Progress Energy

April 1, 2008

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COMMISSION CLERK

VIA HAND DELIVERY

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

Re: Ten-Year Site Plan as of December 31, 2007 080000

Dear Ms. Cole:

Pursuant to Rule 25-22.071, F.A.C., please find enclosed for filing the original and twenty-five (25) copies of Progress Energy Florida, Inc.'s 2007 Ten-Year Site Plan.

Please acknowledge your receipt of the above filing on the enclosed copy of this letter and return to the undersigned. Thank you for your assistance in this matter.

Sincerely,

John T Burnett LMS

John T. Burnett

JTB:lms
Enclosure

CMP ____
COM ____
CTR ____
ECR ____
GCL 1
OPC ____
RCA ____
SCR ____
SGA ____
SEC ____
CLK 2
~~OTH~~

Progress Energy Florida, Inc.
106 E. College Avenue
Suite 800
Tallahassee, FL 32301

Progress Energy Florida, Inc.
Ten-Year Site Plan

April 2008

2008-2017

Submitted to:
Florida Public Service Commission

Progress Energy

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REQUIRED SCHEDULES

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CODE IDENTIFICATION SHEET

Generating Unit Type

ST - Steam Turbine - Non-Nuclear
NP - Steam Power - Nuclear
GT - Gas Turbine
CT - Combustion Turbine
CC - Combined cycle
SPP - Small Power Producer
COG - Cogeneration Facility

Fuel Type

NUC - Nuclear (Uranium)
NG - Natural Gas
RFO - No. 6 Residual Fuel Oil
DFO - No. 2 Distillate Fuel Oil
BIT - Bituminous Coal
MSW - Municipal Solid Waste
WH - Waste Heat
BIO - Biomass

Fuel Transportation

WA - Water
TK - Truck
RR - Railroad
PL - Pipeline
UN - Unknown

Future Generating Unit Status

A - Generating unit capability increased
D – Generating unit capability decreased
FC - Existing generator planned for conversion to another fuel or energy source
P - Planned for installation but not authorized; not under construction
RP - Proposed for repowering or life extension
RT - Existing generator scheduled for retirement
T - Regulatory approval received but not under construction
U - Under construction, less than or equal to 50% complete
V - Under construction, more than 50% complete

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INTRODUCTION

Section 186.801 of the Florida Statutes requires electric generating utilities to submit a Ten-Year Site Plan (TYSP) to the Florida Public Service Commission (FPSC). The TYSP includes historical and projected data pertaining to the utility's load and resource needs as well as a review of those needs. Florida Power Corporation d/b/a Progress Energy Florida, Inc. TYSP is compiled in accordance with FPSC Rules 25-22.070 through 22.072, Florida Administrative Code.

Progress Energy Florida, Inc.'s (PEF) TYSP is based on the projections of long-term planning requirements that are dynamic in nature and subject to change. These planning documents should be used for general guidance concerning PEF's planning assumptions and projections, and should not be taken as an assurance that particular events discussed in the TYSP will materialize or that particular plans will be implemented. Information and projections pertinent to periods further out in time are inherently subject to greater uncertainty.

This TYSP document contains four (4) chapters as indicated below:

- **CHAPTER 1 DESCRIPTION OF EXISTING FACILITIES**

  This chapter provides an overview of PEF's generating resources as well as the transmission and distribution system.

- **CHAPTER 2 FORECAST OF ELECTRICAL POWER DEMAND AND ENERGY CONSUMPTION**

  Chapter 2 presents the history and forecast for load and peak demand as well as the forecast methodology used. DSM savings and fuel requirement projections are also included.

- **CHAPTER 3 FORECAST OF FACILITIES REQUIREMENTS**

  The resource planning forecast, transmission planning forecast as well as the proposed generating facilities and bulk transmission line additions status are discussed in Chapter 3.

- **CHAPTER 4 ENVIRONMENTAL AND LAND USE INFORMATION**

  Preferred and potential site locations along with any environmental and land use information are presented in this chapter.

