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COMMISSION CLERK

June 11, 2008

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

080000-07

Re: Ten Year Site Plan

Dear Ms. Cole:

Enclosed for filing please find the original and twenty-five copies of some revised pages to Florida Power & Light Company's Ten Year Power Plant Site Plan, originally filed on April 1, 2008. In the course of reviewing our Ten Year Site Plan, several minor errors were noted. These revised pages correct those errors.

Specifically, the following pages are being replaced:

- Page 24 – I.D. Demand Side Management - the value changes from 3,958 to 3,961 MW at the generator.
- Page 41 – Schedule 3.2 – the values in Columns 6-9 were corrected.
- Page 42 – Schedule 3.3 (Footnote Change) for Forecast of Annual Net Energy for Load.
- Page 63 - DSM Summary- the value changes from 3,958 to 3,961 MW at the generator.
- Page 88 – Schedule 9, page 3 of 9 - the cost values for the WCEC 3 unit have been updated to reflect corrected values used in FPL's Determination of Need filing for WCEC 3.
- Pages 93 and 94 - Schedule 9, pages 8 of 9 and 9 of 9 – the cost values for the Greenfield CC units have been updated to reflect values used in FPL's Determination of Need filings for the Cape Canaveral and Riviera plant conversions.

CMP \_\_\_\_\_

COM \_\_\_\_\_ If you have any questions, please do not hesitate to contact me at (305) 552-4416.

CYS \_\_\_\_\_

EDR \_\_\_\_\_

Sincerely,

GLL \_\_\_\_\_

SPR \_\_\_\_\_

Sabrina Spradley  
Senior Regulatory Affairs Analyst

PCA \_\_\_\_\_

SDR \_\_\_\_\_

SLP \_\_\_\_\_

Copies: R. Silva  
S. Sim

SLC \_\_\_\_\_

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**I.C Non-Firm (As Available) Energy Purchases**

FPL purchases non-firm (as-available) energy from several cogeneration and small power production facilities. Table I.C.1 shows the amount of energy purchased in 2007 from these facilities.

Table I.C.1: As Available Energy Purchases From Non-Utility Generators in 2007

<i>Project</i>	<i>County</i>	<i>Fuel</i>	<i>In-Service Date</i>	<i>Energy (MWH) Delivered to FPL in 2007</i>
Tropicana	Manatee	Natural Gas	2/90	19,067
Elliot	Palm Beach	Natural Gas	7/05	297
US Sugar-Bryant	Palm Beach	Bagassee	2/80	1,432
Okeelanta	Palm Beach	Bagassee/Wood	11/95	265,475
Georgia Pacific	Putnam	Paper by-product	2/94	3,415
Tomoka Farms	Volusia	Landfill Gas	7/98	20,500
Rothenbach Park	Sarasota	PV	10/07	48
Customer Owned PV	Various	PV	Various	60

**I.D. Demand Side Management (DSM)**

FPL has sought out and implemented cost-effective DSM programs since 1978. These programs include a number of conservation/energy-efficiency and load management initiatives. FPL's DSM efforts through 2007 have resulted in a cumulative Summer peak reduction of approximately 3,961 MW at the generator and an estimated cumulative energy saving of approximately 42,301 Gigawatt Hour (GWh) at the generator. After accounting for reserve margin requirements, FPL's DSM efforts through 2007 have eliminated the need to construct the equivalent of approximately 12 new 400 MW generating units.

Table I.D.1 presents FPL's DSM projections. This projection captures: FPL's DSM Goals approved by the Florida Public Service Commission through 2014, additional cost-effective DSM identified by FPL after the DSM Goals were established, and a projection of continued DSM implementation for 2015 – 2017 at an implementation rate commensurate with the projected annual rate of implementation for the years immediately preceding 2014.

