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May 25, 2012

Ms. Ann Cole
Division of the Commission Clerk and
Administrative Services
Florida Public Service Commission
Betty Easley Conference Center
2540 Shumard Oak Boulevard, Room 110
Tallahassee, FL 32399-0850

Re: Docket No. 120072-EQ – Florida Power & Light Company's Petition for Approval of a Renewable Energy Tariff and Standard Offer Contract

Dear Ms. Cole:

Please find enclosed for filing an original and five (5) copies of Florida Power & Light Company's responses to Staff's Second Data Request Nos. 1-3 in the above-mentioned docket.

Thank you for your assistance. Please contact me should you or your staff have any questions regarding this filing.

Sincerely,

William P. Cox
Senior Attorney
Florida Bar No. 0093531

WPC/bag
Enclosures

COM ____
APA ____
ECR 1
GCL 1
RAD 3
SRC ____
ADM ____
OPC ____
CLK ____

Q.

Please refer to page 1 of 2 (from FPL's response to Staff's First Data Request, Question No. 10) and page 1 of 4 (from FPL's response to Staff's First Data Request, Question No. 11) in responding to the following: Please explain why the energy rates in the payment stream assuming the 2025 avoided unit exceed those which assume the short term PPA in 2021 (this is, when assuming the 2025 avoided unit, please explain why the energy rates would not revert to the lesser of the cost of as-available energy or the energy cost associated with the unit).

A.

The energy rates should revert to the lower of the cost of as-available or the energy cost of the unit. FPL's original response to Question 11 to Commission Staff's First Data Request in this docket was in error. FPL's corrected response is attached as Attachment A.

ATTACHMENT A

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

	Energy (MWh)	Capacity Rates ($/kW-Mo)	Total Capacity Payments ($000)	Energy Rates ($/MWh)	Total Energy Payments ($000)	Total Payments to Renewable Provider ($000)
2021	411,720	-	-	73.02	30,062	30,062
2022	411,720	-	-	74.46	30,656	30,656
2023	411,720	-	-	75.04	30,895	30,895
2024	412,848	-	-	81.20	33,524	33,524
2025	411,720	8.82	5.29	76.71	31,582	31,587
2026	411,720	9.09	5.45	78.36	32,264	32,269
2027	411,720	9.36	5.62	79.76	32,839	32,845
2028	412,848	9.64	5.79	81.18	33,517	33,523
2029	411,720	9.93	5.96	82.63	34,021	34,027
2030	411,720	10.23	6.14	84.11	34,629	34,635
2031	411,720	10.54	6.32	85.61	35,246	35,253
2032	412,848	10.85	6.51	87.14	35,974	35,980
2033	411,720	11.18	6.71	87.80	36,150	36,156
2034	411,720	11.51	6.91	88.02	36,240	36,247
2035	411,720	11.86	7.11	87.74	36,126	36,133
2036	412,848	12.21	7.33	88.23	36,428	36,435
2037	411,720	12.58	7.55	87.21	35,905	35,912
2038	411,720	12.96	7.77	86.36	35,555	35,563
2039	411,720	13.35	8.01	82.94	34,149	34,157
2040	412,848	13.75	8.25	84.90	35,051	35,059
Total	8,240,040		106.72		680,812	680,918
2012 NPV			$25.42		$196,530.67	$196,556.09

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

	Energy (MWh)	Capacity Rates ($/kW-Mo)	Total Capacity Payments ($000)	Energy Rates ($/MWh)	Total Energy Payments ($000)	Total Payments to Renewable Provider ($000)
2021	411,720	7.07	4.241	73.02	30,062	30,066
2022	411,720	7.28	4.368	74.46	30,656	30,661
2023	411,720	7.50	4.499	75.04	30,895	30,899
2024	412,848	7.72	4.634	81.20	33,524	33,529
2025	411,720	7.96	4.773	76.71	31,582	31,587
2026	411,720	8.19	4.917	78.36	32,264	32,269
2027	411,720	8.44	5.064	79.76	32,839	32,844
2028	412,848	8.69	5.216	81.18	33,517	33,522
2029	411,720	8.95	5.373	82.63	34,021	34,027
2030	411,720	9.22	5.534	84.11	34,629	34,634
2031	411,720	9.50	5.700	85.61	35,246	35,252
2032	412,848	9.78	5.871	87.14	35,974	35,980
2033	411,720	10.08	6.047	87.80	36,150	36,156
2034	411,720	10.38	6.228	88.02	36,240	36,246
2035	411,720	10.69	6.415	87.74	36,126	36,133
2036	412,848	11.01	6.608	88.23	36,428	36,434
2037	411,720	11.34	6.806	87.21	35,905	35,911
2038	411,720	11.68	7.010	86.36	35,555	35,562
2039	411,720	12.03	7.220	82.94	34,149	34,156
2040	412,848	12.39	7.437	84.90	35,051	35,058
Total	8,240,040		113.961		680,812	680,926
2012 NPV			$31.40		$196,530.67	$196,562.07