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CHAPTER 1

DESCRIPTION OF EXISTING FACILITIES

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CHAPTER 1

DESCRIPTION OF EXISTING FACILITIES

EXISTING FACILITIES OVERVIEW

OWNERSHIP

Florida Power Corporation d/b/a Progress Energy Florida, Inc. (PEF or the Company) is a wholly owned subsidiary of Progress Energy, Inc. (Progress Energy). Congress enacted legislation in 2005 repealing the Public Utilities Holding Company Act of 1935 (PUHCA) effective February 8, 2006. Subsequent to that date, Progress Energy is no longer subject to regulation by the Securities and Exchange Commission as a public utility holding company.

AREA OF SERVICE

PEF has an obligation to serve approximately 1.7 million customers in Florida. Its service area covers approximately 20,000 square miles in west central Florida and includes the densely populated areas around Orlando, as well as the cities of Saint Petersburg and Clearwater. PEF is interconnected with twenty-two (22) municipal and nine (9) rural electric cooperative systems. PEF is subject to the rules and regulations of the Federal Energy Regulatory Commission (FERC), the Nuclear Regulatory Commission (NRC), and the FPSC. PEF's Service Area is shown in Figure 1.1.

TRANSMISSION/DISTRIBUTION

The Company is part of a nationwide interconnected power network that enables power to be exchanged between utilities. The PEF transmission system includes approximately 5,000 circuit miles of transmission lines. The distribution system includes approximately 18,000 circuit miles of overhead distribution conductors and approximately 13,000 miles of underground distribution cable.

ENERGY MANAGEMENT and ENERGY EFFICIENCY

PEF customers participating in the company's residential Energy Management program help to manage future growth and costs. At the close of 2007, approximately 390,000 customers participating in the Energy Management program contributed about 760,500 kW of winter peak-shaving capacity while 273,414 participants contributed about 290,042 kW of summer peak-shaving capacity for use during high load periods.

PEF's DSM Plan currently consists of seven (7) residential programs, eight (8) commercial and industrial programs, and one (1) research and development program. This includes the thirty-nine (39) additional DSM measures and two (2) new residential programs approved by the FPSC on January 5, 2007 (Docket 060647: Consummating Order PSC-07-0017-CO-EG making Order PSC-0601018-TRG-EG effective and final). Megawatt (MW) contributions to the TYSP have increased as a result of these changes to conservation, standby, and residential load management programs.

