## **BEFORE THE FLORIDA** PUBLIC SERVICE COMMISSION

**DOCKET NO. 070001-EI FLORIDA POWER & LIGHT COMPANY** 

September 4, 2007

## **GENERATING PERFORMANCE INCENTIVE FACTOR**

**JANUARY 2008 THROUGH DECEMBER 2008** 

**TESTIMONY & EXHIBITS OF:** 

F. Irizarry

DOCUMENT NUMBER-DATE 07966 SEP-4 3 FPSC-COMMISSION CLERK

1		BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION								
2		FLORIDA POWER & LIGHT COMPANY								
3		TESTIMONY OF FRANK IRIZARRY								
4	DOCKET NO. 070001-EI									
5		SEPTEMBER 4, 2007								
6										
7	Q.	Please state your name and business address.								
8	Α.	My name is Frank Irizarry and my business address is 700 Universe								
9		Boulevard, Juno Beach, Florida 33408.								
10	Q.	Would you please state your present position with Florida Power								
11		and Light Company (FPL).								
12	A.	I am the Director of Production Assurance and Business Services in								
13		the Power Generation Division of FPL.								
14	Q.	Please describe your educational background and business								
15		experience.								
16	A.	I received a Bachelors degree in Industrial Engineering from Georgia								
17		Tech in 1982 and a Masters of Business Administration from Nova								
18		Southeastern University in 1988. I am also a Registered Professional								
19		Engineer in Florida and have held my registration for over twenty								
20		years. I have been employed with FPL since 1985 and between 1985								
21		and 2002, I have held a variety of administrative, technical,								
22		maintenance, and operating positions at one nuclear site and various								
23		fossil plants in Florida. Between 2002 and through my current								

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DOCUMENT NUMBER-DATE

07966 SEP-45

FPSC-COMMISSION CLERK

position, I have held business unit support positions in Business
 Services, Central Maintenance, and the Integrated Supply Chain.
 Prior to joining FPL, I worked as an Industrial and Production
 Engineer with ALCOA aluminum company for approximately three
 and a half years.

Q. Mr. Irizarry, are you adopting the testimony of FPL witness
 Pamela Sonnelitter entitled "Generating Performance Incentive
 Factor, Performance Factor Results for January through
 December 2006" as your own?

10 A. Yes, I am.

#### 11 Q. What is the purpose of your testimony?

A. The purpose of my testimony is to present the target unit equivalent availability factors (EAF) and the target unit average net operating heat rates (ANOHR) for the period of January through December, 2008, for use in determining the Generating Performance Incentive Factor (GPIF).

17Q.Have you prepared, or caused to have prepared under your18direction, supervision, or control, an exhibit in this proceeding?

A. Yes, I have. It consists of one document, FI -2. The first page of this
 document is an index to the contents of the document. All other
 pages are numbered according to the GPIF Manual as approved by
 the Commission.

Q. Please summarize the 2008 system targets for EAF and ANOHR

for the units to be considered in establishing the GPIF for FPL.

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For the period of January through December, 2008, FPL projects a Α. 3 weighted system equivalent planned outage factor of 5.4% and a 4 weighted system equivalent unplanned outage factor of 7.1%, which 5 vield a weighted system equivalent availability target of 87.5%. The 6 targets for this period reflect planned refueling outages for two 7 nuclear units. FPL also projects a weighted system average net 8 operating heat rate target of 8,924 Btu/kWh for the period January 9 through December, 2008. As discussed later in this testimony. these 10 targets represent fair and reasonable values when compared to 11 historical data. Therefore, FPL requests that the targets for these 12 performance indicators be approved by the Commission. 13

Q. Have you established target levels of performance for the units
 to be considered in establishing the GPIF for FPL?

A. Yes, I have. Exhibit PS-2, pages 6 and 7, contains the information
 summarizing the targets and ranges for EAF and ANOHR for the 13
 generating units which FPL proposes to be considered as GPIF units
 for the period of January through December, 2008. All of these
 targets have been derived utilizing the methodologies adopted in the
 GPIF Manual.

Q. Please summarize FPL's methodology for determining
 equivalent availability targets.

Α. The GPIF Manual requires that the EAF target for each unit be 1 determined as the difference between 100% and the sum of the 2 equivalent planned outage factor (EPOF) and the equivalent 3 unplanned outage factor (EUOF). The EPOF for each unit is 4 determined by the length of the planned outage, if any, scheduled for 5 the projected period. The EUOF is determined by the sum of the 6 historical average equivalent forced outage factor (EFOF) and the 7 equivalent maintenance outage factor (EMOF). The EUOF is then 8 adjusted to reflect recent unit performance and known unit 9 modifications or equipment changes. 10

## Q. Please summarize FPL's methodology for determining ANOHR targets.

To develop the ANOHR targets, historic ANOHR vs. unit net output 13 Α. factor curves are developed for each GPIF unit. The historic data is 14 analyzed for any unusual operating conditions and changes in 15 equipment that will materially affect the predicted heat rate. A 16 regression equation that best fits the data is calculated and a 17 statistical analysis of the historic ANOHR variance with respect to the 18 best fit curve is also performed to identify unusual observations. The 19 resulting equation is used to project ANOHR for the unit using the net 20 output factor from the POWERSYM model. This projected ANOHR 21 value is then used in the GPIF tables and in the calculations to 22 determine the possible fuel savings or losses due to improvements or 23

degradations in heat rate performance. This process is consistent
 with the GPIF Manual.

## Q. How did you select the units to be considered when establishing the GPIF for FPL?

The GPIF units were selected in accordance with the GPIF Manual 5 Α. using the estimated net generation for each unit taken from the 6 production costing simulation program, POWRSYM, which forms the 7 basis for the projected levelized fuel cost recovery factor for the 8 period. The 13 units which FPL proposes to use for the period of 9 January through December 2008 represent the top 81.2% of the total 10 forecasted system net generation for this period excluding three units: 11 12 Martin Unit 8, Manatee Unit 3, and Turkey Point Unit 5. These three units were excluded from the GPIF calculation because there is 13 insufficient historical data to include them. The conversion of Martin 14 Unit 8 to combined cycle in 2005 constitutes a major design change 15 affecting both the generation capacity and the performance of this 16 unit. As a result, its future performance is not yet comparable to its 17 historical performance. Manatee Unit 3 and Turkey Point Unit 5 are 18 new units for 2005 and 2007 respectively. Consistent with the GPIF 19 Manual, the above mentioned units will be excluded from the GPIF 20 calculations until we have enough operating history to use in 21 projecting future performance. 22

- **Q.** Do FPL's EAF and ANOHR performance targets represent a
- 2 reasonable level of generation efficiency?
- 3 A. Yes, they do.
- 4 Q. Does this conclude your testimony?
- 5 A. Yes, it does.

