

Florida Power & Light Company, 215 S. Monroe Street, Suite 810, Tallahassee, FL 32301 RECEIVED-FPSC Jessica Cano Principal Attorney

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COMMISSION CLERK Jessica Cano Principal Attorney Florida Power & Light Company 700 Universe Boulevard Juno Beach, FL 33408-0420 (561) 304-5226 (561) 691-7135 (Facsimile)

July 25, 2011

D-0T

VIA HAND DELIVERY

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: Florida Power & Light Company's 2011 Ten Year Power Plant Site Plan

Dear Ms. Cole:

Enclosed are Florida Power & Light Company's responses to Staff's Sixth Set of Data Requests related to FPL's 2011 Ten Year Site Plan. Please note that the documents responsive to question Nos. 14, 25A and B, and 28 are confidential, and will be filed separately with a Notice of Intent to Request Confidential Classification.

If you have any questions or concerns please feel free to call me.

Sincerely, Rynne D. adam

FPSC-COMMISSION CLERK

Jessica A. Cano

cc: Lawrence Harris COM 475co's containing clata request also find. ECR GCL RAD SSC ADM DOCUMENT NUMBER-DATE OPC CLK 05|43 JUL 25 =

an FPL Group company

Enclosure

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 1 Page 1 of 1

Q.

Please provide a status update of all planned Renewable Energy facilities including scheduled construction dates, upcoming and achieved milestones, changes to the original plan, and any other notable progress towards their completions.

Α.

Please see FPL's responses to Staff's 1st Supplemental Data Request provided on April 29, 2011, and FPL's 2011 Ten Year Site Plan pages 80-82. There is no further status update to provide at this time.

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Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 2 Page 1 of 1

Q.

Please list all planned Renewable Energy Contracts and/or facilities that have been cancelled, withdrawn, or delayed since the filing of the 2010 Ten-Year Site Plan. As part of this response, explain or describe the reason(s) for the change in the status of each.

Α.

No planned Renewable Energy Contracts and/or facilities discussed in the 2010 Ten-Year Site Plan have been cancelled, delayed or withdrawn.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 3 Page 1 of 1

Q.

Please complete the table below describing the status of the company's generating units during each month's peak demand, for each year from 2007 through 2010, Please also provide data for 2011 as available. Please include the actual values at monthly peak for planned capacity, scheduled maintenance, forced outages, available capacity, and the system peak demand. Please provide these responses in hardcopy and in electronic (Excel) format.

	Year: (2007, 2008, 2009, 2010, 2011)									
		Capacity / Demand at Time of Peak (MW)								
Month	Planned Capacity	Scheduled Maintenance	Forced Outages	Available Capacity	Peak Demand					
Jan										
Feb										
Mar										
Apr										
May										
Jun										
Jul										
Aug										
Sep			<u> </u>							
Oct										
Nov										
Dec										

Α.

See Attachment No.1.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 3 Attachment No. 1 Page 1 of 5

Year: 2007									
Capacity (6) / Demand at Time of Peak (MW)									
Month	Planned Capacity (1)	Scheduled Maintenance (2)	Forced Outages (3)	Available Capacity (4)	Peak Demand (5)				
Jan	22,281	2,043	637	19,601	15,619				
Feb	22,281	1,019	148	21,115	16,815				
Mar	22,281	2,218	3	20,060	16,450				
Apr	20,984	1,832	2	19,151	17,623				
May	22,135	3,380	181	18,574	19,004				
Jun	22,135	722	1,232	20,181	20,560				
Jul	22,135	946	257	20,932	21,732				
Aug	22,135	783	192	21,161	21,962				
Sep	22,135	116	1,276	20,744	21,808				
Oct	23,459	3,625	135	19,699	19,876				
Nov	23,459	4,018	31	19,411	16,484				
Dec	23,459	3,923	362	19,174	16,043				

Peak Demand is an hourly calculation. Planned Capacity, Scheduled Maintenance, and Forced Outages were not available on an hourly basis. Planned Capacity was available on a monthly basis. Scheduled Maintenance and Forced Outages were available on a peak day basis.

Notes:

(1) FPL-owned generating units' projected monthly long-term firm peak capability ratings (excluding solar) for summer months (April-October) and winter months (November-March). This "Planned Capacity" includes MW capability for the inactive reserve units, as well as Riviera Units 3 & 4. Units reported in the Ten Year Site Plans as units in inactive reserve (including Riviera Units 3 & 4) are not reflected as planned capacity.

(2) Scheduled Maintenance MW is based on the "Planned Capacity" in column 1 multiplied by the percent of time during the peak day that all FPL owned generating units were in a planned and maintenance outage (including units in inactive reserve).

(3) Forced Outage MW is based on the "Planned Capacity" in column 1 multiplied by the percent of time during the peak day that all FPL owned generating units were in a forced outage (including units in inactive reserve).

(4) This "Available Capacity" has been calculated as MW = Planned Capacity MW - Scheduled Maintenance MW - Forced Outage MW. This Available Capacity was not adjusted for peak day ambient conditions.

(5) Actual Peak MW system demand is reported over the peak hour.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 3 Attachment No. 1 Page 2 of 5

	Year: 2008										
		Capacity (6) / Demand at Time of Peak (MW)									
Month	Planned Capacity (1)	Scheduled Maintenance (2)	Forced Outages (3)	Available Capacity (4)	Peak Demand (5)						
Jan	23,541	864	1,339	21,338	18,055						
Feb	23,541	1,777	1,148	20,616	15,735						
Mar	23,541	3,367	12	20,162	16,226						
Apr	22,119	2,780	7	19,332	16,995						
May	22,119	1,643	206	20,271	20,289						
Jun	22,119	489	910	20,720	20,565						
Jul	22,115	820	217	21,079	20,951						
Aug	22,115	65	433	21,617	21,060						
Sep	22,115	591	8	21,516	20,456						
Oct	23,358	2,701	1,163	19,494	18,752						
Nov	23,358	2,447	991	19,920	16,538						
Dec	23,358	3,910	0	19,448	14,849						

Peak Demand is an hourly calculation. Planned Capacity, Scheduled Maintenance, and Forced Outages were not available on an hourly basis. Planned Capacity was available on a monthly basis. Scheduled Maintenance and Forced Outages were available on a peak day basis.

Notes:

(1) FPL-owned generating units' projected monthly long-term firm peak capability ratings (excluding solar) for summer months (April-October) and winter months (November-March). This "Planned Capacity" includes MW capability for the inactive reserve units, as well as Riviera Units 3 & 4. Units reported in the Ten Year Site Plans as units in inactive reserve (including Riviera Units 3 & 4) are not reflected as planned capacity.

(2) Scheduled Maintenance MW is based on the "Planned Capacity" in column 1 multiplied by the percent of time during the peak day that all FPL owned generating units were in a planned and maintenance outage (including units in inactive reserve).

(3) Forced Outage MW is based on the "Planned Capacity" in column 1 multiplied by the percent of time during the peak day that all FPL owned generating units were in a forced outage (including units in inactive reserve).

(4) This "Available Capacity" has been calculated as MW = Planned Capacity MW - Scheduled Maintenance MW - Forced Outage MW. This Available Capacity was not adjusted for peak day ambient conditions.

(5) Actual Peak MW system demand is reported over the peak hour.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 3 Attachment No. 1 Page 3 of 5

			Year: 2009							
	Capacity (6) / Demand at Time of Peak (MW)									
Month	Planned Capacity (1)	Scheduled Maintenance (2)	Forced Outages (3)	Available Capacity (4)	Peak Demand (5)					
Jan	23,358	48	120	23,190	19,378					
Feb	23,358	2,008	585	20,765	20,081					
Mar	23,358	2,568	122	20,668	15,347					
Apr	22,088	2,387	0	19,701	17,145					
May	22,088	2,095	406	19,587	19,210					
Jun	22,088	43	226	21,819	22,351					
Jul	22,088	398	1,201	20,489	21,138					
Aug	23,307	756	787	21,764	21,015					
Sep	23,307	2,422	1,294	19,591	20,334					
Oct	24,671	2,454	5	22,211	21,014					
Nov	25,791	1,516	41	24,233	19,226					
Dec	25,791	4,646	30	21,114	16,122					

Peak Demand is an hourly calculation. Planned Capacity, Scheduled Maintenance, and Forced Outages were not available on an hourly basis. Planned Capacity was available on a monthly basis. Scheduled Maintenance and Forced Outages were available on a peak day basis. Notes:

(1) FPL-owned generating units' projected monthly long-term firm peak capability ratings (excluding solar) for summer months (April-October) and winter months (November-March). This "Planned Capacity" includes MW capability for the inactive reserve units, as well as Riviera Units 3 & 4. Units reported in the Ten Year Site Plans as units in inactive reserve (including Riviera Units 3 & 4) are not reflected as planned capacity.