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**Schedule 3.2  
History and Forecast of Winter Peak Demand: Base Case**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Firm Wholesale	Retail	Interruptible	Res. Load Management	Residential Conservation	C/I Load Management	C/I Conservation	Net Firm Demand
1998/99	16,802	149	16,653	0	692	404	446	164	15,664
1999/00	17,057	142	16,915	0	741	434	438	176	15,878
2000/01	18,199	150	18,049	0	791	459	448	183	16,960
2001/02	17,597	145	17,452	0	811	500	457	196	16,329
2002/03	20,190	246	19,944	0	847	546	453	206	18,890
2003/04	14,752	211	14,541	0	857	570	532	230	13,363
2004/05	18,108	225	17,883	0	862	583	542	233	16,704
2005/06	19,683	225	19,458	0	870	600	550	240	18,263
2006/07	16,815	223	16,592	0	894	620	577	249	15,344
2007/08	18,055	225	17,830	0	918	644	635	279	15,579
2008/09	22,755	137	22,617	0	972	82	670	27	21,005
2009/10	23,454	138	23,316	0	989	109	678	38	21,640
2010/11	23,971	374	23,597	0	1,009	137	686	51	22,089
2011/12	24,487	381	24,105	0	1,030	166	694	65	22,533
2012/13	24,976	387	24,588	0	1,052	194	702	79	22,947
2013/14	26,290	394	25,895	0	1,077	224	711	95	24,184
2014/15	26,979	1,226	25,753	0	1,105	253	719	112	24,790
2015/16	27,690	1,260	26,430	0	1,131	280	726	127	25,426
2016/17	28,418	1,296	27,122	0	1,154	305	733	141	26,084
2017/18	29,178	1,332	27,846	0	1,179	311	769	144	26,775

**Historical Values (1998 - 2007):**

Col. (2) - Col. (4) are actual values for historical winter peaks. As such, they incorporate the effects of conservation (Col. 7 & Col. 9), and may incorporate the effects of load control if load control was operated on these peak days. Therefore, Col. (2) represents the actual Net Firm Demand.

Col. (5) - Col.(9) for 1996/97 through 2005/06 represent actual DSM capabilities starting from January 1988 and are annual (12-month) values. Note that the values for FPL's former Interruptible Rate are incorporated into Col. (8), which also includes Business On Call (BOC) and Commercial/Industrial Demand Reduction (CDR). Col.(5) - Col.(9) for year 2004/05 are "estimated actuals" and are January values.

Col. (10) represents a HYPOTHETICAL "Net Firm Demand" if the load control values had definitely been exercised on the peak. Col. (10) is derived by the formula: Col. (10) = Col. (2) - Col. (6) - Col. (8).

**Projected Values (2008 - 2017):**

Col. (2) - Col.(4) represent FPL's forecasted peak w/o incremental conservation or cumulative load control. The effects of conservation implemented prior to 2004 are incorporated into the load forecast.

Col. (5) - Col.(9) represent all incremental conservation and cumulative load control. These values are projected January values and the conservation values are based on projections with a 1/2004 starting point for use with the 2004 load forecast.

Col. (10) represents a "Net Firm Demand" which accounts for all of the incremental conservation and assumes all of the load control is implemented on the peak. Col. (10) is derived by using the formula: Col. (10) = Col. (2) - Col. (5) - Col. (6) - Col. (7) - Col. (8) - Col. (9).

**Schedule 3.3**

**History of Annual Net Energy for Load - GWH: Base Case**

(All values are "at the generator" value)

(1)	(2) = (5) + (3) + (4)	(3)	(4)	(5)	(6)	(7)	(8) = (5) - (6) - (7)	(9)
Year	Total Net Energy For Load without DSM	Residential Conservation	C/I Conservation	Actual Net Energy For Load	Sales for Resale GWH	Utility Use & Losses	Actual Total Billed Retail Energy Sales (GWH)	Load Factor(%)
1998	95,318	1,374	1,282	92,662	1,326	6,206	85,130	59.1%
1999	94,365	1,542	1,365	91,458	953	5,829	84,676	59.3%
2000	99,097	1,674	1,434	95,989	970	7,059	87,960	61.4%
2001	101,739	1,789	1,545	98,404	970	7,222	90,212	59.9%
2002	107,755	1,917	1,639	104,199	1,233	7,443	95,523	61.9%
2003	112,160	2,008	1,759	108,393	1,511	7,386	99,496	62.9%
2004	112,031	2,106	1,834	108,091	1,531	7,464	99,095	59.9%
2005	115,440	2,205	1,934	111,301	1,506	7,498	102,296	56.8%
2006	117,490	2,312	2,041	113,137	1,569	7,909	103,659	59.2%
2007	118,894	2,373	2,206	114,315	1,499	7,401	105,415	59.4%