#### **DOCUMENT NO. 1**

#### WITNESS: FRANK IRIZARRY

#### GENERATING PERFORMANCE INCENTIVE FACTOR

#### JANUARY THROUGH DECEMBER, 2008

FI-2 DOCKET NO. 070001-EI FPL Witness: Frank Irizarry Exhibit No.: Pages 1 - 24 September 4, 2007

#### Original Sheet No.

#### **DOCUMENT NUMBER 1 INDEX**

#### FLORIDA POWER & LIGHT COMPANY

#### JANUARY THROUGH DECEMBER, 2008

PAGE NUMBER	TITLE
7.201.001	Index
7.201.002 to 7.201.003	Generating Unit Selection Criteria
7.201.004	GPIF Reward/(Penalty) Table (Estimated)
7.201.005	GPIF calculation of Maximum Allowed Dollars (Estimated)
7.201.006 and 7.201.007	GPIF Target and Range Summary
7.201.008	GPIF Predicted Unit Heat Rates
7.201.009	Derivation of Weighting Factors
7.201.010	Estimated Unit Performance Data
7.201.011 - 7.201.023	Unit MOF and FOF vs Time Graphs
7.201.024	Planned Outages Schedule (Estimated)
	7.201.001 7.201.002 to 7.201.003 7.201.004 7.201.005 7.201.006 and 7.201.007 7.201.008 7.201.009 7.201.010 7.201.011 - 7.201.023

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# Table 2.0POWRSYM Projected System GenerationJanuary Through December, 2008

	Capacity	Service	Net Output	NOF	% of Total	Cumulative % of Total	Production Cost
<u>Name</u>	(MW)	Hours	<u>MWH</u>	<u>%</u>	Output	Output	<u>(\$000)</u>
FT. MYERS 2	1,412	7,292	9,052,636	87.9%	8.8	8.8	558,880
MARTIN 8	1,092	8,750	8,428,896	88.2%	8.2	16.9	502,154
TURKEY POINT 5	1,090	8,609	8,286,828	88.3%	8.0	24.9	483,396
MANATEE 3	1,092	8,258	7,888,074	87.4%	7.6	32.6	470,284
SANFORD 4	944	7,907	6,636,144	88.9%	6.4	39.0	409,953
ST. LUCIE 1	845	7,800	6,420,882	97.4%	6.2	45.2	25,802
ST. LUCIE 2	719	8,784	6,157,258	97.5%	6.0	51.2	29,065
TURKEY POINT 3	703	8,784	6,020,510	97.5%	5.8	57.0	29,024
SANFORD 5	944	7,032	5,870,531	88.4%	5.7	62.7	364,600
TURKEY POINT 4	703	7,944	5,451,815	97.6%	5.3	68.0	29,623
SCHERER 4	637	7,872	4,893,259	97.7%	4.7	72.7	106,537
LAUDERDALE 4	437	8,544	3,046,785	81.7%	2.9	75.7	214,892
LAUDERDALE 5	437	8,424	3,041,271	82.7%	2.9	78.6	215,216
MARTIN 3	462	6,304	2,579,515	88.6%	2.5	81.1	158,981
MARTIN 2	817	4,536	2,498,162	67.4%	2.4	83.5	231,468
MARTIN 4	462	5,506	2,241,574	88.2%	2.2	85.7	138,775
MANATEE 1	798	4,637	2,079,398	56.2%	2.0	87.7	195,814
MANATEE 2	798	4,600	1,821,665	49.6%	1.8	89.5	171,227
MARTIN 1	817	3,380	1,765,183	63.9%	1.7	91.2	164,487
ST JOHNS 10	128	8,784	1,097,698	97.4%	1.1	92.2	28,492
PT EVERGLADES 3	375	4,203	1,033,927	65.6%	1.0	93.2	98,443
ST JOHNS 20	128	7,368	912,318	96.5%	0.9	94.1	· 23,884
PT EVERGLADES 4	375	3,657	911,807	66.5%	0.9	95.0	86,364
CAPE CANAVERAL 1	379	3,178	798,396	66.3%	0.8	95.8	75,535
PUTNAM 2	241	3,490	766,261	91.1%	0.7	96.5	61,547
TURKEY POINT 1	379	2,916	726,461	65.8%	0.7	97.2	69,448
TURKEY POINT 2	379	2,857	694,174	64.1%	0.7	97.9	66,081
PUTNAM 1	241	3,088	620,249	83.3%	0.6	98.5	51,157
CAPE CANAVERAL 2	379	2,452	594,285	64.0%	0.6	99.1	56,555
RIVIERA 3	274	1,903	311,617	59.8%	0.3	99.4	30,272
RIVIERA 4	285	1,917	275,382	50.4%	0.3	99.6	26,855
FORT MYERS 3A_B	321	319	100,337	98.0%	0.1	99.7	9,498
PT EVERGLADES 2	206	690	94,770	66.7%	0.1	99.8	9,534
PT EVERGLADES 1	206	629	89,875	69.4%	0.1	99.9	8,958
SANFORD 3	139	553	42,415	55.2%	0.0	99.9	4,316
CUTLER 6	137	364	35,267	70.5%	0.0	100.0	3,521
CUTLER 5	68	324	17,642	79.6%	0.0	100.0	1,720
FORT MYERS 1-12	583	3	386	0.0%	0.0	100.0	77
LAUDERDALE 1-24	718	1	115	0.0%	0.0	100.0	17
EVERGLADES 1-12	359	0	0	0.0%	0.0	100.0	0
Total	21,508		103,303,768		100.0	100.0	5,212,452

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FI-2, DOCKET NO. 070001-EI FPL Witness: Frank Irizarry Exhibit No. Document 1 Page 2 of 24