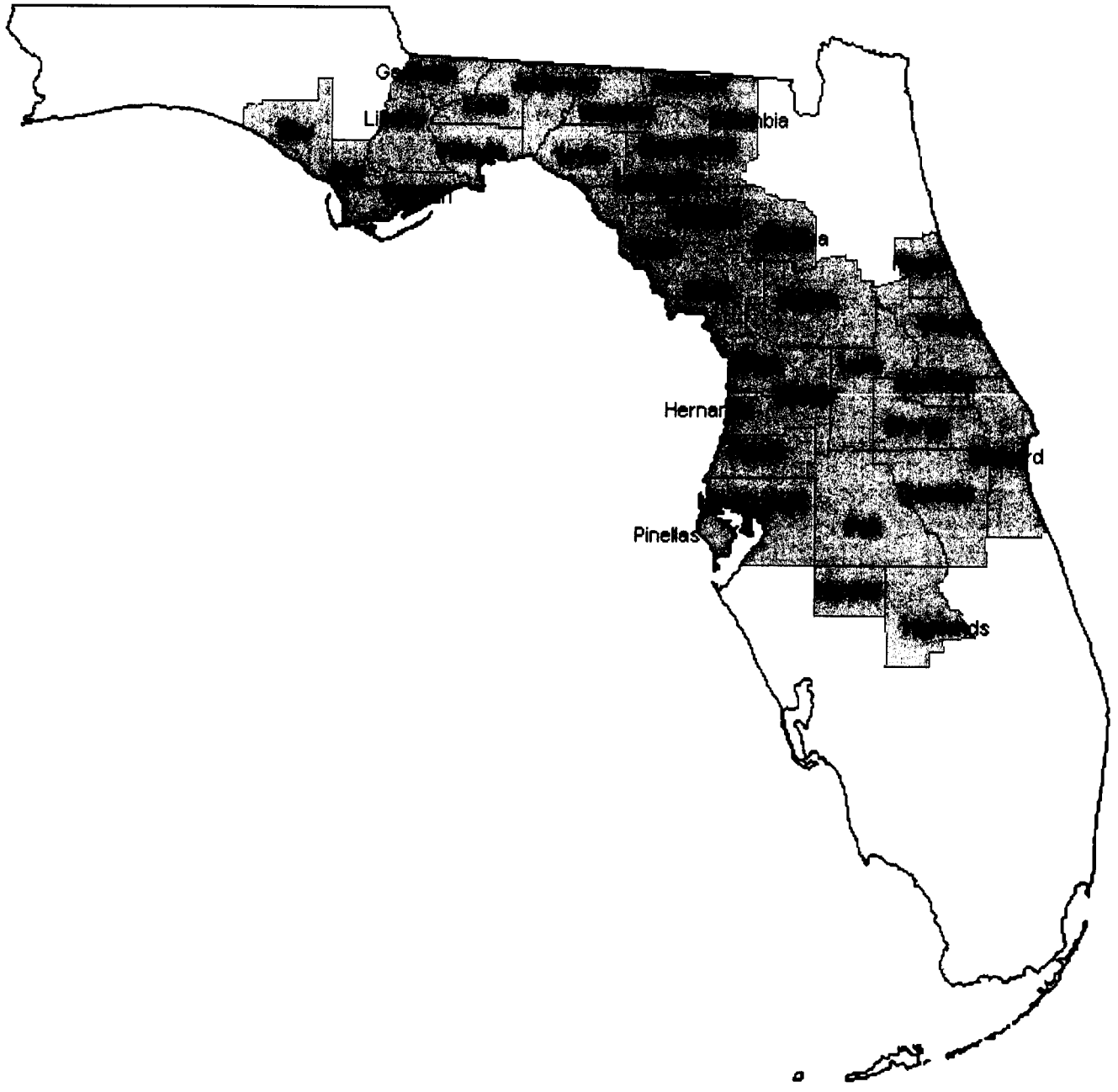
TOTAL CAPACITY RESOURCE

As of December 31, 2007, PEF had total summer capacity resources of approximately 11,215 MW consisting of installed capacity of 9,293 MW (excluding Crystal River Unit 3 joint ownership) and 1,922 MW of firm purchased power. Additional information on PEF's existing generating resources can be found in Schedule 1 and Table 3.1.