(2) Scheduled Maintenance MW is based on the "Planned Capacity" in column 1 multiplied by the percent of time during the peak day that all FPL owned generating units were in a planned and maintenance outage (including units in inactive reserve).

(3) Forced Outage MW is based on the "Planned Capacity" in column 1 multiplied by the percent of time during the peak day that all FPL owned generating units were in a forced outage (including units in inactive reserve).

(4) This "Available Capacity" has been calculated as MW = Planned Capacity MW - Scheduled Maintenance MW - Forced Outage MW. This Available Capacity was not adjusted for peak day ambient conditions.

(5) Actual Peak MW system demand is reported over the peak hour.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 3 Attachment No. 1 Page 4 of 5

			Year: 2010								
		Capacity (6) / Demand at Time of Peak (MW)									
Month	Planned Capacity (1)	Scheduled Maintenance (2)	Forced Outages -(3)	Available Capacity (4)	Peak Demand (5)						
Jan	25,835	934	428	24,473	24,346						
Feb	25,835	2,462	56	23,317	16,488						
Mar	25,835	2,699	0	23,136	17,748						
Apr	24,505	3,589	481	20,435	15,480						
May	24,505	3,608	160	20,737	19,217						
Jun	23,713	1,402	299	22,012	21,901						
Jul	23,713	1,152	534	22,027	21,633						
Aug	23,713	470	505	22,738	22,256						
Sep	23,713	1,107	7	22,599	20,738						
Oct	23,713	2,758	82	20,873	19,099						
Nov	24,982	3,150	732	21,100	17,127						
Dec	24,982	1,721	1,297	21,964	21,126						

Peak Demand is an hourly calculation. Planned Capacity, Scheduled Maintenance, and Forced Outages were not available on an hourly basis. Planned Capacity was available on a monthly basis. Scheduled Maintenance and Forced Outages were available on a peak day basis.

Notes:

(1) FPL-owned generating units' projected monthly long-term firm peak capability ratings (excluding solar) for summer months (April-October) and winter months (November-March). This "Planned Capacity" includes MW capability for the inactive reserve units, as well as Riviera Units 3 & 4. Units reported in the Ten Year Site Plans as units in inactive reserve (including Riviera Units 3 & 4) are not reflected as planned capacity.

(2) Scheduled Maintenance MW is based on the "Planned Capacity" in column 1 multiplied by the percent of time during the peak day that all FPL owned generating units were in a planned and maintenance outage (including units in inactive reserve).

(3) Forced Outage MW is based on the "Planned Capacity" in column 1 multiplied by the percent of time during the peak day that all FPL owned generating units were in a forced outage (including units in inactive reserve).

(4) This "Available Capacity" has been calculated as MW = Planned Capacity MW - Scheduled Maintenance MW - Forced Outage MW. This Available Capacity was not adjusted for peak day ambient conditions.

(5) Actual Peak MW system demand is reported over the peak hour.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 3 Attachment No. 1 Page 5 of 5

	Year: 2011									
	Capacity (6) / Demand at Time of Peak (MW)									
Month	Planned Capacity (1)	Scheduled Maintenance (2)	Forced Outages (3)	Available Capacity (4)	Peak Demand (5)					
Jan	24,191	582	62	23,547	18,552					
Feb	24,191	3,825	0	20,366	14,483					
Mar	24,191	4,102	140	19,949	16,088					
Apr	23,139	3,112	1,412	18,615	19,615					
May	24,358	3,451	285	20,622	19,747					
Jun	24,358	1,969	383	22,005	21,222*					
Jul	N/A	N/A	N/A	N/A	N/A					
Aug	N/A	N/A	N/A	N/A	N/A					
Sep	N/A	N/A	N/A	N/A	N/A					
Oct	N/A	N/A	N/A	N/A	N/A					
Nov	N/A	N/A	N/A	N/A	N/A					
Dec	N/A	N/A	N/A	N/A	N/A					

Peak Demand is an hourly calculation. Planned Capacity, Scheduled Maintenance, and Forced Outages were not available on an hourly basis. Planned Capacity was available on a monthly basis. Scheduled Maintenance and Forced Outages were available on a peak day basis.

Notes:

(1) FPL-owned generating units' projected monthly long-term firm peak capability ratings (excluding solar) for summer months (April-October) and winter months (November-March). This "Planned Capacity" includes MW capability for the inactive reserve units, as well as Riviera Units 3 & 4. Units reported in the Ten Year Site Plans as units in inactive reserve (including Riviera Units 3 & 4) are not reflected as planned capacity.

(2) Scheduled Maintenance MW is based on the "Planned Capacity" in column 1 multiplied by the percent of time during the peak day that all FPL owned generating units were in a planned and maintenance outage (including units in inactive reserve).

(3) Forced Outage MW is based on the "Planned Capacity" in column 1 multiplied by the percent of time during the peak day that all FPL owned generating units were in a forced outage (including units in inactive reserve).

(4) This "Available Capacity" has been calculated as MW = Planned Capacity MW - Scheduled Maintenance MW - Forced Outage MW. This Available Capacity was not adjusted for peak day ambient conditions.

(5) Actual Peak MW system demand is reported over the peak hour.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 4 Page 1 of 1

Q.

Please complete the following table describing the company's historic actual peak demand and available capacity, and the company's projected (from the previous year's forecast) peak demand and planning capacity. Please provide the variance between the actual and projected values. Please provide these responses in hardcopy and in electronic (Excel) format.

Year	Peak Demand	Projected (Year Before) Peak Demand	Variance	Available Capacity During Peak	Projected Capacity During Peak	Variance
	(MW)	(MW)	(%)	(MW)	(MW)	(%)
2007						
2008						
2009						
2010						

A. See Attachment No. 1.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 4 Attachment No. 1 Page 1 of 1

Year	Peak Demand	Projected (Year Before) Peak Demand (1)	Variance	Available Capacity During Peak (2)	Projected Capacity During Peak (3)	Variance
	(MW)	(MW)	(%)	(MW)	(MW)	(%)
2007	21,962	22,543	-2.6%	23,544	25,134	-6.3%
2008	21,060	22,770	-7.5%	23,966	25,143	-4.7%
2009	22,351	22,792	-1.9%	23,557	25,931	-9.2%
2010	24,346	21,147	15.1%	25,498	26,852	-5.0%

(1) Projected (Year Before) Peak Demand is the Summer Peak reported in the prior year's Ten Year Site Plan. For example, the projected Peak Demand for 2007 is the projected Peak Demand from the 2006 Ten Year Site Plan.

(2) FPL's System firm peak capacity for the peak day.

(3) Projected Capacity During Peak is from FPL's prior year's Ten Year Site Plan Schedule 7.1 or 7.2 column (6) based on the period when the peak demand occurred (summer or winter).

Note: Actual Peak Demand dates 8/10/2007 8/7/2008 6/22/2009 1/11/2010 Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 5 Page 1 of 1

Q.

Please complete the following table describing the company's usage of interruptible or curtailable load. Please describe, for each type of load management, the total number of customers available to be interrupted or curtailed, the number of customers interrupted each year, total load interrupted and available to be interrupted, and the average duration of interruptions. Please complete this table for each of the following groups; interruptible load, curtailable load, residential load management, and commercial load management. Please provide these responses in hard copy and in electronic (Excel) format.