#### FLORIDA POWER & LIGHT COMPANY UNITS TO BE USED TO DETERMINE THE GENERATING PERFORMANCE INCENTIVE FACTOR

#### JANUARY THROUGH DECEMBER, 2008

Ft. Myers 2

Lauderdale 4

Martin 2

Martin 3

Martin 4

Sanford 4

Sanford 5

Scherer 4

St. Lucie 1

St. Lucie 2

Turkey Point 3

Turkey Point 4

#### GENERATING PERFORMANCE INCENTIVE FACTOR

#### REWARD/PENALTY TABLE (ESTIMATED )

#### FLORIDA POWER & LIGHT COMPANY JANUARY THROUGH DECEMBER, 2008

Generating Performance Incentive Points <u>(GPIF)</u>	Fuel Savings/(Loss) <u>(\$000)</u>	Generating Performance Incentive Factor <u>(\$000)</u>
+ 10	149,700	29,718
+ 9	134,730	26,746
+ 8	119,760	23,774
+ 7	104,790	20,803
+ 6	89,820	17,831
+ 5	74,850	14,859
+ 4	59,880	11,887
+ 3	44,910	8,915
+ 2	29,940	5,944
+ 1	14,970	2,972
0	0	0
- 1	( 14,970)	( 2,972)
- 2	(29,940)	( 5,944)
- 3	( 44,910)	( 8,915)
- 4	( 59,880)	( 11,887)
- 5	(74,850)	( 14,859)
- 6	(89,820)	( 17,831)
- 7	( 104,790)	(20,803)
- 8	( 119,760)	( 23,774)
- 9	( 134,730)	(26,746)
- 10	( 149,700)	(29,718)

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#### GENERATING PERFORMANCE INCENTIVE FACTOR

#### CALCULATION OF MAXIMUM ALLOWED INCENTIVE DOLLARS

#### ESTIMATED

#### FLORIDA POWER & LIGHT COMPANY PERIOD OF: JANUARY THROUGH DECEMBER, 2008

LINE 1	BEGINNING OF PERIOD BALANCE OF (	COMMON EQUITY	\$ 7,269,526,697
	END OF MONTH BALANCE OF COMMO	N EQUITY	
LINE 2	MONTH OF JANUARY	2008	\$ 7,251,954,910
LINE 3	MONTH OF FEBRUARY	2008	\$ 7,283,251,291
LINE 4	MONTH OF MARCH	2008	\$ 7,331,150,506
LINE 5	MONTH OF APRIL	2008	\$ 7,387,662,695
LINE 6	MONTH OF MAY	2008	\$ 7,465,114,899
LINE 7	MONTH OF JUNE	2008	\$ 7,578,768,715
LINE 8	MONTH OF JULY	2008	\$ 7,696,906,184
LINE 9	MONTH OF AUGUST	2008	\$ 7,826,667,682
LINE 10	MONTH OF SEPTEMBER	2008	\$ 7,946,903,916
LINE 11	MONTH OF OCTOBER	2008	\$ 8,038,031,971
LINE 12	MONTH OF NOVEMBER	2008	\$ 8,109,053,479
LINE 13	MONTH OF DECEMBER	2008	\$ 8,127,808,777
LINE 14	AVERAGE COMMON EQUITY FOR THE (SUMMATION OF LINE 1 THROUGH LIN		\$ 7,639,446,000
LINE 15	25 BASIS POINTS		0.0025
LINE 16	REVENUE EXPANSION FACTOR		63.6941%
LINE 17	MAXIMUM ALLOWED INCENTIVE DOLL (LINE 14 TIMES LINE 15 DIVIDED BY LIN		\$ 29,984,908
LINE 18	JURISDICTIONAL SALES		111,773,806,124 KWH
LINE 19	TOTAL SALES		112,777,460,444 KWH
LINE 20	JURISDICTIONAL SEPARATION FACTO (LINE 18 DIVIDED BY LINE 19)	R	99.11%
LINE 21	MAXIMUM ALLOWED JURISDICTIONAL	INCENTIVE DOLLARS	\$ 29,718,060

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#### **GPIF TARGET AND RANGE SUMMARY**

#### FLORIDA POWER & LIGHT COMPANY PERIOD OF: JANUARY THROUGH DECEMBER, 2008

<u>Plant / Unit</u>	Weighting Factor <u>(%)</u>	EAF Target <u>(%)</u>	EAF F Max. <u>( % )</u>	Range Min. <u>(%)</u>	Max. Fuel Savings <u>(\$000's)</u>	Max. Fuel Loss <u>(\$000's)</u>
Ft. Myers 2	4.40	86.6	89.6	83.6	6,591.2	-6,591.2
Lauderdale 4	0.82	93.3	95.3	91.3	1,226.1	-1,226.1
Lauderdale 5	0.77	91.9	93.9	89.9	1,147.2	-1,147.2
Martin 2	0.25	94.9	97.4	92.4	376.9	-376.9
Martin 3	1.09	93.8	96.3	91.3	1,627.2	-1,627.2
Martin 4	0.76	82.4	84.4	80.4	1,144.1	-1,144.1
Sanford 4	2.17	94.1	96.1	92.1	3,242.2	-3,242.2
Sanford 5	2.89	85.5	88.5	82.5	4,322.2	-4,322.2
Scherer 4	3.69	85.6	87.6	83.6	5,525.5	-5,525.5
St. Lucie 1	9.38	82.4	85.4	79.4	14,045.8	-14,045.8
St. Lucie 2	9.03	93.6	96.6	90.6	13,522.3	-13,522.3
Turkey Point 3	8.82	90.9	93.9	87.9	13,207.8	-13,207.8
Turkey Point 4	7.98	81.7	84.7	78.7	11,943.2	-11,943.2