FIGURE 1.1

PROGRESS ENERGY FLORIDA

Service Area Map



PROGRESS ENERGY FLORIDA

SCHEDULE 1
EXISTING GENERATING FACILITIES

AS OF DECEMBER 31, 2007

(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
EIA		UNIT	LOCATION	UNIT	FUEL		FUEL TRANSPORT		ALT. FUEL	COM'L IN-SERVICE	EXPECTED RETIREMENT	GEN. MAX. NAMEPLATE	NET CAPABILITY SUMMER	NET CAPABILITY WINTER
PLANT CODE	PLANT NAME	NO.	(COUNTY)	TYPE	PRI.	ALT.	PRI.	ALT.	DAYS USE	MO./YEAR	MO./YEAR	KW	MW	MW
	STEAM													
8048	ANCLOTE	1	PASCO	ST	RFO	NG	PL	PL		10/74		556,200	499	522
8048	ANCLOTE	2	PASCO	ST	RFO	NG	PL	PL		10/78		556,200	507	526
634	BARTOW	1	PINELLAS	ST	RFO		WA			09/58	6/2009	127,500	121	125
634	BARTOW	2	PINELLAS	ST	RFO		WA			08/61	6/2009	127,500	119	124
634	BARTOW	3	PINELLAS	ST	RFO	NG	WA	PL		07/63	6/2009	239,360	204	215
628	CRYSTAL RIVER	1	CITRUS	ST	BIT		RR	WA		10/66		440,550	372	386
628	CRYSTAL RIVER	2	CITRUS	ST	BIT		RR	WA		11/69		523,800	494	496
628	CRYSTAL RIVER	3 *	CITRUS	NP	NUC		TK			03/77		890,460	769	788
628	CRYSTAL RIVER	4	CITRUS	ST	BIT		WA	RR		12/82		739,260	722	734
628	CRYSTAL RIVER	5	CITRUS	ST	BIT		WA	RR		10/84		739,260	722	734
638	SUWANNEE RIVER	1	SUWANNEE	ST	RFO	NG	TK/RR	PL		11/53	6/2013	34,500	30	33
638	SUWANNEE RIVER	2	SUWANNEE	ST	RFO	NG	TK/RR	PL		11/54	6/2013	37,500	28	31
638	SUWANNEE RIVER	3	SUWANNEE	ST	RFO	NG	TK/RR	PL		10/56	6/2013	75,000	71	82
													4,658	**4,796**
	COMBINED-CYCLE													
7302	HINES ENERGY COMPLEX	1	POLK	CC	NG	DFO	PL	TK	2***	04/99		546,500	466	528
7302	HINES ENERGY COMPLEX	2	POLK	CC	NG	DFO	PL	TK		12/03		548,250	490	562
7302	HINES ENERGY COMPLEX	3	POLK	CC	NG	DFO	PL	TK		11/05		561,000	499	570
7302	HINES ENERGY COMPLEX	4	POLK	CC	NG	DFO	PL	TK		12/07		610,000	475	517
7699	TIGER BAY	1	POLK	CC	NG		PL			08/97		278,100	204	225
													2,134	**2,402**
	COMBUSTION TURBINE													
624	AVON PARK	P1	HIGHLANDS	CT	NG	DFO	PL	TK	3***	12/68	*****	33,790	24	34
624	AVON PARK	P2	HIGHLANDS	CT	DFO		TK			12/68	*****	33,790	25	36
634	BARTOW	P1, P3	PINELLAS	CT	DFO		WA			05/72, 06/72		111,400	86	112
634	BARTOW	P2	PINELLAS	CT	NG	DFO	PL	WA	8	06/72		55,700	43	56
634	BARTOW	P4	PINELLAS	CT	NG	DFO	PL	WA	8	06/72		55,700	47	58
627	BAYBORO	P1-P4	PINELLAS	CT	DFO		WA			04/73		226,800	178	232
6046	DEBARY	P1-P6	VOLUSIA	CT	DFO		TK			12/75-04/76		401,220	313	393
6046	DEBARY	P7-P9	VOLUSIA	CT	NG	DFO	PL	TK	8	10/92		345,000	247	287
6046	DEBARY	P10	VOLUSIA	CT	DFO		TK			10/92		115,000	82	99
630	HIGGINS	P1-P2	PINELLAS	CT	NG	DFO	PL	TK		03/69, 04/69	*****	67,580	53	68
630	HIGGINS	P3-P4	PINELLAS	CT	NG	DFO	PL	TK	1	12/70, 01/71	*****	85,850	60	65
8049	INTERCESSION CITY	P1-P6	OSCEOLA	CT	DFO		PL,TK			05/74		340,200	280	369
8049	INTERCESSION CITY	P7-P10	OSCEOLA	CT	NG	DFO	PL	PL,TK	5	10/93		460,000	329	376
8049	INTERCESSION CITY	P11 **	OSCEOLA	CT	DFO		PL,TK			01/97		165,000	143	161
8049	INTERCESSION CITY	P12-P14	OSCEOLA	CT	NG	DFO	PL	PL,TK	5	12/00		345,000	232	278
637	RIO PINAR	P1	ORANGE	CT	DFO		TK			11/70	*****	19,290	12	16
638	SUWANNEE RIVER	P1, P3	SUWANNEE	CT	NG	DFO	PL	TK	9****	10/80, 11/80		122,400	103	133
638	SUWANNEE RIVER	P2	SUWANNEE	CT	DFO		TK			10/80		61,200	50	66
629	TURNER	P1-P2	VOLUSIA	CT	DFO		TK			10/70	*****	38,580	22	32
629	TURNER	P3	VOLUSIA	CT	DFO		TK			08/74		71,200	63	85
629	TURNER	P4	VOLUSIA	CT	DFO		TK			08/74		71,200	63	84
7345	UNIV. OF FLA.	P1	ALACHUA	CT	NG		PL			01/94		43,000	46	47
													2,501	**3,087**
												TOTAL RESOURCES (MW)	**9,293**	**10,285**

* REPRESENTS APPROXIMATELY 91.8% PEF OWNERSHIP OF UNIT

** SUMMER CAPABILITY (JUNE THROUGH SEPTEMBER) OWNED BY GEORGIA POWER COMPANY

*** FOR ENTIRE PLANT

**** P1 REQUIRES A 3-4 DAY OUTAGE IN ORDER TO SWITCH BETWEEN NG & DFO

***** PEAKERS at AVON PARK, HIGGINS, RIO PINAR, TURNER ARE ESTIMATED TO BE PUT IN COLD STAND-BY OR RETIRED BY 6/2016.

CHAPTER 2

FORECAST OF ELECTRIC POWER DEMAND AND ENERGY CONSUMPTION

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CHAPTER 2
FORECAST OF ELECTRIC POWER DEMAND
AND
ENERGY CONSUMPTION

OVERVIEW

The information presented in the following Schedules 2, 3 and 4 represent PEF's history and forecast of customers, energy sales (GWh), and peak demand (MW). High and low scenarios are also presented for sensitivity purposes.