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Year	Total Customers Available for Interruption	Total Customer(s) Interrupted	Interruptions per Customer per Year	Total Internipted Load	Total Interruptible Load Available	Average Duration of Interruption
	(4) (4) (4) (4) (4) (4) (4) (4) (4) (4)	(-)	(int/yr)	(MW)	(MVV)	(mins)
1935					· · · · ·	
1990						
1998						
1999						
2000						
2001						
2002						
20.03						
2004						
2005						
2006						
2007						
2008						
2009						
2010						

A. See Attachment No. 1.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 5 Attachment No. 1

		F	Residential O	n Call		
	Total				Total	
	Customers	Total	Interruptions	Total	Interruptible	Average
Year	Available for	Customer(s)	per Customer	Interrupted	Load	Duration of
	Interruption ⁽¹⁾	Interrupted ⁽²⁾	per Year ⁽³⁾	Load ⁽⁴⁾	Available ⁽⁵⁾	Interruption
	(-)	(-)	(int/yr)	(MW)	(MW)	(min)
1995	425,083	425,083	2	482	531	115
1996	479,905	479,905	1	656	600	60
1997	532,240	-	-	-	665	-
1998	574,330	574,330	8	655	718	235
1999	615,346	615,346	21	650	769	110
2000	656,808	656,808	5	493	821	111
2001	673,287	436,633	5	122	842	37
2002	703,262	486,156	18	116	879	78
2003	713,432	494,352	11	119	892	103
2004	715,578	428,079	8	77	894	43
2005	721,728	543,998	24	130	902	59
2006	742,395	555,102	18	133	928	15
2007	761,569	560,241	14	134	952	24
2008	772,806	566,154	12	966	966	54
2009	784,965	577,724	3	138	981	30
2010	791,791	582,752	11	139	990	11

			Business On	Call		
	Total Customers	Total	Interruptions	Total	Total Interruptible	Average
Year	Available for	Customer(s)	per Customer	Interrupted	Load	Duration of
	Interruption ⁽¹⁾	Interrupted (2)	per Year ⁽³⁾	Load (4)	Available ⁽⁵⁾	Interruption
	(-)	(-)	(int/yr)	(MW)	(MW)	(min)
1995	-	-	-	-	-	-
1996	3,515	-	-	-	5	-
1997	7,050	-	-	-	9	-
1998	9,281	9,281	6	12	12	161
1999	11,232	11,232	18	15	15	101
2000	14,285	14,285	3	19	19	75
2001	15,664	-	-	-	32	-
2002	15,784	2,440	1	6	36	180
2003	16,963	-	-	-	43	-
2004	17,730	-	-	-	46	-
2005	18,315	3,541	1	10	51	180
2006	19,206	-	-	-	58	-
2007	19,911	-	-	-	80	-
2008	20,157	20,157	1	84	84	324
2009	20,416	-	-	-	91	-
2010	20,345	239	4	1	93	210

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 5 Attachment No. 1

Cor	nmercial/Indu	strial Load C	ontrol (CILC)	& Commerc	ial/Industrial	Demand
			Reduction (C	DR)		
	Total				Total	
	Customers	Total	Interruptions	Total	Interruptible	Average
Year	Available for	Customer(s)	per Customer	Interrupted	Load	Duration of
	Interruption ⁽¹⁾	Interrupted (2)	per Year ⁽³⁾	Load ⁽⁴⁾	Available ⁽⁵⁾	Interruption
	(-)	(-)	(int/yr)	(MW)	(MW)	(min)
1995	453	453	2	406	406	210
1996	496	496	1	417	417	120
1997	506	-	-	-	426	-
1998	508	508	2	446	446	218
1999	508	508	3	438	438	180
2000	516	516	1	448	448	60
2001	526	-	-	-	457	-
2002	529	-	-	-	453	-
2003	530	530	1	534	534	135
2004	536	536	2	542	542	300
2005	544	291	1	294	550	195
2006	606	-	-	-	577	-
2007	747	-	-	-	636	-
2008	861	855	1	671	676	240
2009	953	-	-	-	721	-
2010	960	942	3	709	722	220

		С	urtailable Se	rvice		
Year	Total Customers Available for	Total Customer(s)	Interruptions per Customer	Total Interrupted	Total Interruptible Load	Average Duration of
	Interruption "	Interrupted	per Year **	Load "	Available "	Interruption
	(-)		(int/yr)	(MVV)	(MVV)	(min)
1995	69	-	-	-	37	-
1996	65	-	-	-	34	-
1997	68	-	-	-	30	-
1998	74	74	1	48	48	165
1999	60	60	3	42	42	180
2000	61	-	-	-	45	-
2001	54	-	-	-	52	-
2002	65	-	-	-	50	-
2003	69	69	1	53	53	135
2004	76	-	-	-	64	-
2005	69	37	1	51	71	195
2006	60	-	-	-	42	-
2007	58	-	-	-	41	-
2008	59	-	-	-	41	-
2009	51	-	-	-	40	-
2010	45	45	1	35	32	180

Footnotes

⁽¹⁾ Represents end-of year counts.

- ⁽²⁾ For simplicity, represents the maximum number of customers interrupted during a single event in that year. Not all customers are required to be interrupted during every event.
- ⁽³⁾ Total number of interruption events in a given year regardless of the number of customers interrupted during a particular event.
- (4) In years where a full activation occurred, value represents total interruptible load available; in years with partial activation only, value represents pro-rata estimate of total interruptible load available to reflect subset of customers interrupted.
- ⁽⁵⁾ 2010 line loss factors applied to all years. For Curtailable Service, values represent amounts as of December 1st each year as reported to the Commission.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 6 Page 1 of 1

Q.

Please indicate the number of customers since 1995 participating in interruptible, curtailable, and load management programs that have requested to discontinue their participation. Please provide annual figures for each of the following programs individually: interruptible load, curtailable load, residential load management, and commercial load management.

Α.

See Attachment No. 1.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 **Question No. 6** Attachment No. 1 Page 1 of 1

	Total Customers Discontinuing Participation in Program ⁽¹⁾									
		Program								
Year	Residential On Call	Business On Call	Commercial/Industrial Load Control (CILC) & Commercial/Industrial Demand Reduction (CDR)	Curtailable Service						
1995	N/A ⁽²⁾	N/A	3	N/A						
1996	N/A	N/A	3	N/A						
1997	1,047	27	4	N/A						
1998	4,893	208	4	N/A						
1999	N/A	9	5	N/A						
2000	1,493	323	5	N/A						
2001	352	31	4	N/A						
2002	2,668	201	1	N/A						
2003	2,380	173	6	N/A						
2004	2,973	260	2	N/A						
2005	2,811	198	1	N/A						
2006	2,167	79	Ø	19						
2007	3,510	173	3	6						
2008	7,453	369	11	4						
2009	3,615	53	4	8						
2010	5,747	1,352	17	8						

⁽¹⁾ Represents customers leaving program in given year.
⁽²⁾ N/A = FPL was unable to locate historic records providing these particular values.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 7 Page 1 of 1

Q.

Please explain or describe the reason(s) given, if any, by those customers that chose to discontinue participation in interruptible, curtailable, or load management programs.

Α.

For the mass market type programs of Residential and Business On-Call, the primary reason given for discontinuing participation (by those customers who provided a reason) was inconvenience associated with load control event(s). For the large Commercial/Industrial load management programs, the reasons primarily relate to changes in the customer's business operations (e.g., closing or relocation of the business, reduction in activity such that the minimum load requirements were no longer met). In addition, some reductions in Curtailment Service participation represent migration over to the Commercial/Industrial Demand Reduction program.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 8 Page 1 of 1

Q.

In both the 2009 (p. 21) and 2010 (p. 41) reviews of the utilities Ten-Year Site Plans, the Commission has stated that, "...in an era of rising rates, utilities should study all options available to mitigate price increases, including possible modification of current planning criteria." Please provide and discuss any such studies that have been performed, including those that demonstrate the benefit of maintaining the company's current level of planning reserve. If no such studies have been conducted, please describe and explain the reason(s).

Α.

FPL interprets this question to primarily ask if FPL has considered a reduction in its current 20% minimum reserve margin criterion. FPL is not considering a reduction in its reliability criterion. The Commission has approved FPL's current 20% reserve margin criterion and FPL believes that this criterion is the minimum required to serve its customers reliably. This latter point has been discussed by FPL in several dockets including the rebuttal testimony of FPL witness Rene Silva in the Florida Glades Power Park coal unit need docket.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 9 Page 1 of 2

Q.

For the next planned generating unit identified in the company's 2011 Ten-Year Site Plan, please provide the estimated annual value of deferral for each year for five years. As part of this response, identify any planned additional generating unit which is capable of being deferred, and what potential impacts a deferral would have on any pre-existing contracts or purchases.