52.05

77,921.7 -77,921.7

#### **GPIF TARGET AND RANGE SUMMARY**

#### FLORIDA POWER & LIGHT COMPANY PERIOD OF: JANUARY THROUGH DECEMBER, 2008

Plant / Unit	Weightin Factor <u>(%)</u>	g ANOHR TA BTU/KWH	ARGET <u>NOF</u>	ANOHR BTU/KWH	RANGE	Max. Fuel Savings <u>(\$000's)</u>	Max. Fuel Loss <u>(\$000's)</u>
<u>Flaint / Onn</u>	( // )	DIORVII		DIOM	DIOMAN	14000 37	<u>(\$000.31</u>
Ft. Myers 2	6.30	6,808	87.9	6,694	6,923	9,432.4	-9,432.4
Lauderdale 4	2.32	7,757	81.7	7,632	7,883	3,469.7	-3,469.7
Lauderdale 5	2.99	7,641	82.7	7,482	7,800	4,476.5	-4,476.5
Martin 2	6.12	9,892	67.4	9,501	10,284	9,155.7	-9,155.7
Martin 3	2.32	7,031	88.6	6,877	7,185	3,474.3	-3,474.3
Martin 4	1.34	6,973	88.2	6,873	7,073	1,998.7	-1,998.7
Sanford 4	4.15	6,920	88.9	6,815	7,025	6,218.0	-6,218.0
Sanford 5	4.27	6,915	88.4	6,794	7,036	6,398.5	-6,398.5
Scherer 4	0.85	10,163	97.7	10,041	10,285	1,278.4	-1,278.4
St. Lucie 1	2.90	10,881	97.4	10,779	10,983	4,346.5	-4,346.5
St. Lucie 2	2.82	11,052	97.5	10,949	11,155	4,225.5	-4,225.5
Turkey Point 3	5.76	11,125	97.5	10,903	11,347	8,625.5	-8,625.5
Turkey Point 4	5.80	11,070	97.6	10,823	11,317	8,678.0	-8,678.0

47.95

71,777.8 -71,777.8

**Original Sheet No.** 

#### PROJECTED UNIT HEAT RATE EQUATIONS FLORIDA POWER & LIGHT COMPANY PERIOD OF: JANUARY THROUGH DECEMBER, 2008

				ANOHR	Equation				
Plant/Unit	ANOHR	NOF	<u>MW</u>	<u>a coef.</u>	<u>b coef.</u>	<u>Bounds</u>	<u>First</u>	<u>Last</u>	Exclusions
Ft. Myers 2	6,808	87.9	1412	7183	-4.26	115	07-04	06-07	Nov-Dec '04, Dec '05
Lauderdale 4	7,757	81.7	437	10157	-29.38	125	07-04	06-07	May-June '07
Lauderdale 5	7,641	82.7	437	9050	-17.04	159	07-04	06-07	Nov '04, Nov-Dec '05
Martin 2	9,892	67.4	817	10261	-5.47	391	07-04	06-07	Jan-Mar '06, Dec '06, Feb-Mar '07
Martin 3	7,031	88.6	462	7526	-5.59	154	07-04	06-07	Dec '05, Nov '06
Martin 4	6,973	88.2	462	7570	-6.77	100	07-04	06-07	Feb-Apr '05, Mar '07
Sanford 4	6,920	88.9	944	7372	-5.07	105	07-04	06-07	May '07
Sanford 5	6,915	88.4	944	7386	-5.32	121	07-04	06-07	Apr 06, Dec '06
Scherer 4	10,163	97.7	637	10348	-1.89	122	07-04	06-07	Feb '05, Oct '05, May '06
St. Lucie 1	10,881	97.4	845	12939	<b>-</b> 21.12	102	07-04	06-07	Nov '05, Apr-May '07
St. Lucie 2	11,052	97.5	719	13239	-22.43	103	07-04	06-07	Jan-Feb '05, May-Jun '06
Turkey Point 3	11,125	97.5	703	14017	-29.66	222	07-04	06-07	Oct-Dec '04, Oct '05
Turkey Point 4	11,070	97.6	703	13017	-19.94	247	07-04	06-07	Apr-May '05, Nov '06

Issued by: Florida Power & Light Company

FI-2, DOCKET NO. 070001-EI FPL Witness: Frank Irizarry Exhibit No. \_\_\_\_\_ Document 1 Page 8 of 24

#### **DERIVATION OF WEIGHT FACTORS**

#### FLORIDA POWER & LIGHT COMPANY PERIOD OF: JANUARY THROUGH DECEMBER, 2008

#### PRODUCTION COSTING SIMULATION FUEL COST (\$000)

			At Maximum		
	Performance	At Target	Improvement	Savings	Factor
Unit	Indicator	(1)	(2)	(3)	(% Of Savings)
Ft. Myers 2	EAF	5,212,452	5,205,861	6,591.2	4.40
Ft. Myers 2	ANOHR	5,212,452	5,203,020	9,432.4	6.30
Lauderdale 4	EAF	5,212,452	5,211,226	1,226.1	0.82
Lauderdale 4	ANOHR	5,212,452	5,208,982	3,469.7	2.32
Lauderdale 5	EAF	5,212,452	5,211,305	1,147.2	0.77
Lauderdale 5	ANOHR	5,212,452	5,207,975	4,476.5	2.99
Martin 2	EAF	5,212,452	5,212,075	376.9	0.25
Martin 2	ANOHR	5,212,452	5,203,296	9,155.7	6.12
Martin 3	EAF	5,212,452	5,210,825	1,627.2	1.09
Martin 3	ANOHR	5,212,452	5,208,978	3,474.3	2.32
Martin 4	EAF	5,212,452	5,211,308	1,144.1	0.76
Martin 4	ANOHR	5,212,452	5,210,453	1,998.7	1.34
Sanford 4	EAF	5,212,452	5,209,210	3,242.2	2.17
Sanford 4	ANOHR	5,212,452	5,206,234	6,218.0	4.15
Sanford 5	EAF	5,212,452	5,208,130	4,322.2	2.89
Sanford 5	ANOHR	5,212,452	5,206,053	6,398.5	4.27
Scherer 4	EAF	5,212,452	5,206,926	5,525.5	3.69
Scherer 4	ANOHR	5,212,452	5,211,174	1,278.4	0.85
St. Lucie 1	EAF	5,212,452	5,198,406	14,045.8	9.38
St. Lucie 1	ANOHR	5,212,452	5,208,105	4,346.5	2.90
St. Lucie 2	EAF	5,212,452	5,198,930	13,522.3	9.03
St. Lucie 2	ANOHR	5,212,452	5,208,226	4,225.5	2.82
Turkey Point 3	EAF	5,212,452	5,199,244	13,207.8	8.82
Turkey Point 3	ANOHR	5,212,452	5,203,826	8,625.5	5.76
Turkey Point 4	EAF	5,212,452	5,200,509	11,943.2	7.98
Turkey Point 4	ANOHR	5,212,452	5,203,774	8,678.0	5.80
		• •			

TOTAL

149,699.5 100.00

(1) FUEL ADJUSTMENT - ALL UNITS PERFORMANCE AT TARGET
 (2) ALL OTHER UNITS PERFORMANCE AT TARGET
 (3) EXPRESSED IN REPLACEMENT ENERGY COSTS.