The base case was developed using assumptions to predict a forecast with a 50/50 probability, or most likely scenario. The high and low scenarios, which have a 90/10 probability of occurrence or an 80 percent probability of an outcome falling between the high and low cases, employed a Monte Carlo simulation procedure that studied 1,000 possible outcomes of retail demand and energy.

PEF's customer growth is expected to average 1.8 percent between 2008 and 2017, which is less than the ten-year historical average of 2.2 percent. Slower population growth, based on the latest projection from the University of Florida's Bureau of Economic and Business Research, and economic conditions less favorable for the housing/construction industry (including, for example, tighter mortgage credit availability as well as higher property insurance rates and property taxes) result in a lower base case customer projection when compared to the higher historical growth rate. This translates into lower projected energy and demand growth rates from historic rate levels.

Net energy for load (NEL), which had grown at an average of 2.6 percent between 1998 and 2007, is expected to increase by 2.5 percent per year from 2008 to 2017 in the base case, 2.7 percent in the high case and 2.2 percent in the low case. A lower contribution from the wholesale jurisdiction, which grew an average of 10.2 percent between 1998 and 2007, results in lower expected system growth going forward than the historic rate. Retail NEL, which grew at a 1.8 percent average rate historically, is expected to grow 2.2 percent over the next ten-year

period. The higher projected growth rate is solely due to the hottest summer weather in over thirty-two (32) years in 1998 as well as extremely mild winter weather conditions in 2007. Both conditions work to hold down the historical average growth rate. The projected growth rate for NEL assumes normal weather. Wholesale NEL is expected to average 2.4 percent between 2008 and 2017.

Summer net firm demand is expected to grow at an average of 1.9 percent per year during the next ten (10) years. This is lower than the 3.5 percent growth rate experienced throughout the last ten (10) years. Again, lower contribution from the wholesale jurisdiction is expected going forward and a higher load management capability for the projected period. High and low summer growth rates for net firm demand are 2.2 percent and 1.6 percent per year, respectively. Winter net firm demand is projected to grow at 2.4 percent per year after having increased by 2.7 percent per year from 1998 to 2007. High and low winter net firm demand growth rates are 2.7 percent and 1.7 percent, respectively.

Summer net firm retail demand is expected to grow at an average of 2.0 percent per year during the next ten (10) years; this is lower than the 3.2 percent average annual growth rate experienced throughout the last ten-year period. The historical growth percentage is driven by a period of declining load management capability while the projection period has a return to higher capability. High and low summer growth rates for net firm retail demand are 2.3 percent and 1.6 percent per year, respectively. Winter net firm retail demand is projected to grow at approximately 1.6 percent per year after having grown by 2.1 percent from 1998 to 2007. Again, higher load control capability is incorporated in the projection period. High and low winter net firm retail demand growth rates are 2.0 percent and 1.3 percent, respectively.

ENERGY CONSUMPTION AND DEMAND FORECAST SCHEDULES

SCHEDULE	DESCRIPTION
2.1, 2.2 and 2.3	History and Forecast of Energy Consumption and Number of Customers by Customer Class
3.1.1, 3.1.2 and 3.1.3	History and Forecast of Base, High and Low Summer Peak Demand (MW)
3.2.1, 3.2.2 and 3.2.3	History and Forecast of Base, High, and Low Winter Peak Demand (MW)
3.3.1, 3.3.2 and 3.3.3	History and Forecast of Base, High and Low Annual Net Energy for Load (GWh)
4	Previous Year Actual and Two-Year Forecast of Peak Demand and Net Energy for Load by Month