**Historical Values (1998 - 2007):**

Col. (2) represents derived "Total Net Energy For Load w/o DSM". The values are calculated using the formula: Col. (2) = Col. (3) + Col. (4) + Col. (5).

Col.(3) & Col.(4) for 1998 through 2007 are DSM values starting in January 1988 and are annual (12-month) values. Col. (3) and Col. (4) for 2007 are "estimated actuals" and are also annual (12-month) values. The values represent the total GWH reductions actually experienced each year .

Col. (5) is the actual Net Energy for Load (NEL) for years 1998 - 2007.

Col. (8) is the Total Retail Billed Sales. The values are calculated using the formula: Col. (8) = Col. (5) - Col. (6) - Col. (7).

Col. (9) is calculated using Col. (5) from this page and Col. (2), "Total", from Schedule 3.1 using the formula: Col. (9) = ((Col. (5)\*1000) / ((Col.(2) \* 8760))

**Forecast of Annual Net Energy for Load - GWH: Base Case**

(All values are "at the generator" value except for Col (8))

(1)	(2)	(3)	(4)	(5) = (2) - (3) - (4)	(6)	(7)	(8) = (2) - (6) - (7)	(9)
Year	Forecasted Net Energy For Load without DSM	Residential Conservation	C/I Conservation	Net Energy For Load Adjusted for DSM	Sales for Resale GWH	Utility Use & Losses	Forecasted Total Billed Retail Energy Sales (GWH) without DSM	Load Factor(%)
2008	118,357	91	41	118,225	903	8,316	109,137	60.3%
2009	121,852	181	86	121,586	903	8,233	112,715	61.0%
2010	127,004	275	133	126,595	1,871	8,596	116,537	61.6%
2011	131,862	373	184	131,305	2,001	8,913	120,948	62.2%
2012	136,871	475	238	136,158	2,047	9,581	125,243	62.7%
2013	141,374	580	294	140,500	2,089	9,567	129,718	63.5%
2014	148,752	688	354	147,710	5,450	10,042	133,260	63.9%
2015	152,495	797	413	151,285	5,919	10,283	136,293	63.9%
2016	156,384	894	510	154,979	6,098	10,538	139,747	63.7%
2017	160,246	991	608	158,647	6,251	10,799	143,196	63.9%

**Forecasted Values (2008 - 2017):**

Col. (2) represents Forecasted Net Energy for Load w/o DSM values. The values are extracted from Schedule 2.3, Col. (19).

Col. (3) & Col. (4) are forecasted values of the reduction on sales from incremental conservation and are mid-year (6-month) values. The effects of conservation implemented prior to 2006 are incorporated into the load forecast.

Col. (5) is the forecasted Net Energy for Load (NEL) with DSM for years 2008 - 2017.

Col. (8) is the Retail Billed Sales. The values are calculated using the formula: Col. (8) = Col. (2) - Col. (6) - Col. (7). These values are at the meter.

Col. (9) is calculated using Col. (2) from this page and Col. (2), "Total", from Schedule 3.1. Col. (9) = ((Col. (2)\*1000) / ((Col. (2) \* 8760))  
Adjustments are made for leap years.

through 2007 have resulted in a cumulative Summer peak reduction of approximately 3,961 MW at the generator and an estimated cumulative energy saving of approximately 42,301 Gigawatt Hour (GWh) at the generator. Accounting for reserve margin requirements, FPL's DSM efforts through 2007 have eliminated the need to construct the equivalent approximately 12 new 400 MW generating units.