Issued by: Florida Power & Light Company

#### ESTIMATED UNIT PERFORMANCE DATA FLORIDA POWER & LIGHT COMPANY PERIOD OF: JANUARY THROUGH DECEMBER, 2008

Plant/Unit	<u>EAF</u>	EPOF	<u>EUOF</u>	<u>PH</u>	<u>SH</u>	<u>RSH</u>	<u>UH</u>	<u>EPOH</u>	<u>EFOH</u>	<u>EMOH</u>	NET GEN
Ft. Myers 2	86.6	4.7	8.7	8784	7292	312	1180	416	176	589	9,052,636
Lauderdale 4	93.3	2.7	4.0	8784	8193	0	591	240	176	176	3,046,785
Lauderdale 5	91.9	4.1	4.0	8784	8073	0	711	360	176	176	3,041,271
Martin 2	94.9	0.0	5.1	8784	4536	<b>38</b> 00,	448	0	176	272	2,498,162
Martin 3	93.8	1.0	5.2	8784	6304	1939	541	84	176	281	2,579,515
Martin 4	82.4	13.4	4.2	8784	5506	1733	1545	1176	176	193	2,241,574
Sanford 4	94.1	1.9	4.0	8784	7907	358	519	168	176	176	6,636,144
Sanford 5	85.5	6.2	8.3	8784	7032	477	1275	546	343	386	5,870,531
Scherer 4	85.6	10.4	4.0	8784	7521	0	1263	912	176	176	4,893,259
St. Lucie 1	82.4	11.2	6.4	8784	7238	0	1546	984	281	281	6,420,882
St. Lucie 2	93.6	0.0	6.4	8784	8222	0	562	0	281	281	6,157,258
Turkey Point 3	90.9	0.0	9.1	8784	7985	0	799	0	518	281	6,020,510
Turkey Point 4	81.7	9.6	8.7	8784	7180	0	1604	840	483	281	5,451,815

EPOF = equivalent planned outage factor. EPOF=(EPOH/PH)\*100

EUOF = equivalent unavailable outage factor. EUOF=((EFOH+EMOH)/PH)\*100

PH = period hours

SH = service hours

RSH = reserve shutdown

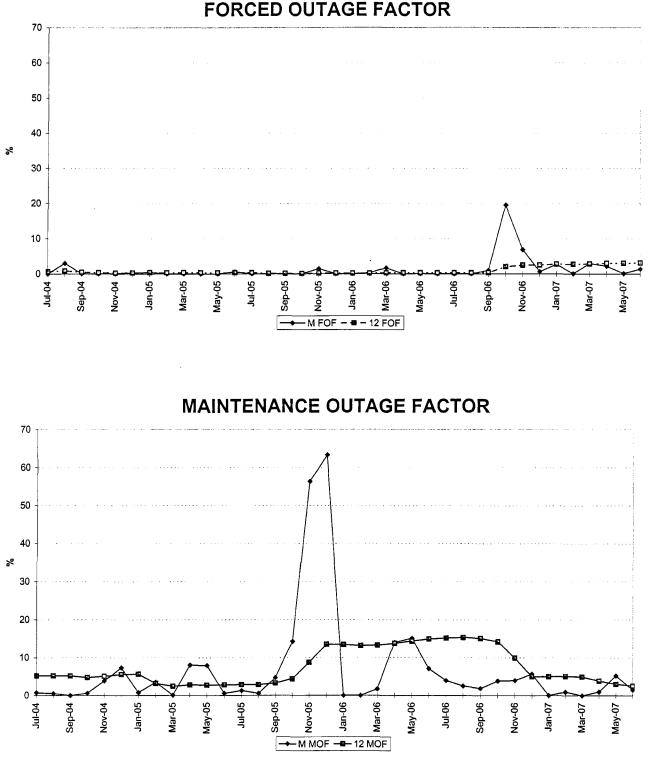
UH = unavailable hours . UH=PH-SH-RSH

EPOH = equivalent planned outage hours

EFOH = equivalent forced outage hours

EMOH = equivalent maintenance outage hours

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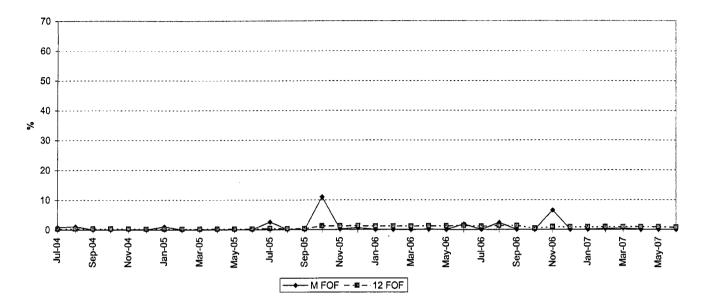
PFM 2 FORCED OUTAGE FACTOR

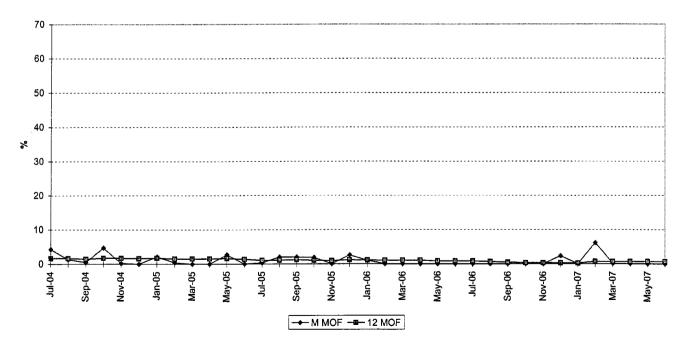
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7.201.011