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

	Energy (MWh)	Capacity Rates ($/kW-Mo)	Total Capacity Payments ($000)	Energy Rates ($/MWh)	Total Energy Payments ($000)	Total Payments to Renewable Provider ($000)
2021	411,720	-	-	73.02	30,062	30,062
2022	411,720	-	-	74.46	30,656	30,656
2023	411,720	-	-	75.04	30,895	30,895
2024	412,848	-	-	81.20	33,524	33,524
2025	411,720	10.641	6.384	76.71	31,582	31,588
2026	411,720	10.641	6.384	78.36	32,264	32,270
2027	411,720	10.641	6.384	79.76	32,839	32,846
2028	412,848	10.641	6.384	81.18	33,517	33,523
2029	411,720	10.641	6.384	82.63	34,021	34,028
2030	411,720	10.641	6.384	84.11	34,629	34,635
2031	411,720	10.641	6.384	85.61	35,246	35,253
2032	412,848	10.641	6.384	87.14	35,974	35,980
2033	411,720	10.641	6.384	87.80	36,150	36,156
2034	411,720	10.641	6.384	88.02	36,240	36,246
2035	411,720	10.641	6.384	87.74	36,126	36,132
2036	412,848	10.641	6.384	88.23	36,428	36,434
2037	411,720	10.641	6.384	87.21	35,905	35,911
2038	411,720	10.641	6.384	86.36	35,555	35,561
2039	411,720	10.641	6.384	82.94	34,149	34,155
2040	412,848	10.641	6.384	84.90	35,051	35,057
Total	8,240,040		102.151		680,812	680,914
2012 NPV			$25.42		$196,530.67	$196,556.09

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

	Energy (MWh)	Capacity Rates ($/kW-Mo)	Total Capacity Payments ($000)	Energy Rates ($/MWh)	Total Energy Payments ($000)	Total Payments to Renewable Provider ($000)
2021	411,720	9.520	5.712	73.02	30,062	30,068
2022	411,720	9.520	5.712	74.46	30,656	30,662
2023	411,720	9.520	5.712	75.04	30,895	30,901
2024	412,848	9.520	5.712	81.20	33,524	33,530
2025	411,720	9.520	5.712	76.71	31,582	31,588
2026	411,720	9.520	5.712	78.36	32,264	32,269
2027	411,720	9.520	5.712	79.76	32,839	32,845
2028	412,848	9.520	5.712	81.18	33,517	33,522
2029	411,720	9.520	5.712	82.63	34,021	34,027
2030	411,720	9.520	5.712	84.11	34,629	34,634
2031	411,720	9.520	5.712	85.61	35,246	35,252
2032	412,848	9.520	5.712	87.14	35,974	35,979
2033	411,720	9.520	5.712	87.80	36,150	36,155
2034	411,720	9.520	5.712	88.02	36,240	36,246
2035	411,720	9.520	5.712	87.74	36,126	36,132
2036	412,848	9.520	5.712	88.23	36,428	36,433
2037	411,720	9.520	5.712	87.21	35,905	35,910
2038	411,720	9.520	5.712	86.36	35,555	35,561
2039	411,720	9.520	5.712	82.94	34,149	34,154
2040	412,848	9.520	5.712	84.90	35,051	35,056
Total	8,240,040		114.237		680,812	680,926
2012 NPV			$33.69		$196,530.67	$196,564.36

Q.
Please explain why the firm capacity rate of a renewable facility located near FPL's Cape Canaveral site may be adjusted by the factor contained in Appendix III of the contract. Please provide an example in this explanation.

A.
FPL's Tariff Sheet No. 10.201 under Adjustment to Capacity Payment, notes:

> "The firm capacity rates will be adjusted to reflect the impact that the location of the QF will have on FPL system reliability due to constraints imposed on the operation of FPL transmission tielines.
>
> Appendix III shows, for illustrative purposes, the factors that would be used to adjust the firm capacity rate for different geographical areas. The actual adjustment would be determined on a case-by-case basis. The amount of such adjustment, as well as a binding contract rate for firm capacity, shall be provided to the QF within sixty days of FPL execution of the signed Standard Offer Contract."

The adjustment is needed to accommodate the impact of system losses on meeting FPL's capacity requirements as a function of location of the generating unit. Losses are impacted by the location and economics of generating units, location of loads, and transmission system capacity. The adjustment used is based upon a system simulation at FPL's system peak load with all generation units economically dispatched.

The impact of this adjustment depends upon both the location of the unit proposed by the QS, as well as the location of the avoided unit. As requested, we discuss below the example where the location of the renewable unit is near FPL's Canaveral plant - value of capacity from Appendix III listed at 0.897. First, consider two alternative locations for the avoided unit - one at Port Everglades (location value 1.000), and the other near Plant Manatee (location value 0.857). For purposes of this example, assume that both avoided units have the same avoided capacity cost of $8.00/kW-month. Then, the contract capacity payment against the Port Everglades avoided unit would be $8.00/kW-month multiplied by (0.897 unit loss factor)/(1.000 avoided unit loss factor) or $7.176/kW-month. With the second alternative location, the contract capacity payment against the Manatee avoided unit would be $8.00/kW-Month multiplied by (0.897 unit loss factor)/(0.857 avoided unit loss factor), or $8.373/kW-month.

As illustrated in this example, the value of capacity by location factor assures that the customers pay no more than the avoided cost of the capacity they receive, and that conversely, given advantageous siting of a renewable facility, the renewable generator receives no less than the value the renewable generator provides.

Q.
Is the value of capacity location dependent on the avoided unit or power purchase agreement?

A.
The value of capacity location depends upon the location of the renewable generating unit in the purchased power agreement (PPA). Rule 25-17.0836(2), F.A.C., which requires Commission approval to modify a PPA when changing the location of the generating unit, implicitly recognizes that location of a generating unit impacts the value of the PPA to the customers. As demonstrated by the example in response to Question No. 2 above, the interplay between the location of the renewable generating unit and the location of the avoided unit impacts the capacity payments to the renewable generator itself.