Α.

In the 2011 Ten-Year Site plan the first new unit to be added is in 2016. The table below provides the estimated annual value of deferral for five years for the 2016 combined cycle unit.

CC 2016 Generation - 3X1CC H

Payment Summary (\$/kW/Month)

	Value of Deferral						
	Option A - Normal Stream (Starting with expected In-service)						
	Capacity O&M Paym						
2016	\$6.66	\$1.48	\$8.14				
2017	\$6.86	\$1.52	\$8.38				
2018	\$7.07	\$1.56	\$8.63				
2019	\$7.28	\$1.61	\$8.89				
2020	\$7.50	\$1.66	\$9.15				

The only other planned unit identified in the 2011 Ten Year Site Plan is a combined cycle in 2020. The 2020 combined cycle unit would have the same costs as the 2016 units escalated by 3% a year for four years. These units would have no impact on any pre-existing contracts or purchases.

FPL's current resource planning analyses suggest that a 2017 unit may be needed whether on the basis of economic need or for reliability purposes if it is concluded that FPL's reserve margin should be met with at least 10% generation reserves.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 9 Page 2 of 2

In addition to the level of the reserve margin, it is extremely important to consider the quality of the reserve margin. Even at the Commission's approved reserve margin of 20%, FPL has concerns about the quality of that margin to the extent that it is becoming increasingly dependent on Demand Side Management (DSM) rather than generation-only, or what could be referred to as "steel in the ground", reserves. As noted in FPL's 2011 Ten Year Site Plan, page 69:

"...FPL's projected system reserves, already dependent to a significant degree upon DSM resources, are becoming increasingly more dependent upon DSM. Stated another way, the FPL system's ability to continue to provide reliable electricity service to FPL's customers is becoming increasingly dependent upon DSM. FPL currently believes that generation-only reserves at these projected lower levels may not be adequate, and FPL will continue to evaluate the appropriateness of a minimum generation-only requirement as part of its on-going resource planning work."

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 10 Page 1 of 1

Q.

Please explain or describe the impact(s) of having an operating capacity that was reduced from current levels by 5% during the two previous peak seasons (Jan/Feb 2011, and July/Aug 2010).

Α.

FPL interprets the question to ask what FPL's projected reserve margins would have been for the past two seasonal peak periods if FPL's total available generating capacity had been reduced by 5%. The following answer provides the arithmetic results of assuming operating capacity was lower by 5%.

The projected Summer 2010 reserve margin from FPL's 2010 Site Plan was 23.7%. If DSM is removed from this projection, the resulting generation-only reserve margin is 11.7% (or approximately 50% of the total reserve margin). However, if 5% of the total capacity were assumed to be removed, the total reserve margin value for Summer 2010 would have been 17.5% which is considerably below the currently approved reserve margin criterion for FPL of 20%. In addition, if the full projected amount of DSM is removed from this new projection, the resulting generation-only reserve margin would have been only 6.1%, which FPL considers inadequate to ensure reliable service to its customers.

In regard to the Winter 2011 reserve margin, FPL notes that it is the Summer reserve margin that drives FPL's projected need for new resources, not the Winter reserve margin. The projected Winter 2011 reserve margin from FPL's 2011 Site Plan was 25.7%. If DSM is removed from this projection, the resulting generation-only reserve margin would have been 15.7% (or approximately 60% of the total reserve margin). However, if 5% of the total capacity were assumed to be removed, the total reserve margin value would have been 19.1% which is below the currently approved reserve margin criterion for FPL of 20%. In addition, if the full projected amount of DSM is removed from this projection, the resulting generation-only reserve margin would decrease to 9.6%.

Therefore, with the assumption that FPL would have had 5% less total generation capacity available in recent projections of 2010 Summer and 2011 Winter reserve margins, FPL's projected reserve margins would have been below 20%. The 20% reserve margin criterion is the level currently approved for FPL by the Commission and is the total reserve margin level that FPL believes is minimally necessary to maintain reliable electric service for its customers. Therefore, reducing generating capacity by 5% would mean that FPL's customers would be served by a far less reliable electric system. This is particularly true because FPL's system would be considerably more dependent upon DSM to provide and maintain reliable electric service.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 11 Page 1 of 1

Q.

Please explain whether FPL will be filing a revision of its 2011 Ten-Year Site Plan that reflects the changes described in Document 0300211 and if so, when staff should expect the revised Plan. Please also discuss any additional changes to the Plan that may have been made since May 25, if any.

Α.

FPL's 2011 Site Plan reflects the results of FPL's resource planning process as of the end of 2010 (and early 2011) as called for in the reporting requirements for Site Plan filings (i.e., "The Plan shall date from December 31 of the prior calendar year." Rule 25-22.071). FPL's annual Site Plan filing always reflects the results of its resource planning process at the end of the prior year (and the very beginning of the current year). Thus, a revision to FPL's 2011 Site Plan to reflect the information provided in Document No. 03002-11 is not planned.

FPL will be filing a new Site Plan in April of 2012 and FPL's 2012 Site Plan filing will reflect the results of FPL's resource planning process as of the end of 2011 and early 2012.

However, consistent with the on-going nature of resource planning, FPL's current resource plan reflects the following: (i) the projected modernization of the Port Everglades site in 2016, (ii) the accompanying retirement of the four existing Port Everglades steam units 1 through 4 prior to 2016, and (iii) the conversion of Turkey Point Unit 1 from a generation unit to a synchronous condenser facility in 2016. FPL's current resource planning analyses also suggest that a 2017 unit may be needed whether on the basis of economic need or for reliability purposes if it is concluded that FPL's reserve margin should be met with at least 10% generation reserves.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 12 Page 1 of 1

Q.

Please describe and discuss the planning assumptions made in 2010 that changed in 2011 (i.e., additional information, fuel prices, etc.). Please explain whether the planning assumptions made in order to generate the 2011 Plan are still valid.

Α.

A large number of resource planning assumptions regularly change from one year to the next, and during the course of any given year as well. Consequently, virtually all of the planning assumptions FPL used in 2009 that were used to develop the resource plan reported in FPL's 2010 Site Plan were updated during FPL's 2010 resource planning work which developed the resource plan reported in FPL's 2011 Site Plan. A list of planning assumptions that were updated in FPL's 2010 resource planning work includes, but is not limited to, the following: load forecasts, fuel cost forecasts, environmental compliance costs, cost and operating parameters of new generating options, etc.

In FPL's ongoing resource planning work in 2011, many of these assumptions have again been updated, and may be updated more than once during the year, from those used in the 2010 resource planning work that led to the resource plan that was reported in FPL's 2011 Site Plan.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 13 Page 1 of 1

Q.

The May 25 letter indicates that due to changes in scheduled maintenance, an additional 350 MW of summer peak capacity will be available. Please describe whether this change in planning also impacts resource availability during times of winter peak, for which FPL is currently scheduling 550 MW maintenance.

Α.

For resource planning purposes, FPL's current assumption is that it will not be assuming 350 MW's of planned maintenance in all summer months or assuming 550 MW's of planned maintenance in all winter months.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 14 Page 1 of 1

Q.

Please describe and discuss the process and factors which resulted in the company's indication that scheduled maintenance would be required during seasonal peak periods. As part of this response, please provide all studies and analysis done by the company indicating this need.

Α.

FPL's fossil preventive maintenance activities (scheduled outages) are based upon condition-based maintenance (cycles and service hours) for site equipment, its risk of failure and equipment manufacturer recommendations. FPL's fossil fleet mix is now 70% combustion turbine and 30% conventional steam. The combustion turbine fleet equipment (hot end components) reach end of life based on service hours and cycles. The projected maintenance schedule for this fleet (2011 through 2020) was based on service hours and cycles, with unit outages falling in seasonal peak periods (please see Attachment No. 1). For capacity planning purposes (Ten Year Site Plan), it was assumed that maintenance was mandatory during these periods. However, further review of the specific combustion turbine units and the maintenance schedule led FPL to determine this would not be necessary.

Attachment No. 1 is confidential and will be filed with the clerk with a notice of intent to seek confidential classification.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 15 Page 1 of 1

Q.