PFL 4 FORCED OUTAGE FACTOR

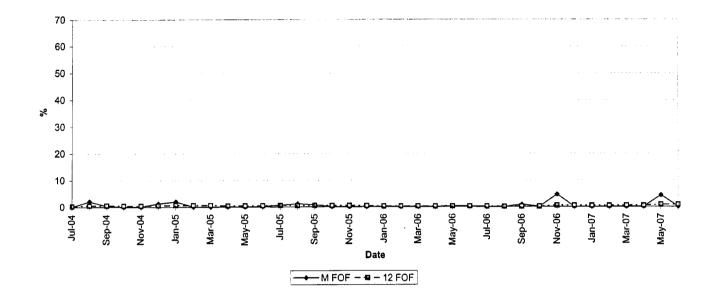


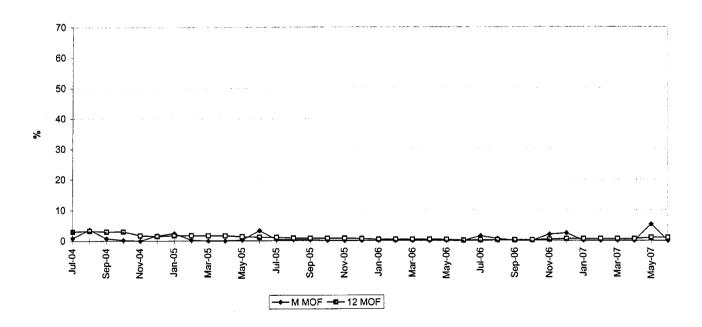


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PFL 5 FORCED OUTAGE FACTOR

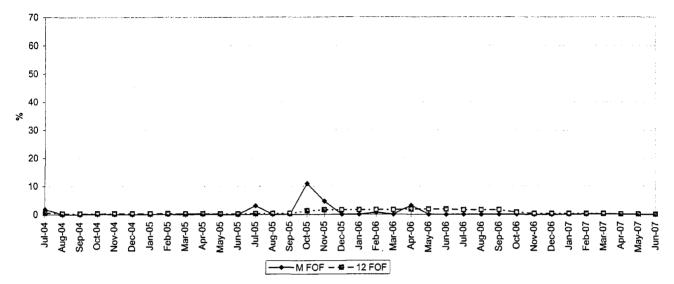


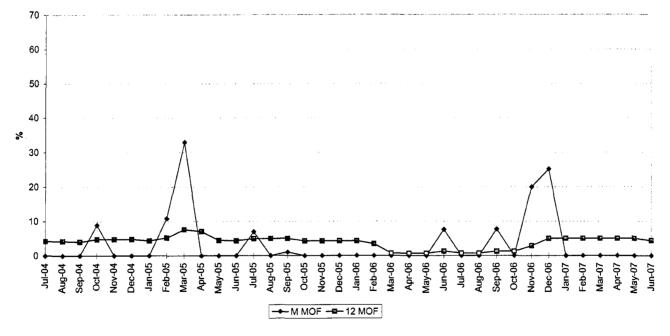


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PMR 2 FORCED OUTAGE FACTOR

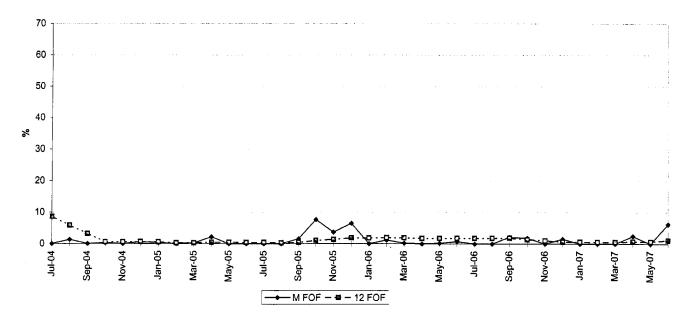


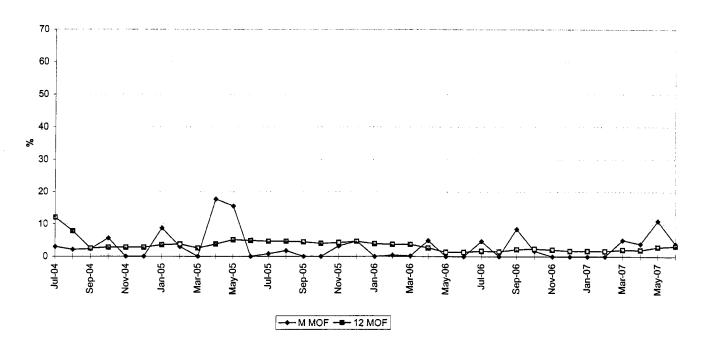


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PMG 3 FORCED OUTAGE FACTOR

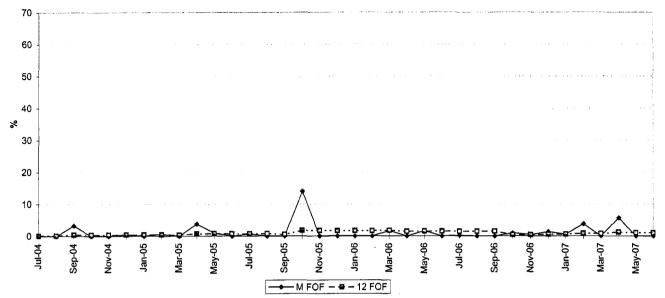


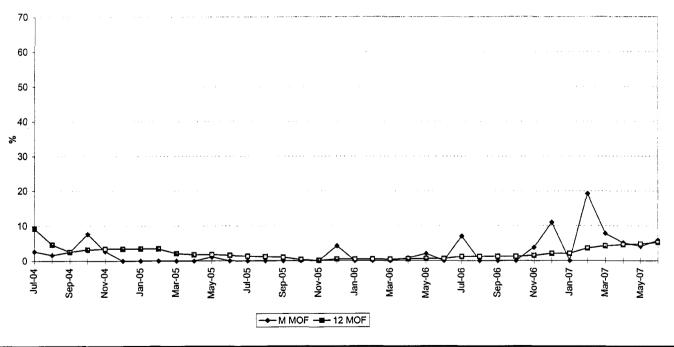


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PMG 4 FORCED OUTAGE FACTOR





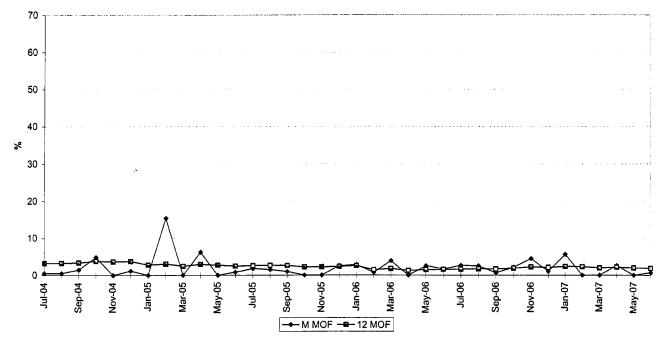
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FORCED OUTAGE FACTOR 70 60 50 40 % 30 20 10 . 0 🕏 Nov-06 May-05 Jul-05 Sep-05 Nov-05 May-06 Jul-06 Jul-04 Sep-04 Jan-05 Mar-05 Jan-06 Mar-06 Sep-06 Jan-07 Mar-07 May-07 Nov-04 - M FOF - 🛥 - 12 FOF

