		
2017		
2018		
2019		
2020	5.69	
2021	5.80	
2022	5.92	
2023	6.04	
2024	6.16	
2025	6.28	
2026	6.40	
2027	6.53	
2028	6.66	
2029	6.80	
2030	6.93	
2031	7.07	
2032	7.21	
2033	7.36	
2034	7.50	
2035	7.65	
2036	7.81	
2037	7.96	
2038	8.12	
2039	8.29	
2040	8.45	
2041	8.62	
2042	8.79	
2043	8.97	
2044	9.15	
2045		
Average of amounts for avoided unit years	\$7.29	KW/month
(KW/month Multiplied by 1,000)	\$7,286.40	MW/month
(MW/month Multiplied by 12)	\$87,436.80	MW/year

*These amounts come from the 2011 PEF SOC

Using cost per MW/year, the amount is multiplied by 192 which is the average number of megawatts for the avoided unit over all seasons.

One year **16,744,147**

The above amount is then multiplied by 2 which is the number of years to put the avoided unit into operation.

Two year **33,488,294**

The average of the unsecured credit line amounts granted by Progress Energy for a ratings range is calculated.

	Unsecured lines	Average
"A" Range	30,000,000 25,000,000	27,500,000
"BBB+ and BBB" Range	20,000,000 15,000,000	17,500,000
"BBB-"	10,000,000	10,000,000

Next, the average of the unsecured credit line amount is subtracted from the Two Year amount and is divided by 178 to get a per megawatt security cost. This security cost provides the start point and guidance for contract negotiations under the Standard Renewable Contract.

"A" Range	33,488,294 - 27,500,000 = 5,988,294	5,988,294 / 192 = <u>\$31,189 Per MW</u>
"BBB+ and BBB"	33,488,294 - 17,500,000 = 15,988,294	15,988,294 / 192 = <u>\$83,272 Per MW</u>
"BBB-"	33,488,294 - 10,000,000 = 23,488,294	23,488,294 / 192 = <u>\$122,335 Per MW</u>
Below "BBB-"	33,488,294 / 192 = <u>\$174,418 Per MW</u>	

Note: Actual Performance Security amounts used in the current standard contract (years 1 - 5).
 "A" range - \$50,000/MW
 "BBB+/BBB" range - \$80,000/MW
 "BBB-" range - \$135,000/MW
 Below "BBB-" - \$190,000/MW

Note: Proposed Performance Security amounts for use in the 2011 standard contract (years 1 - 5).
 "A" range - \$30,000/MW
 "BBB+/BBB" range - \$80,000/MW
 "BBB-" range - \$125,000/MW
 Below "BBB-" - \$175,000/MW

Year	Avoided Unit Capacity Payments \$/ KW-Month*	
2010		
2011		
2012		
2013		
2014		
2015		
2016		
2017		
2018	6.05	
2019	6.23	
2020	6.41	
2021	6.60	
2022	6.79	
2023	6.99	
2024	7.20	
2025	7.41	
2026	7.63	
2027	7.85	
2028	8.08	
2029	8.32	
2030	8.56	
2031	8.82	
2032	9.08	
2033	9.34	
2034	9.62	
2035	9.90	
2036	10.19	
2037	10.50	
2038	10.80	
2039	11.12	
2040	11.45	
2041	11.79	
2042	12.14	
2043		
2044		
Average of amounts for avoided unit years	\$8.75	KW/month
(KW/month Multiplied by 1,000)	\$8,754.80	MW/month
(MW/month Multiplied by 12)	\$105,057.60	MW/year

*These amounts come from the 2010 PEF SOC

Using cost per MW/year, the amount is multiplied by 178 which is the number of megawatts for the avoided unit

One year **18,700,253**

The above amount is then multiplied by 2 which is the number of years to put the avoided unit into operation.

Two year **37,400,506**

The average of the unsecured credit line amounts granted by Progress Energy for a ratings range is calculated.

	Unsecured lines	Average
"A" Range	30,000,000 25,000,000	27,500,000
"BBB+ and BBB" Range	20,000,000 15,000,000	17,500,000
"BBB-"	10,000,000	10,000,000

Next, the average of the unsecured credit line amount is subtracted from the Two Year amount and is divided by 178 to get a per megawatt security cost. This security cost provides the start point and guidance for contract negotiations under the Standard Renewable Contract.

"A" Range	$\frac{37,400,506 - 27,500,000}{178} = 9,900,506$ $\frac{9,900,506}{178} = \underline{\underline{\$55,621 \text{ Per MW}}}$
"BBB+ and BBB"	$\frac{37,400,506 - 17,500,000}{178} = 19,900,506$ $\frac{19,900,506}{178} = \underline{\underline{\$111,801 \text{ Per MW}}}$
"BBB-"	$\frac{37,400,506 - 10,000,000}{178} = 27,400,506$ $\frac{27,400,506}{178} = \underline{\underline{\$153,935 \text{ Per MW}}}$
Below "BBB-"	$\frac{37,400,506}{178} = \underline{\underline{\$210,115 \text{ Per MW}}}$

Note: Actual Performance Security amounts used in the new contract standard
 "A" range - \$50,000/MW
 "BBB+/BBB" range - \$80,000/MW
 "BBB-" range - \$135,000/MW
 Below "BBB-" - \$190,000/MW