Please describe and discuss the process and factors which resulted in the company's indication that scheduled maintenance would no longer be required during the summer peak period. As part of this response, please provide all studies and analysis done by the company indicating that maintenance was no longer required during summer peak. Have these changes in planned maintenance been coordinated with the FRCC?

Α.

Please see FPL's response to Staff's Data Request No. 6 Question No. 14.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 16 - a) Page 1 of 1

Q.

Please discuss the impacts that the changes described in Document No. 03002-11 will have on FPL's resource planning for the remainder of the planning horizon.

a) Given the expiration of planned purchases in 2016 and the lower projected resource needs, will the planned additions of two new 3x1 combined cycle generating units still be required in 2016 and 2017?

Α.

FPL's 2011 Site Plan, as well as earlier Site Plans, reflects the expiration of the existing (not planned) UPS contract with Southern Company on 12/31/2015. FPL's 2011 Site Plan, as well as earlier Site Plans, also reflects the projected inability to continue to receive firm capacity and energy from its SJRPP purchase power contract starting in 2016 due to IRS regulations which limit the total amount of energy that FPL can receive from this contract.

In addition, FPL's 2011 Site Plan did not project the addition of two new combined cycle (CC) units, one in 2016 and one in 2017. Instead, FPL's 2011 Site Plan projected the addition of one new CC unit in 2016 and another in 2020. The timing of these unit additions in 2016 and 2020 shown in the 2011 Site Plan was based upon FPL's projection of its resource needs; i.e., when new generation was needed to maintain system reliability.

FPL's 2011 resource planning work continues to project the need to add new generation in 2016. FPL's current resource planning analyses also suggest that a 2017 unit may be needed whether on the basis of economic need or for reliability purposes if it is concluded that FPL's reserve margin should be met with at least 10% generation reserves.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 16 - b) Page 1 of 1

Q.

Please discuss the impacts that the changes described in Document No. 03002-11 will have on FPL's resource planning for the remainder of the planning horizon.

b) Has FPL expended any dollars for permitting, licensing, engineering, or construction for the unit appearing in the 2011 Plan for in-service in 2016?

Α.

No.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 17 Page 1 of 1

Q.

FPL's 2011 Ten-Year Site Plan discusses the additional natural gas needs that result from the modernizations of the Cape Canaveral and Riviera Beach units. In Staff's Third Data Request, Question 3, staff requested and FPL provided information regarding FPL's plans to meet this additional need.

- a) Has FPL made any determination as to which of the available options it will pursue to provide sufficient gas to the two modernized and two new gas-fired units?
- b) Has an RFP been issued for this purpose?
- c) If so, when was it issued?
- d) If not, when will it be issued?

Α.

- a) FPL is still evaluating a number of alternatives and has not yet made a determination about which option to pursue.
- b) FPL has not issued an RFP related to projected additional long-term natural gas needs for the modernizations of the Cape Canaveral and Riviera Beach units at this time.
- c) Please refer to the response provided to part b of this data request.
- d) FPL is still evaluating the timing and quantity of future natural gas transportation needs. A determination has not yet been made regarding the issue date of an RFP.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 18 Page 1 of 1

Q.

FPL's 2011 Ten-Year Site Plan indicates that FPL will continue to evaluate the appropriateness of a minimum generation-only requirement as part of its on-going resource planning work.

- a) What is the status of FPL's evaluation?
- b) What does FPL believe is an appropriate minimum generation-only requirement?

Α.

- a) FPL continues to evaluate the advisability of a new minimum generation-only reserve margin based on projections of significant decreases in the percentage of reserves that will be provided by generation starting in 2016. The primary reason for this significant decrease in generation-based reserves is the high level of additional DSM now required by the Commission for FPL to add through 2019. As a result, the reliability of the FPL system will become dependent upon DSM to an unprecedented extent. FPL's analyses of other Florida utilities indicate that the reliability of the entire Florida peninsula is also becoming increasingly dependent upon DSM due to the very significant increases in DSM mandated for the utilities. FPL's evaluation of this issue is ongoing.
- b) Historically, although the makeup of FPL's projected reserves varies somewhat from year to year, in recent planning cycles the contributions of generation and DSM have remained close to 50% generation, 50% DSM. This would translate to a minimum generation-only reserve margin requirement of approximately 10%. Without correction, that ratio will be significantly less by 2016. For this reason, as indicated in FPL's answer to subpart a) above, FPL's analyses are ongoing.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 19 Page 1 of 1

Q.

Please complete the following table detailing the service periods of the Inactive Reserve units. As part of this response, include the original in-service date, the date the unit first entered the inactive reserve, and its anticipated retirement date. Also include a calculation of the unit's age at retirement, the number of years in the Inactive Reserve without being brought into service during peak, and the number of years reactivated from the Inactive Reserve for use. Please provide these responses in hardcopy and in electronic (Excel) format.

Unit	Original In- Service Date	Date First Entering Inactive Reserve	Anticipated Retirement Date	Unit Age at Retirement	Duration in Inactive Reserve	Duration Returned to Service	Average Heat Rate	Average Fuel Cost
()	(mo/yr)	(mo/yr)	(mo/yr)	(Years)	(Years)	(Years)	(Åmbtu/kWh)	(\$/MWb)

A. See Attachment No. 1.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 19 Attachment No. 1 Page 1 of 1

	Original	Date	Anticipated	Unit Age	Duration	Duration	Average	Average
	in Service	First Entering	Retirement	at	in Inactive	Returned	Heat Rate**	Fuel Cost**
Unit	Date	Inactive Reserve	Date	Retirement	Reserve*	to Service*		
	<u>(mo/yr)</u>	<u>(mo/yr)</u>	<u>(mo/yr)</u>	<u>(Years)</u>	(Years)	(Years)	(MMbtu/kWh)	<u>(\$/MWh)</u>
Cutler 5	Nov-54	May-09	2012	~ 58	~ 3	retiring 2012	0	0
Cutler 6	Jul-55	May-09	2012	~ 57	~ 3	retiring 2012	14,978	155.8
Sanford 3	May-59	May-09	2012	~ 53	~ 3	retiring 2012	14,215	124.2
Port Everglades 1	Jun-60	May-09	Unknown	Unknown	Unknown	Unknown	12,821	129.9
Port Everglades 2	Apr-61	May-09	Unknown	Unknown	Unknown	Unknown	12,454	127.6
Port Everglades 3	Jul-64	Jun-11	Unknown	Unknown	Unknown	Unknown	11,533	94.8
Port Everglades 4	Apr-65	Jun-11	Unknown	Unknown	Unknown	Unknown	11,702	102.6
Turkey Point 2	Apr-68	Feb-11	Unknown	Unknown	Unknown	Unknown	11,755	109.5

* Source: FPL 2011 TYSP pg 8-9; TYSP reflects Port Everglades 1 & 2 and Turkey Point 2 units not returning to Active Service through 2020, although Turkey Point 2 will operate as a synchronous condenser (providing reactive power support during this period). Port Everglades 3 & 4 units temporarily return to Active Service in 2012, then returning to Inactive Reserve in 2013 through 2020.

** Source: Based upon FPSC A-4 Schedules submitted by FPL for the prior operational calendar year before entering Inactive Reserve (i.e. 2008 and 2010 respectively)

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 20 Page 1 of 1

Q.

Please complete the following table detailing the utilization rate of the Inactive Reserve units for the past three years. As part of this response, please provide each unit's capacity, annual energy production, and capacity factor. Please provide these responses in hardcopy and in electronic (Excel) format.

Unit	Capacity	An	nual Energy Pro	duction (MW	h)
(•)	(MW)	2007	2008	2009	2010
		- 			
Holt	Capacity		Annual Capacit	Eactor (%)	
()	((AW))	2007	2008	2009	2010

Α.

See Attachment No. 1.