PSN 4

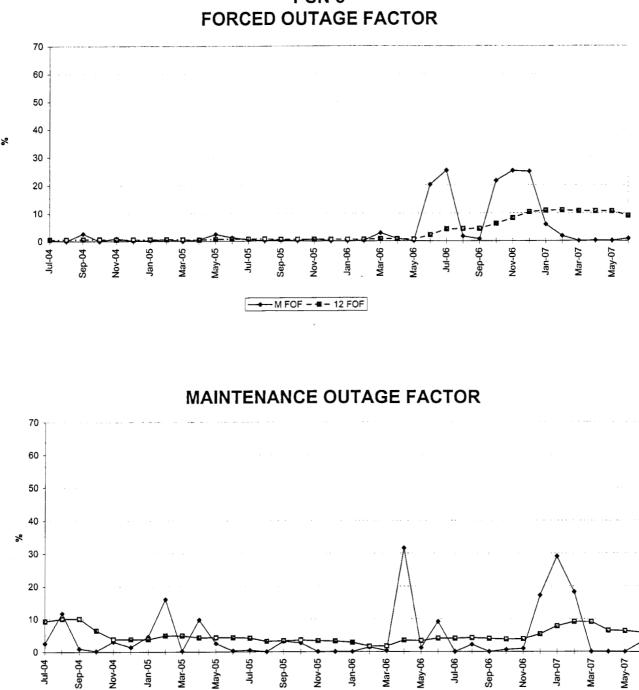
## MAINTENANCE OUTAGE FACTOR



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7.201.017



PSN 5

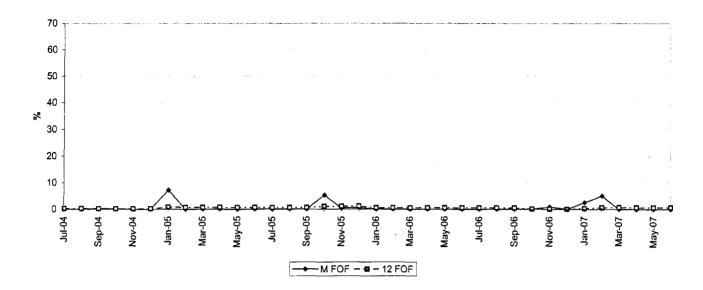
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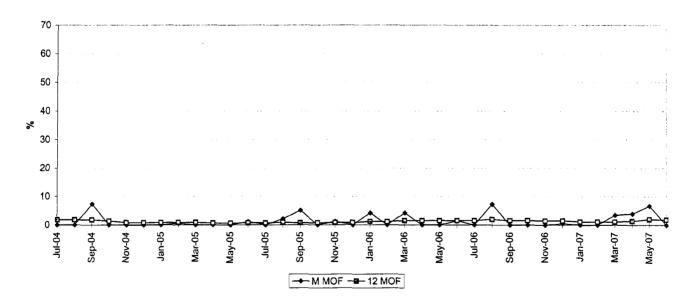
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PSG 4 FORCED OUTAGE FACTOR



## MAINTENANCE OUTAGE FACTOR



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Original Sheet No.

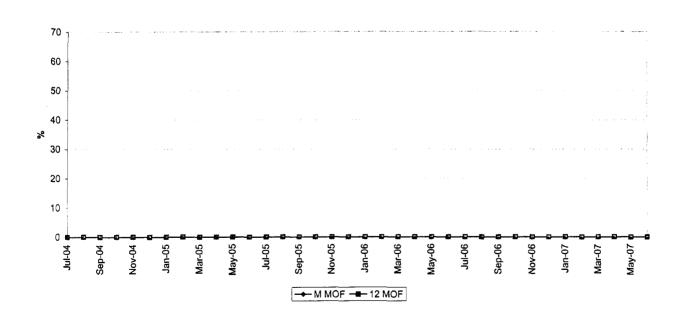
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PSL 1 FORCED OUTAGE FACTOR

## MAINTENANCE OUTAGE FACTOR

- M FOF - - - 12 FOF

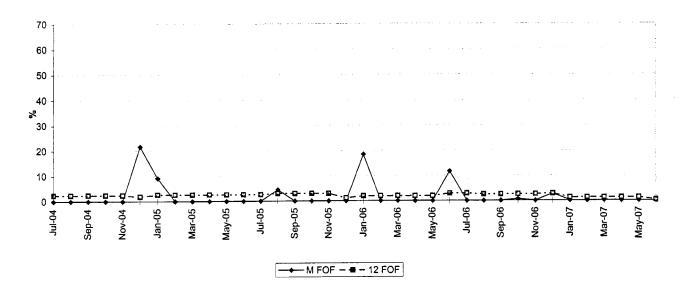
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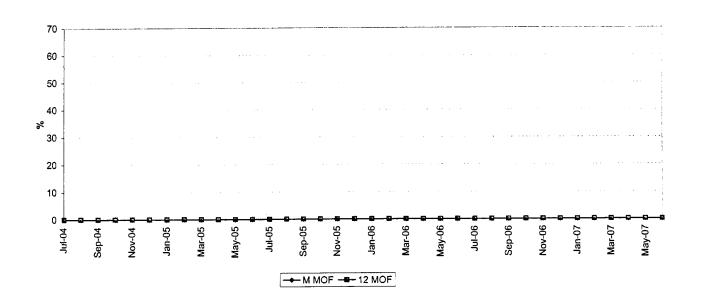