PROGRESS ENERGY FLORIDA

SCHEDULE 2.1
HISTORY AND FORECAST OF ENERGY CONSUMPTION AND
NUMBER OF CUSTOMERS BY CUSTOMER CLASS

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	RURAL AND RESIDENTIAL					COMMERCIAL		
YEAR	PEF POPULATION	MEMBERS PER HOUSEHOLD	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER
1998	2,959,331	2.502	16,526	1,182,786	13,972	9,999	136,345	73,336
1999	3,047,023	2.511	16,245	1,213,470	13,387	10,327	140,897	73,295
2000	3,044,983	2.467	17,116	1,234,286	13,867	10,813	143,475	75,368
2001	3,142,066	2.465	17,604	1,274,672	13,810	11,061	146,983	75,251
2002	3,210,839	2.467	18,754	1,301,515	14,409	11,420	150,577	75,842
2003	3,287,164	2.468	19,429	1,331,914	14,587	11,553	154,294	74,876
2004	3,368,023	2.468	19,347	1,364,677	14,177	11,734	158,780	73,898
2005	3,449,223	2.469	19,894	1,397,012	14,240	11,945	161,001	74,190
2006	3,533,542	2.468	20,021	1,431,743	13,983	11,975	162,774	73,568
2007	3,579,718	2.481	19,912	1,442,853	13,800	12,184	162,837	74,821
2008	3,639,414	2.477	21,089	1,469,283	14,354	12,556	165,924	75,672
2009	3,711,633	2.479	21,766	1,497,230	14,538	12,880	169,772	75,866
2010	3,782,417	2.480	22,362	1,525,168	14,662	13,165	173,623	75,824
2011	3,854,891	2.482	23,027	1,553,139	14,826	13,450	177,480	75,784
2012	3,927,313	2.484	23,718	1,581,044	15,002	13,750	181,327	75,828
2013	4,000,049	2.486	24,396	1,609,030	15,162	14,041	185,185	75,824
2014	4,072,642	2.488	25,056	1,636,914	15,307	14,347	189,028	75,900
2015	4,142,978	2.489	25,723	1,664,515	15,454	14,659	192,832	76,022
2016	4,209,895	2.491	26,369	1,690,042	15,603	14,990	196,351	76,344
2017	4,275,767	2.493	27,059	1,715,109	15,777	15,351	199,807	76,832

PROGRESS ENERGY FLORIDA

SCHEDULE 2.2
HISTORY AND FORECAST OF ENERGY CONSUMPTION AND
NUMBER OF CUSTOMERS BY CUSTOMER CLASS

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	INDUSTRIAL						
YEAR	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER	RAILROADS AND RAILWAYS GWh	STREET & HIGHWAY LIGHTING GWh	OTHER SALES TO PUBLIC AUTHORITIES GWh	TOTAL SALES TO ULTIMATE CONSUMERS GWh
1998	4,375	2,707	1,616,180	0	27	2,459	33,386
1999	4,334	2,629	1,648,536	0	27	2,509	33,442
2000	4,249	2,535	1,676,134	0	28	2,626	34,832
2001	3,872	2,551	1,517,836	0	28	2,698	35,262
2002	3,835	2,535	1,512,821	0	28	2,822	36,859
2003	4,001	2,643	1,513,810	0	29	2,946	37,958
2004	4,069	2,733	1,488,840	0	28	3,016	38,194
2005	4,140	2,703	1,531,632	0	27	3,171	39,176
2006	4,160	2,697	1,542,455	0	27	3,249	39,432
2007	3,819	2,668	1,431,409	0	26	3,341	39,282
2008	4,066	2,655	1,531,450	0	27	3,470	41,208
2009	4,143	2,650	1,563,396	0	27	3,580	42,396
2010	4,159	2,645	1,572,401	0	27	3,695	43,408
2011	4,247	2,645	1,605,671	0	27	3,812	44,563
2012	4,278	2,645	1,617,391	0	27	3,935	45,708
2013	4,359	2,645	1,648,015	0	27	4,061	46,885
2014	4,379	2,645	1,655,577	0	27	4,190	48,000
2015	4,381	2,645	1,656,333	0	27	4,322	49,113
2016	4,401	2,645	1,663,894	0	27	4,457	50,245
2017	4,436	2,645	1,677,127	0	27	4,595	51,469