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	Capacity	Annual Energy production (MWh)							
Unit	(MW)	2007	2008	2009	2010				
Pt. Everglades 1	203	288,403	175,464	195,938	4,788				
Pt. Everglades 2	203	225,627	250,223	224,620	7,420				
Pt. Everglades 3	371	1,046,356	1,052,857	869,939	768,671				
Pt. Everglades 4	371	1,228,445	1,009,485	870,451	660,778				
Sanford 3	139	52,567	36,872	-5,338	-5,430				
Turkey Point 2	377	822,360	521,223	569,845	438,086				
Cutler 5	64	14,388	-638	-796	-810				
Cutler 6	137	92,871	27,871	-797	-812				
	Capacity		Annual Capac	city Factor (%)					
Unit	(MW)	2007	2008	2009	2010				
Pt. Everglades 1	203	16.1	9.89	11.00	0.29				
Pt. Everglades 2	203	12.6	14.10	12.70	0.42				
Pt. Everglades 3	371	32.6	31.73	27.00	24.12				
Pt. Everglades 4	371	38.4	30.41	27.00	20.60				
Sanford 3	139	4.4	3.06	0	0				
Turkey Point 2	377	25.4	15.87	17.40	13.45				
Cutler 5	64	2.6	0	0	0				
Cutter C			0.10		0				

Source: FPSC Schedule A4

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 21 Page 1 of 1

Q.

Please complete the following table detailing the planned utilization rate of the Inactive Reserve units for the planning horizon. As part of this response, please provide each unit's planned capacity, annual energy production, and capacity factor. Please shade the years for which an Inactive Reserve unit is anticipated to provide energy but is not included in the calculation of reserve margin. Please mark retired units with an "R" instead of including a numeric value. Please provide these responses in hardcopy and in electronic (Excel) format.

Unit	Capacity				Annua	al Energy P	roduction	(MWh)			
(-)	(MW)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	+	_									
	++							1			
	+ +								1		
	1 1										
								and the m			
Unit	Capacity					Annual Ca	apacity (%)				
(-)	(MW)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
	+										
		-									

A. See Attachment No. 1.

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Unit	Capacity		Annual Energy Production (MWh)								
(-)	(MW)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
CUTLER 5	68	R	R	R	R	R	R	R	R	R	R
CUTLER 6	137	R	R	R	R	R	R	R	R	R	R
EVERGLADES 1	213	0	0	0	0	0	0	0	0	0	0
EVERGLADES 2	213	0	0	0	0	0	0	0	0	0	0
EVERGLADES 3	387	61,360	315,290	0	0	0	0	0	0	0	0
EVERGLADES 4	374	24,630	115,990	0	0	0	0	0	0	0	0
SANFORD 3	138	R	R	R	R	R	R	R	R	R	R
TURKEY POINT 2	392	1,940	0	0	0	0	0	0	0	0	0
		Annual Capacity Factor (%)									
Unit	Capacity				A	Annual Capac	ity Factor (%)	and the second second		
Unit (-)	Capacity (MW)	2011	2012	2013	A 2014	nnual Capac 2015	ity Factor (% 2016) 2017	2018	2019	2020
Unit (-) CUTLER 5	Capacity (MW) 68	2011 R	2012 R	2013 R	A 2014 R	nnual Capac 2015 R	ity Factor (% 2016 R) 2017 R	2018 R	2019 R	2020 R
Unit (-) CUTLER 5 CUTLER 6	Capacity (MW) 68 137	2011 R R	2012 R R	2013 R R	A 2014 R R	Annual Capac 2015 R R	ity Factor (% 2016 R R) 2017 R R	2018 R R	2019 R R	2020 R R
Unit (-) CUTLER 5 CUTLER 6 EVERGLADES 1	Capacity (MW) 68 137 213	2011 R R 0.0	2012 R R 0.0	2013 R R 0.0	A 2014 R R 0.0	Annual Capac 2015 R R 0.0	ity Factor (% 2016 R R 0.0) 2017 R R 0.0	2018 R R 0.0	2019 R R 0.0	2020 R R 0.0
Unit (-) CUTLER 5 CUTLER 6 EVERGLADES 1 EVERGLADES 2	Capacity (MW) 68 137 213 213	2011 R R 0.0 0.0	2012 R R 0.0 0.0	2013 R R 0.0 0.0	A 2014 R R 0.0 0.0	xnnual Capac 2015 R R 0.0 0.0	ity Factor (% 2016 R R 0.0 0.0) 2017 R R 0.0 0.0	2018 R R 0.0 0.0	2019 R R 0.0 0.0	2020 R R 0.0 0.0
Unit (-) CUTLER 5 CUTLER 6 EVERGLADES 1 EVERGLADES 2 EVERGLADES 3	Capacity (MW) 68 137 213 213 387	2011 R R 0.0 0.0 1.9	2012 R R 0.0 0.0 9.6	2013 R R 0.0 0.0 0.0 0.0	A 2014 R R 0.0 0.0 0.0 0.0	R R 0.0 0.0 0.0	ity Factor (% 2016 R R 0.0 0.0 0.0) 2017 R R 0.0 0.0 0.0	2018 R R 0.0 0.0 0.0 0.0	2019 R R 0.0 0.0 0.0 0.0	2020 R R 0.0 0.0 0.0 0.0
Unit (-) CUTLER 5 CUTLER 6 EVERGLADES 1 EVERGLADES 2 EVERGLADES 3 EVERGLADES 4	Capacity (MW) 68 137 213 213 213 387 374	2011 R R 0.0 0.0 1.9 0.8	2012 R R 0.0 0.0 9.6 3.5	2013 R R 0.0 0.0 0.0 0.0 0.0	A 2014 R R 0.0 0.0 0.0 0.0 0.0	R R 0.0 0.0 0.0 0.0 0.0	ity Factor (% 2016 R R 0.0 0.0 0.0 0.0 0.0) 2017 R R 0.0 0.0 0.0 0.0 0.0	2018 R R 0.0 0.0 0.0 0.0 0.0	2019 R R 0.0 0.0 0.0 0.0 0.0	2020 R R 0.0 0.0 0.0 0.0 0.0
Unit (-) CUTLER 5 CUTLER 6 EVERGLADES 1 EVERGLADES 2 EVERGLADES 3 EVERGLADES 4 SANFORD 3	Capacity (MW) 68 137 213 213 213 387 374 138	2011 R R 0.0 0.0 1.9 0.8 R	2012 R R 0.0 0.0 9.6 3.5 R	2013 R R 0.0 0.0 0.0 0.0 0.0 R	A 2014 R R 0.0 0.0 0.0 0.0 R	R R 0.0 0.0 0.0 0.0 R	ity Factor (% 2016 R R 0.0 0.0 0.0 0.0 R) 2017 R R 0.0 0.0 0.0 0.0 R	2018 R R 0.0 0.0 0.0 0.0 0.0 R	2019 R R 0.0 0.0 0.0 0.0 0.0 R	2020 R R 0.0 0.0 0.0 0.0 R

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Q.

Please explain or describe the differences) between the Inactive Reserve status that FPL proposes, a Cold Standby, and a long-term scheduled outage. As part of this response, please discuss the length of time required to bring an Inactive Reserve unit back into service, as compared to a unit in Cold Standby or a long-term scheduled outage. Also include a discussion of the differences in cost to bring a unit back in-service between placing a unit in Inactive Reserve, Cold Standby, or a long-term scheduled outage.

Α.

Units placed in <u>Inactive Reserve</u> are not generating electricity for daily operations but can be brought back into service for short term load support after some repairs, typically less than 30 days. <u>Cold Standby</u> is substantively different from Inactive Reserve in that a unit is not available for service except after a rather extended period of repairs or rehabilitation, typically lasting several months. Units in Cold Standby could not be returned to service to meet unexpected customer load within the short time duration associated with Inactive Reserve. The <u>long term</u> planned outage schedule consists of units that are available to generate electricity for daily operations but must be removed from service periodically to perform routine preventive overhaul maintenance. Planned outage durations vary based on the type of equipment and work performed that typically last a few weeks or less. Planned outages are scheduled throughout the year during periods where there is sufficient available capacity to meet expected peak load.

The cost of restoring a unit from <u>Inactive Reserve</u> status for short load support with capability to generate electricity for daily operations varies based on the condition of the unit when placed in Inactive Reserve and the duration the unit is in Inactive Reserve. Typically costs can range from several hundred thousand to several million dollars. Restoring a unit from Inactive Reserve for long term load support with on-going capability to generate electricity for daily operations include costs associated with deferred maintenance, environmental compliance, NERC compliance, end of life replacements and startup activities which can exceed one hundred million dollars. The cost to restore a unit from <u>Cold Standby</u> for long term load support with the capability to generate electricity for daily operations is similar to restoring a unit from Inactive Reserve. <u>Planned Outage</u> costs vary based on the type of equipment and work performed, typically ranging from a few hundred thousand to several tens of millions of dollars.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 23 Page 1 of 1

Q.