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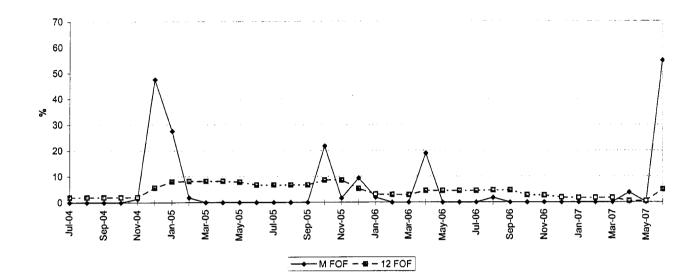


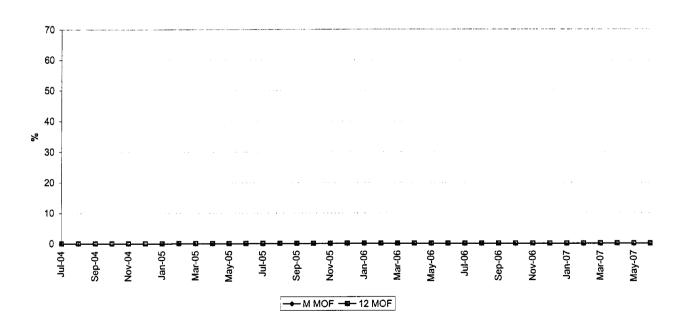


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PTN 3 FORCED OUTAGE FACTOR

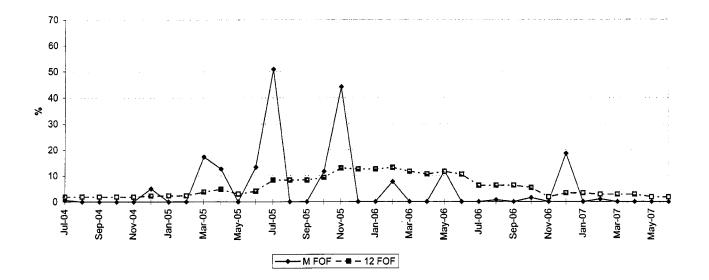


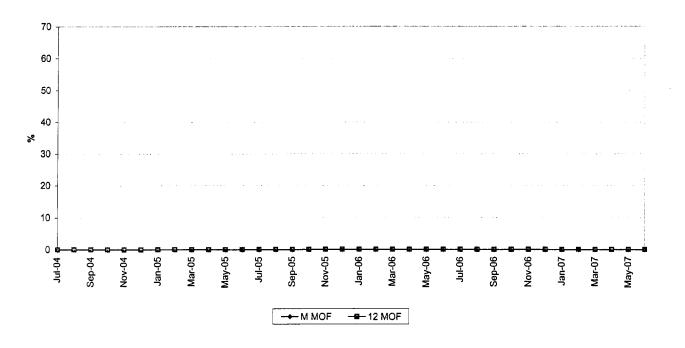


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PTN 4 FORCED OUTAGE FACTOR





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#### PLANNED OUTAGE SCHEDULE (ESTIMATED)

FLORIDA POWER & LIGHT COMPANY

PERIOD OF: JANUARY THROUGH DECEMBER, 2008

PLANT/UNIT	PLAN OUTAGE*	REASON FOR OUTAGE	LR MW**
Ft. Myers 2	01/12/2008 - 02/06/2008	A CT AND E CT MAJOR - 34% CURTAILMENT	483
Ft. Myers 2	02/09/2008 - 03/05/2008	C CT AND D CT MAJOR - 34% CURTAILMENT	483
Lauderdale 4	03/15/2008 - 03/23/2008	A CT COMBUSTOR INSP. AND B CT HOT GAS PATH INSP 100% CURTAILMENT	447
Lauderdale 5	11/01/2008 - 11/14/2008	A CT COMBUSTOR INSP. AND B CT HOT GAS PATH INSP 100% CURTAILMENT	447
Martin 2	NONE		
Martin 3	05/17/2008 - 05/23/2009	B CT COMBUSTOR INSP - 50% CURTAILMENT	239
Martin 4	03/01/2008 - 04/18/2008	A CT COMB INSP, B CT HGP, AND STEAM GEN OH - 100% CURTAILMENT	494
Sanford 4	02/02/2008 - 02/08/2008	LP EVAP - 25% CURTAILMENT	239
Sanford 4	02/09/2008 - 02/15/2008	LP EVAP - 25% CURTAILMENT	239
Sanford 4	02/16/2008 - 02/22/2008	LP EVAP - 25% CURTAILMENT	239
Sanford 4	02/23/2008 - 02/29/2008	LP EVAP - 25% CURTAILMENT	239
Sanford 5	02/09/2008 - 02/15/2008	C CT COMBUSTOR INSPECTION - 25% CURTAILMENT	239
Sanford 5	03/22/2008 - 04/04/2008	STEAM GENERATOR VALVES - 100% CURTAILMENT	239
Sanford 5	03/22/2008 - 04/11/2008	A CT/HRSG MAJOR - 25% CURTAILMENT	239
Sanford 5	07/07/2008 - 07/13/2008	B CT COMBUSTOR INSPECTION - 25% CURTAILMENT	240
Sanford 5	09/06/2008 - 09/19/2008	D CT COMBUSTOR INSPECTION - 25% CURTAILMENT	240
Scherer 4	02/02/2008 - 04/23/2008	BOILER/SV/CRV/CV/VENT - 100% CURTAILMENT	652
St. Lucie 1	10/20/2008 - 11/30/2008	REFUELING, REACTOR VESSEL IN-SERVICE INSPECTION, AND	
		REACTOR COOLING POND SEAL REPLACEMENT	853
St. Lucie 2	NONE		
Turkey Point 3	NONE		
Turkey Point 4	03/30/2008 - 05/04/2008	REFUELING AND SPLIT PIN REPLACEMENT	693

\*Dates are estimated from breaker open to breaker close

\*\*Load Reduction MW are based on the unit's MW rating during the specified outage period

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