PROGRESS ENERGY FLORIDA

SCHEDULE 2.3
HISTORY AND FORECAST OF ENERGY CONSUMPTION AND
NUMBER OF CUSTOMERS BY CUSTOMER CLASS

(1)	(2)	(3)	(4)	(5)	(6)
YEAR	SALES FOR RESALE GWh	UTILITY USE & LOSSES GWh	NET ENERGY FOR LOAD GWh	OTHER CUSTOMERS (AVERAGE NO.)	TOTAL NO. OF CUSTOMERS
1998	2,340	2,037	37,763	19,013	1,340,851
1999	3,267	2,451	39,160	19,601	1,376,597
2000	3,732	2,678	41,242	20,004	1,400,299
2001	3,839	1,832	40,933	20,752	1,444,958
2002	3,173	2,535	42,567	21,155	1,475,783
2003	3,359	2,594	43,911	21,665	1,510,516
2004	4,301	2,773	45,268	22,437	1,548,627
2005	5,195	2,507	46,878	22,701	1,583,417
2006	4,220	2,389	46,041	23,182	1,620,396
2007	5,598	2,753	47,633	24,010	1,632,368
2008	4,798	2,728	48,734	24,463	1,662,325
2009	4,527	2,845	49,768	25,035	1,694,687
2010	5,238	2,969	51,615	25,619	1,727,055
2011	5,363	2,987	52,913	26,205	1,759,469
2012	5,892	3,095	54,695	26,794	1,791,810
2013	6,032	3,128	56,045	27,380	1,824,240
2014	5,708	3,197	56,905	27,966	1,856,553
2015	5,795	3,258	58,166	28,552	1,888,544
2016	5,874	3,329	59,448	29,140	1,918,178
2017	5,953	3,414	60,836	29,723	1,947,284

PROGRESS ENERGY FLORIDA

SCHEDULE 3.1.1
HISTORY AND FORECAST OF SUMMER PEAK DEMAND (MW)
BASE CASE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(OTH)	(10)
YEAR	TOTAL	WHOLESALE	RETAIL	NTERRUPTIBL	RESIDENTIAL LOAD MANAGEMENT	RESIDENTIAL CONSERVATION	COMM. / IND. LOAD MANAGEMENT	COMM. / IND. CONSERVATIO	OTHER DEMAND REDUCTIONS	NET FIRM DEMAND
1998	8,367	943	7,424	291	438	100	42	151	182	7,163
1999	9,039	1,326	7,713	292	505	115	45	156	183	7,743
2000	8,916	1,319	7,597	277	455	129	48	158	75	7,774
2001	8,847	1,117	7,730	283	414	142	48	159	75	7,726
2002	9,426	1,203	8,223	305	390	156	43	161	75	8,296
2003	8,886	887	7,999	300	354	172	44	164	75	7,778
2004	9,589	1071	8,518	531	320	188	39	166	110	8,235
2005	10,356	1118	9,238	448	309	206	38	169	110	9,076
2006	10,153	1257	8,896	329	292	226	37	172	66	9,031
2007	10,938	1544	9,394	290	294	243	43	179	110	9,778
2008	10,647	1,343	9,304	305	308	259	52	189	110	9,424
2009	10,742	1,191	9,551	306	326	275	61	198	125	9,451
2010	11,026	1,265	9,762	297	347	292	70	207	125	9,689
2011	11,272	1,282	9,990	302	368	308	79	217	125	9,873
2012	11,659	1,439	10,220	310	389	325	89	226	125	10,195
2013	11,912	1,464	10,449	316	403	342	98	235	125	10,393
2014	12,132	1,463	10,670	316	413	360	107	244	125	10,568
2015	12,361	1,475	10,886	316	417	367	112	248	125	10,776
2016	12,578	1,491	11,087	317	424	380	115	256	125	10,961
2017	12,797	1,510	11,287	318	429	393	119	263	125	11,150

Historical Values (1998 - 2007):

Col. (2) = recorded peak + implemented load control + residential and commercial/industrial conservation and customer-owned self-service cogeneration.

Cols. (5) - (9) = Represent total cumulative capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) =Customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

Projected Values (2008 - 2017):

Cols. (2) - (4) = forecasted peak without load control, conservation, and customer-owned self-service cogeneration.

Cols. (5) - (9) = cumulative conservation and load control capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) = customer-owned self-service cogeneration.