For each of the Inactive Reserve Units, provide the annual Fixed O&M expense, before and after the unit entered the Inactive Reserve. Also, please provide the variable O&M expense for each unit, and whether it has changed as a result of the inactive reserve, and if so, to what degree. As part of this response, please explain or describe the reasons for changes in Fixed O&M expense.

Α.

See Attachment No 1.

Florida Power & Light Company 2011 Ten Year Site Plan Staff's Data Request No. 6 Question No. 23 Attachment No. 1 Page 1 of 1

Inactive Units	Year Inactive	Costs	Prior To Inactive, 5 Year Annaul Average Spend	Year Unit Goes Inactive Annual Spend	After Inactive, Annual Average Spend Through 2014*	Fixed & Variable Comments
Sanford Unit 3	May 09	Fixed	\$1,313,929	\$131,942	\$56,192	Fixed is made up of daily preventative equipment maintenance, and other fixed costs such as payroll, building & grounds maintenance, vehicle usage, utilities, etc, to maintain the unit on inactive reserve.
Prior To Inactive: 04 - 08		Variable	\$656,640	\$0	\$0	There are no scheduled overhauls after unit goes inactive.
Year Inactive: 09 After Inactive: 10 - 14		Total	\$1,970,569	\$131,942	\$56,192	
Cutler Units 5 & 6	May 09	Fixed	\$2,466,350	\$677,398	\$619,871	Fixed is made up of daily preventative equipment maintenance, and other fixed costs such as payroll, building & grounds maintenance, vehicle usage, utilities, etc, to maintain the unit on inactive reserve.
Prior To Inactive: 04 - 08		Variable	\$788,568	\$20,424	\$0	There are no scheduled overhauls after units go inactive.
Year Inactive: 09 After Inactive: 10 - 14		Total	\$3,254,918	\$697,822	\$619,871	
Port Everglades Units 1 & 2	May 09	Fixed	\$3,440,775	\$2,740,505	\$855,440	Fixed is made up of daily preventative equipment maintenance, and other fixed costs such as payroll, building & grounds maintenance, vehicle usage, utilities, etc, to maintain the unit on inactive reserve.
Prior To Inactive: 04 - 08		Variable	\$3,214,260	\$321,759	\$0	There are no scheduled overhauls after units go inactive.
Year Inactive: 09 After Inactive: 10 - 14		Total	\$6,655,035	\$3,062,264	\$855,440	
Port Everglades Units 3 & 4 Units inactive June, 2011 through year end and reactivated for 2012. Inactive again in 2013.	Jan 13	Fixed	\$5,160,688	\$2,289,008	\$2,349,881	Fixed is made up of daily preventative equipment maintenance, and other fixed costs such as payroll, building & grounds maintenance, vehicle usage, utilities, etc, to maintain the unit on inactive reserve.
Prior To Inactive: 08 - 12		Variable	\$2,402,926	\$0	\$0	There are no scheduled overhauls after units go inactive
Year Inactive: 13 After Inactive: 14		Total	\$7,563,614	\$2,289,008	\$2,349,881	
Turkey Point Unit 2	Feb 11	Fixed	\$2,926,883	\$1,188,415	\$1,235,397	Fixed is made up of daily preventative equipment maintenance, and other fixed costs such as payroll, building & grounds maintenance, vehicle usage, utilities, etc, to maintain the unit on inactive reserve.
Prior To Inactive: 06 - 10		Variable	\$1,199,264	\$31,976	\$246,502	Overhauls to maintain Synchronous Condensor.
Year Inactive: 11 After Inactive: 12 - 14		Total	\$4,126,147	\$1,220,391	\$1,481,899	

* Current planning cycle for O&M expenses is through 2014.

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Q.

Please provide a list of all units in the Inactive Reserve which are not scheduled to be placed back into service during the current ten-year planning period (2011-2020). For each of these units, please explain or describe the reasons for not retiring them. As part of this response, please provide a comparison between costs for the planning period associated with maintaining each unit in Inactive Reserve and immediately retiring them.

Α.

The following units are/will be placed on Inactive Reserve:

- Sanford 3
- Cutler 5 & 6
- Turkey Point 2
- Port Everglades 1,2,3 and 4

Three of these units are scheduled for retirement by 2012: Sanford 3 and Cutler 5 & 6. Another unit, Turkey Point 2, is continuing to serve as a synchronous condenser that supports the transmission system rather than a generation resource.

The remaining units, Port Everglades Units 1 through 4, are currently on Inactive Reserve. The two larger units, Port Everglades 3 and 4, are scheduled to temporarily be brought back into active service beginning in 2012 and returned to Inactive Reserve status in 2013 to provide generation support as the modernization work at Cape Canaveral and Riviera proceeds. Port Everglades units 1 and 2 must remain in Inactive Reserve at least until the modifications of Cape Canaveral and Riviera are completed as a contingency against unforeseen occurrences.

A modernization of the Port Everglades site would result in the retirement and removal of the four existing units at Port Everglades and the construction of a new 3 X 1 CC unit at the site, similar to the ongoing modernization work at Cape Canaveral and Riviera.

The Inactive Reserve cost assumptions table below shows the projected O&M costs for maintaining these units in Inactive Reserve status for 2011 through 2020. The projected costs-to-maintain include fixed O&M for daily preventative equipment maintenance and other fixed costs such as payroll, building and grounds maintenance, vehicle usage, utilities, etc., to maintain the unit on Inactive Reserve.

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Site	O&M Costs for Maintaining in Inactive Reserve	O&M Costs for Immediate Retirement
Sanford Unit 3	\$60,665	\$0
Port Everglades Unit 1&2	\$6,406,440	\$0
Cutler Units 5&6	\$585,789	\$0
Port Everglades Units 3&4	\$23,439,987	\$0
Turkey Point Unit 2	\$7,521,418	\$0

The O&M costs related to immediate retirement would mainly include security and grounds keeping expenses, which has not been quantified at this time. However, these costs are minimal and may vary by unit due to the length of time between when the unit was retired and demolished as well as unit configuration and plant site layout.

As described above, FPL cannot immediately retire Turkey Point 2 or the Everglades units as they are necessary for transmission and generation support respectively therefore, the O&M costs reflected above for those facilities are required expenditures.

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Q.

With respect to the impact(s) on projected resource needs of changes to the Inactive Reserve for the planning horizon:

- a) Please describe and discuss the process and factors that resulted in the company indicating that the Inactive Reserve units would be taken off-line and then returned to service, as indicated in the 2010 Ten-Year Site Plan. As part of this response, please provide the studies and analysis done by the company supporting the Inactive Reserve's reactivation schedule,
- b) Please describe and discuss the process and factors that resulted in the company's indication that units in Inactive Reserve would not return to service in order to delay capacity beyond 2014, yet still be maintained as indicated in the 2011 Ten-Year Site Plan. As part of this response, please provide the studies and analysis done by the company supporting the revised reactivation schedule.

Α.

a) As part of its 2009 resource planning work that resulted in the resource plan presented in FPL's 2010 Site Plan, FPL determined that it could maintain a 20% reserve margin through 2016 without a number of its older generating units in service. At the time, there were no analyses or studies regarding the return of the Inactive Reserve units because it was assumed that the Inactive Reserve units would be brought back into active service starting in 2016 on a schedule dictated by a projection of resource needs. At that time, there was no need to make a decision regarding how best to meet the 2016-on resource needs. Therefore, no additional analyses were done.

Because FPL would need to make such a decision in 2011, it began analyses of the Inactive Reserve units and other generation options in its resource planning work beginning in late 2010. The resource plan that was developed as a result of that work was reported in FPL's 2011 Site Plan.

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b) The process that led to the results presented in FPL's 2011 Site Plan is generally described in FPL's response to subpart a) of this data request. As discussed in subpart a), FPL began analyses of returning the Inactive Reserve units versus new generation options at the end of 2010, and updated the analyses at the beginning of 2011. Some of the Inactive Reserve unit-related factors used in these analyses are presented in FPL's response to Staff's Data Request No. 6 Question No. 24. In addition, projected costs associated with returning the units to active service were used. Those projected costs are presented in the table below.