### III.E Transmission Plan

The transmission plan will allow for the reliable delivery of the required capacity and energy for FPL's retail and wholesale customers. The following table presents FPL's proposed future additions of 230 kV bulk transmission lines that must be certified under the Transmission Line Siting Act.

(1) Line Ownership	(2) Terminals (To)	(3) Terminals (From)	(4) Line Length CKT. Miles	(5) Commercial In-Service Date (Mo/Yr)	(6) Nominal Voltage (KV)	(7) Capacity (MVA)
FPL	St. Johns <sup>1/</sup>	Pringle	25	Dec-08	230	759
FPL	Manatee	BobWhite	30	Dec-11	230	1190

1/ Final order certifying the corridor was issued on April 21, 2006. This project will be completed in two phases. Phase I consists of 4 miles of new 230kV line (Pringle to Pellicer) and is scheduled to be completed by Dec-2008. Phase II consists of 21 miles of new 230kV line (St. Johns to Pellicer) and is scheduled to be completed by Jun-2011.

Table III.E.1: List of Proposed Power Lines

In addition, there will be transmission facilities needed to connect several of FPL's committed and proposed capacity additions to the system transmission grid. These transmission facilities for the committed capacity additions at the WCEC site; WCEC 1 & 2, and the proposed capacity addition at the WCEC site, WCEC 3, are described on the following pages.

**Schedule 9**  
**Status Report and Specifications of Proposed Generating Facilities**

- (1) **Plant Name and Unit Number:** West County Energy Center Combined Cycle Unit 3
- (2) **Capacity**  
a. Summer 1,219 MW  
b. Winter 1,335 MW
- (3) **Technology Type:** Combined Cycle
- (4) **Anticipated Construction Timing**  
a. Field construction start-date: 2009  
b. Commercial In-service date: 2011
- (5) **Fuel**  
a. Primary Fuel Natural Gas  
b. Alternate Fuel Distillate
- (6) **Air Pollution and Control Strategy:** Natural Gas, Dry Low No<sub>x</sub> Combustors, SCR  
0.0015% S. Distillate, & Water Injection on Distillate
- (7) **Cooling Method:** Cooling Tower
- (8) **Total Site Area:** 220 Acres
- (9) **Construction Status:** P (Planned)
- (10) **Certification Status:** P (Planned)
- (11) **Status with Federal Agencies:** P (Planned)
- (12) **Projected Unit Performance Data:**  
Planned Outage Factor (POF): 2.1%  
Forced Outage Factor (FOF): 1.1%  
Equivalent Availability Factor (EAF): 96.8% (Base & Duct Firing Operation)  
Resulting Capacity Factor (%): Approx. 93% (First Full Year Base Operation)  
Average Net Operating Heat Rate (ANOHR): 6,582 Btu/kWh (Base Operation)  
Base Operation 75F, 100%
- (13) **Projected Unit Financial Data \*\*, \*\*\***  
Book Life (Years): 25 years  
Total Installed Cost (2011 \$/kW): 709  
Direct Construction Cost (\$/kW):  
AFUDC Amount (\$/kW): 71  
Escalation (\$/kW):  
Fixed O&M (\$/kW -Yr.): (2011 \$kW-Yr) 11.63  
Variable O&M (\$/MWH): (2011 \$/MWH) 0.480  
K Factor: 1.4697

\* \$/kW values are based on Summer capacity.

\*\* Fixed O&M cost includes capital replacement, but not firm gas transportation costs.

NOTE: Total installed cost includes gas expansion, transmission interconnection and integration, escalation, and AFUDC.

