Florida Power & Light Company, 215 S. Monroe St., Suite 810, Tallahassee, FL 32301

May 6, 2010

VIA HAND DELIVERY

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

RE: Docket No. 100169-EI - 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 the original and five (5) copies of Florida Power & Light Company's responses to Staff Data Request No. 1 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

for Bryan S. Anderson
Authorized House Counsel No. 219511

Enclosures

cc: Martha Brown, Senior Attorney
Shevie Brown, Office of Regulatory Analysis

COM ____
APA ____
ECR ____
GCL 2
RAD 3
SSC ____
ADM ____
OPC ____
CLK ____

Q.

Please provide the minimum (on and off peak availability factor) performance standards of Florida Power and Light's 2025 avoided unit.

A.

FPL provides the following information with respect to the minimum (on and off peak availability factor) performance standards of FPL's 2025 avoided unit utilized in preparation of its 2010 Standard Offer Contract:

- Please be aware that the 2025 avoided unit is a combined cycle generating unit supporting around-the-clock base load system electrical requirements. As such its expected availability factor is properly stated on an annual basis of 94% that is the same during on-peak and off-peak hours.

- The minimum performance (on and off peak availability factor) standard of FPL's 2025 avoided unit utilized in preparation of its 2010 Standard Offer Contract is thus 94% for both on-peak and off-peak hours consistent with the 2025 avoided unit's expected availability as a base-loaded generating unit.

- FPL's supporting analysis for the availability factor, provided below, is based on information received from its Power Generation Group.

  The avoided unit in FPL's 2010 Standard Offer Contract is assumed to be an "H-class" three-on-one combined cycle unit coming into service in 2025. At present, FPL has no H-class units in service. However, West County Energy Center (WCEC) Unit 1's G-class unit entered service during the summer of 2009 and FPL has assessed the expected performance of this WCEC Unit 1 based on the manufacturer's recommendations and estimates of planned maintenance, as well as FPL experience with similar technologies.

  The result of FPL's assessment is a projected availability of 94% for WCEC Unit 1 over the first ten years of its operation. Because FPL expects the availability of "H" class units to be similar to the "G" class units, FPL is utilizing the assessment conducted for WCEC Unit in establishing the availability factor for the 2025 avoided unit. Accordingly, FPL has set a minimum performance standard of 94% in all hours for the ten year minimum term of the SOC consistent with the same expected performance as for the WCEC Unit 1 G-class unit.

  For purposes of this analysis, the following assumptions are made for the 2025 avoided unit:

- The avoided unit would have entered service on August 27th ;
- Unit dispatch for the avoided unit will be similar to the current expectations for the WCEC Unit;
- The G-class unit manufacturer's current recommendations for planned maintenance schedules remain valid for the 2025 avoided unit.

Based upon these assumptions, Table 1 shows the planned maintenance schedule that is expected to be applicable to the avoided unit:

TABLE 1

YEAR	Breaker OPEN	CLOSED	DAYS	DAYS	DESCRIPTION	Equiv. Days
2	5/22	6/2		12	12.0 ST WARRANTY OUTAGE / BLOCK OUTAGE	12
2	5/22	6/2		12	12.0 A WARRANTY OUTAGE & CI	0
2	5/22	6/2		12	12.0 B WARRANTY OUTAGE & CI	0
2	6/1	6/12		12	12.0 WARRANTEE / COMBUSTOR INSP-33% CURT	4
3	10/1	10/20		20	20.0 HOT GAS INSP. -33% CURT	6.6
3	10/21	11/9		20	20.0 HOT GAS INSP. -33% CURT	6.6
3	11/10	11/29		20	20.0 HOT GAS INSP. -33% CURT	6.6
5	3/30	4/8		10	10.0 COMBUSTOR INSP. - 33% CURT	3.3
5	3/30	4/8		10	10.0 COMBUSTOR INSP. - 33% CURT	3.3
5	4/9	4/18		10	10.0 COMBUSTOR INSP. - 33% CURT	3.3
6	10/4	11/2		30	30.0 MAJOR - 33% CURT	6.6
6	10/23	11/21		30	30.0 MAJOR - 33% CURT	6.6
6	11/6	12/5		30	30.0 MAJOR - 33% CURT	9.9
6	10/23	11/1		10	10.0 GEN INSP. - 100% CURT	10
8	1/1	6/1		7	7.0 FLOAT	0
8	1/1	6/1		7	7.0 FLOAT	0
8	1/1	6/1		7	7.0 FLOAT	0
9	10/7	10/26		20	20.0 HOT PATH INSP - 33% CURT	6.6
9	10/7	10/26		20	20.0 HOT PATH INSP - 33% CURT	6.6
9	10/28	11/16		20	20.0 HOT PATH INSP - 33% CURT	6.6
10	1/1	6/1		7	7.0 FLOAT	0
10	1/1	6/1		7	7.0 FLOAT	0
10	1/1	6/1		7	7.0 FLOAT	0
11	No outages	through	27-Aug			

The table above may be interpreted as follows: The unit comes into service August 27 of year 1. The first scheduled maintenance starts with opening the breaker on May 22 of the following year. The entire site is curtailed from May 22 to June 2, during which period work is accomplished on all aspects of the project. The entire site is, therefore, not available for 12 full days. The unit returns to service on June 1, except for one of the gas turbines where the combustor inspection is not completed until June 12. During this twelve day period one turbine is not available, reducing the plant output by 33%, accounting for 4 equivalent outage days. The rest of the table may be interpreted similarly.

In addition to planned maintenance, the facility is subject to forced outages and maintenance outages. A forced outage occurs when the plant is unable to run due to some failure. A maintenance outage is an outage that is opportunistically taken to correct some problem, and during the outage the unit would be unable to run, however the outage can be scheduled at the convenience of the system within a reasonable time period. As shown on Table 2, FPL's Power Generation Division, based on its operating experience and expertise, currently expects the forced outage rate to be 4% for the first year of operation, then 1% thereafter and the maintenance outage rate to be approximately 1% after the first year of operation.

Table 2, shows the calculation of the planned maintenance, forced outage and maintenance outage factors and also shows how the expected Total Availability of 94 %_over the first ten years of operation of the avoided unit was calculated:

TABLE 2

Years of Operation	1	2	3	4	5	6	7	8	9	10	11	
Period Hrs*	3,024	8,760	8,760	8,784	8,760	8,760	8,760	8,784	8,760	8,760	5,736	87,648
Planned Outages												
*Duration days***	0	16	20	0	10	33	0	0	20	0	0	99
Equiv POF hrs	0	384	480	-	240	800	-	-	480	-	-	2,384
POF%	0.00	4.38	5.48	0.00	2.74	9.13	0.00	0.00	5.48	0.00	0.00	2.72
Unplanned Outages												
Forced Outage hrs***	92	175	88	88	88	88	88	88	88	88	57	1,025
Equiv FOF	3.03	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.17
Maintenance Outage hrs****	700	131	88	88	88	88	88	88	88	88	57	1,590
Equivalent MOF	23.15	1.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.81
Total Outage Hours*****	792	691	655	176	415	975	175	176	655	175	115	4,999
Total Availability %	74	92	93	98	95	89	98	98	93	98	98	94

* commercial operation August 27, 2009
** Outage schedule and duration is based upon vendor scheduled maintenance and assumed dispatch
*** Forced outage hours are based upon an assumed 4% forced outage rate in the first year, 2% in 2nd year and 1% per year thereafter.
**** Maintenance outage hours are as shown on the Table
***** Total outage hours are the sum of forced, maintenance and planned outage hours in the period.

For the above stated reasons, FPL has determined the availability factor performance standards of FPL's 2025 avoided unit to be 94% for both on-peak and off- peak hours consistent with the unit's expected availability as a base-loaded generating unit.