2011 IRP - Power Generation Inactive Unit Reserve Cost Summary					
	Total Costs				
	for returning units to Active				
Sites	Service from Inactive Reserve **				
PSN3 *	\$0				
PPE 1 & 2	\$330,338,942				
PCU5&6*	\$0				
PPE 3 & 4	\$345,760,154				
PTF2	\$89,060,465				
Total	\$765,159,561				

* Units retired in 2012

** Costs reflect Base and ECRC O&M and Capital required for returning the units to service in 2016

See Attachment Nos. 1-7 for analysis documentation. The attachments to this question are confidential and will be filed with the clerk with a notice of intent to seek confidential classification.

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Q.

With respect to the impact(s) on projected resource needs of changes to the Inactive Reserve for the planning horizon:

- c) Please describe and discuss the process and factors that led to the changes between the 2010 and 2011 Ten-Year Site Plan treatment of the Inactive Reserve. Please explain any and all assumptions made in the 2010 analysis, how these assumptions changed in 2011, and how these changes affected the cost analyses.
- d) Please describe and discuss any studies or analyses done regarding the reactivation of a portion of the Inactive Reserve units, rather than them all?

Α.

- c) Please see FPL's response to Staff's Data Request No. 6 Question No. 25 subparts a) and b). As explained in that response, there were no unit-specific assumptions regarding the return to service of units in Inactive Reserve, and no economic analyses were performed, in FPL's 2009 resource planning work that was reported in the 2010 Site Plan.
- d) After the analyses presented in response to subpart c) of this data request were completed, additional analyses, using updated assumptions, were performed in 2011 that evaluated the economics of bringing back only some of the Inactive Reserve units.

Because FPL plans to retire three of the units now on Inactive Reserve by 2012 (Sanford 3 and Cutler 5 & 6), only the four units at Port Everglades now on Inactive Reserve (Port Everglades units 1 through 4), and Turkey Point 2 have been considered in such an analysis. FPL's ongoing analyses of how best to meet its projected resource needs from 2016-on has examined bringing back into active service the four Port Everglades units and Turkey Point 2. This option has been compared to a potential modernization of Port Everglades and to a new CC unit at different sites, both in 2016 while leaving Turkey Point 2 as a synchronous condenser.

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The table below illustrates the differences in Inactive Reserve return-to-service-date assumptions between the 2011 Ten Year Site Plan and the 2010 Ten Year Site Plan.

	2010 Site Plan Operating Assumptions			2011 Site Plan Operating Assumptions		
Unit	Year Inactive	Year Active	Year Retired	Year Inactive	Year Active	Year Retired
PSN3	2009	Beyond 2019	n/a	2009	n/a	2012
PPE 1	2009	Beyond 2019	n/a	2009	n/a	n/a **
PPE 2	2009	Beyond 2019	n/a	2009	n/a	n/a **
PCU 5	2009	Beyond 2019	n/a	2009	n/a	2012
PCU 6	2009	Beyond 2019	n/a	2009	n/a	2012
PPE 3	2011	2019	n/a	2011 & 2013 ***	2012	n/a **
PPE 4	2011	Beyond 2019	n/a	2011 & 2013 ***	2012	n/a **
PTF2	2010	2018	n/a	2011 *	n/a	n/a

* Turkey Point Unit 2 converted to a synchronous condenser

** Would be retired in 2013 if Port Everglades units 1 -4 are modernized

*** Unit inactive June, 2011 through year end and reactivated for 2012. Inactive in 2013.

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Q.

Regarding Turkey Point Unit 2, please explain or describe why this unit is included in the Inactive Reserve while it is projected to remain in a transmission support role for the foreseeable future? As part of this response, please provide the projected annual fuel costs of using the unit in this role, and what other options are available to the company to provide the necessary transmission support. Please also describe what other units the company is currently using in a transmission support role and how these are accounted for.

Α.

Turkey Point 2 is currently in-service as a synchronous condenser, providing reactive power support to the transmission system. As a synchronous condenser, the unit does not provide any capacity or energy to the system. For that reason Turkey Point 2 and the other units in Inactive Reserve are not included in FPL's Reserve Margin computations. Although it provides transmission support, in terms of its ability to provide capacity and energy, Turkey Point 2 is essentially in the same situation as the other units in Inactive Reserve status and is therefore placed in the same status. As is the case with the other units in Inactive Reserve status, to bring Turkey Point 2 into active service (i.e. to provide capacity and energy) would require significant work over a period of months.

A generating unit acting as a synchronous condenser does not consume any fuel, although it uses a small amount electricity from the system to perform its function. Turkey Point 2 is acting essentially as a motor to turn the generator. Its purpose is to generate or absorb reactive power as needed to maintain a desired voltage level.

There are few alternatives to using Turkey Point 2 as a synchronous condenser. Transmission voltage-level capacitor banks are often used to provide reactive support to the system but they do not perform the same function as a synchronous condenser and are not an adequate alternative to using Turkey Point 2 as a synchronous condenser. Construction of significant transmission facilities could eliminate the need for Turkey Point 2 as synchronous condenser but at a significantly higher cost to customers.

Currently FPL does not have any other units performing solely a transmission support function. FPL is considering using Turkey Point 1 solely as a synchronous condenser after 2015 (see FPL's response to Staff's Data Request No. 6 Question No. 29). It should be noted that all generating units in "active" service perform a transmission support role in addition to their primary purpose to provide capacity and energy.

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Q.

Regarding Turkey Point Unit 2, please discuss why the unit, in whole or part, is not included in the Company's Reserve Margin. As part of this response, please describe whether or not the unit is capable of delivering real power to the grid, and if it would be capable of providing capacity and energy, in part or whole of the unit's rated capacity, while still performing its transmission support functions.

Α.

Please see FPL's response to Staff's DR No. 6 Question No. 26.

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Q.

Based on FPL's previous data responses, all the Inactive Reserve units are considered candidates for repowering. Does the company have any plans to repower any of these units? If so, which ones? If not, why not? As part of this response, please provide any factors which may influence the decision to repower the sites, including available area, fuel issues, etc., along with any cost-effectiveness analyses performed by FPL.

Α.

Of all the units in Inactive Reserve Status, FPL considers that the Port Everglades units are the preferred candidates for modernization. FPL's analysis indicates that modernizing Port Everglades units 1 through 4 would be cost-effective. Modernizing Port Everglades has significant advantages over other modernization candidates: it has adequate gas deliverability volumes and has adequate water supply to support the operation of a large gas-fired combined cycle unit, and would need very limited on-site transmission enhancements. Also, the Port Everglades site is located at FPL's load center. Please see attachments for results of the economic analysis.

The Cutler units and the Sanford 3 units are not considered candidates for modernization due to their small size, location away from the load center (in the case of Sanford 3) and fuel supply constraints (in the case of Cutler). FPL is planning to retire these units in 2012. As stated in FPL's 2011 Ten Year Site plan, FPL is evaluating possible future uses for those sites. The Turkey Point 1 and 2 units are not preferred candidates for modernization because modernizing those units would require a large and very costly expansion of the gas transportation infrastructure through a very populated area, from Palm Beach to Turkey Point (estimated to cost more than a billion dollars).

See Attachment Nos. 1-7 for analysis documentation. The attachments to this question are confidential and will be filed with the clerk with a notice of intent to seek confidential classification.

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Q.

Please discuss which, if any, of the Inactive Reserve units have the ability to contribute to addressing the balance between load and generating capacity in Southeastern Florida. As part of this response, describe the potential benefits and/or problems with using these units to address the region's transmission issues.

Α.

The Inactive Reserve Units located in Southeastern Florida (i.e. Miami-Dade and Broward Counties) include Cutler 5 and 6, Turkey Point 2, and Port Everglades 1, 2, 3 and 4. These units could contribute by providing generating capacity in South Florida. The focus of FPL's analysis has been to determine how to maintain the balance between demand and generation in South Florida in the most cost-effective manner.

FPL's analysis has shown that a plan that retires Cutler 5 and 6, modernizes Port Everglades by summer of 2016, keeps Turkey Point 2 operating as a synchronous condenser, and changes the role of Turkey Point 1 beginning in 2016 to also serve as a synchronous condenser, results in the lowest cost to customers while continuing to meet system reliability requirements.