**Schedule 9**  
**Status Report and Specifications of Proposed Generating Facilities**

- (1) **Plant Name and Unit Number:** Unsited Combined Cycle
- (2) **Capacity**  
a. Summer 1,219 MW  
b. Winter 1,335 MW
- (3) **Technology Type:** Combined Cycle
- (4) **Anticipated Construction Timing**  
a. Field construction start-date: 2012  
b. Commercial In-service date: 2014
- (5) **Fuel**  
a. Primary Fuel Natural Gas  
b. Alternate Fuel Distillate
- (6) **Air Pollution and Control Strategy:** Dry Low No<sub>x</sub> Burners, SCR, Natural Gas,  
0.0015% S. Distillate and Water Injection on Distillate
- (7) **Cooling Method:** Cooling Tower
- (8) **Total Site Area:** Unknown Acres
- (9) **Construction Status:** P (Planned)
- (10) **Certification Status:** P (Planned)
- (11) **Status with Federal Agencies:** P (Planned)
- (12) **Projected Unit Performance Data:**  
Planned Outage Factor (POF): 2.1%  
Forced Outage Factor (FOF): 1.1%  
Equivalent Availability Factor (EAF): 96.8%  
Resulting Capacity Factor (%): Approx. 92% (First Full Year Base Operation)  
Average Net Operating Heat Rate (ANOHR): 6,582 Btu/kWh  
Base Operation 75F, 100%
- (13) **Projected Unit Financial Data \*,\*\***  
Book Life (Years): 25 years  
Total Installed Cost (2014 \$/kW): 1,105  
Direct Construction Cost (\$/kW):  
AFUDC Amount (\$/kW): 115  
Escalation (\$/kW):  
Fixed O&M (\$/kW -Yr.): (2014 \$kW-Yr) 15.10  
Variable O&M (\$/MWH): (2014 \$/MWH) 1.21  
K Factor: 1.513

\* \$/kW values are based on Summer capacity.

\*\* Fixed O&M cost includes capital replacement.

**NOTE:** Total installed cost includes gas expansion, transmission interconnection and integration, escalation, and AFUDC.

**Schedule 9**  
**Status Report and Specifications of Proposed Generating Facilities**

- (1) **Plant Name and Unit Number:** Unsited Combined Cycle
- (2) **Capacity**  
a. Summer 1,219 MW  
b. Winter 1,335 MW
- (3) **Technology Type:** Combined Cycle
- (4) **Anticipated Construction Timing**  
a. Field construction start-date: 2014  
b. Commercial In-service date: 2016
- (5) **Fuel**  
a. Primary Fuel Natural Gas  
b. Alternate Fuel Distillate
- (6) **Air Pollution and Control Strategy:** Dry Low No<sub>x</sub> Burners, SCR, Natural Gas,  
0.0015% S. Distillate and Water Injection on Distillate
- (7) **Cooling Method:** Cooling Tower
- (8) **Total Site Area:** Unknown Acres
- (9) **Construction Status:** P (Planned)
- (10) **Certification Status:** P (Planned)
- (11) **Status with Federal Agencies:** P (Planned)
- (12) **Projected Unit Performance Data:**  
Planned Outage Factor (POF): 2.1%  
Forced Outage Factor (FOF): 1.1%  
Equivalent Availability Factor (EAF): 96.8%  
Resulting Capacity Factor (%): Approx. 92% (First Full Year Base Operation)  
Average Net Operating Heat Rate (ANOHR): 6,582 Btu/kWh  
Base Operation 75F, 100%
- (13) **Projected Unit Financial Data \*,\*\***  
Book Life (Years): 25 years  
Total Installed Cost (2016 \$/kW): 1,161  
Direct Construction Cost (\$/kW):  
AFUDC Amount (\$/kW): 121  
Escalation (\$/kW):  
Fixed O&M (\$/kW -Yr.): (2016 \$kW-Yr) 15.86  
Variable O&M (\$/MWH): (2016 \$/MWH) 1.27  
K Factor: 1.513

\* \$/kW values are based on Summer capacity.

\*\* Fixed O&M cost includes capital replacement.

**NOTE:** Total installed cost includes gas expansion, transmission interconnection and integration, escalation, and AFUDC.