Col. (10) (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

PROGRESS ENERGY FLORIDA

SCHEDULE 3.1.2
HISTORY AND FORECAST OF SUMMER PEAK DEMAND (MW)
HIGH LOAD FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(OTH)	(10)
YEAR	TOTAL	WHOLESALE	RETAIL	NTERRUPTIBL	RESIDENTIAL LOAD MANAGEMENT	RESIDENTIAL CONSERVATIO	COMM. / IND. LOAD MANAGEMENT	COMM. / IND. CONSERVATIO	OTHER DEMAND REDUCTIONS	NET FIRM DEMAND
1998	8,367	943	7,424	291	438	100	42	151	182	7,163
1999	9,039	1,326	7,713	292	505	115	45	156	183	7,743
2000	8,916	1,319	7,597	277	455	129	48	158	75	7,774
2001	8,847	1,117	7,730	283	414	142	48	159	75	7,726
2002	9,426	1,203	8,223	305	390	156	43	161	75	8,296
2003	8,886	887	7,999	300	354	172	44	164	75	7,778
2004	9,589	1,071	8,518	531	320	188	39	166	110	8,235
2005	10,356	1,118	9,238	448	309	206	38	169	110	9,076
2006	10,153	1,257	8,896	329	292	226	37	172	66	9,031
2007	10,938	1,544	9,394	290	294	243	43	179	110	9,778
2008	10,780	1,343	9,437	305	308	259	52	189	110	9,557
2009	10,894	1,191	9,703	306	326	275	61	198	125	9,603
2010	11,206	1,265	9,941	297	347	292	70	207	125	9,868
2011	11,468	1,282	10,186	302	368	308	79	217	125	10,069
2012	11,890	1,439	10,451	310	389	325	89	226	125	10,426
2013	12,163	1,464	10,699	316	403	342	98	235	125	10,644
2014	12,416	1,463	10,953	316	413	360	107	244	125	10,851
2015	12,696	1,475	11,221	316	417	367	112	248	125	11,111
2016	12,951	1,491	11,460	317	424	380	115	256	125	11,334
2017	13,220	1,510	11,710	318	429	393	119	263	125	11,573

Historical Values (1998 - 2007):

Col. (2) = recorded peak + implemented load control + residential and commercial/industrial conservation and customer-owned self-service cogeneration.

Cols. (5) - (9) = Represent total cumulative capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) =Customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

Projected Values (2008 - 2017):

Cols. (2) - (4) = forecasted peak without load control, conservation, and customer-owned self-service cogeneration.

Cols. (5) - (9) = cumulative conservation and load control capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) = customer-owned self-service cogeneration.

Col. (10) (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

PROGRESS ENERGY FLORIDA

SCHEDULE 3.1.3
HISTORY AND FORECAST OF SUMMER PEAK DEMAND (MW)
LOW LOAD FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(OTH)	(10)
YEAR	TOTAL	WHOLESALE	RETAIL	INTERRUPTIBLE	RESIDENTIAL LOAD MANAGEMENT	RESIDENTIAL CONSERVATION	COMM. / IND. LOAD MANAGEMENT	COMM. / IND. CONSERVATION	OTHER DEMAND REDUCTIONS	NET FIRM DEMAND
1998	8,367	943	7,424	291	438	100	42	151	182	7,163
1999	9,039	1,326	7,713	292	505	115	45	156	183	7,743
2000	8,916	1,319	7,597	277	455	129	48	158	75	7,774
2001	8,847	1,117	7,730	283	414	142	48	159	75	7,726
2002	9,426	1,203	8,223	305	390	156	43	161	75	8,296
2003	8,886	887	7,999	300	354	172	44	164	75	7,778
2004	9,589	1,071	8,518	531	320	188	39	166	110	8,235
2005	10,356	1,118	9,238	448	309	206	38	169	110	9,076
2006	10,153	1,257	8,896	329	292	226	37	172	66	9,031
2007	10,938	1,544	9,394	290	294	243	43	179	110	9,778
2008	10,512	1,343	9,169	305	308	259	52	189	110	9,289
2009	10,598	1,191	9,407	306	326	275	61	198	125	9,307
2010	10,867	1,265	9,602	297	347	292	70	207	125	9,529
2011	11,082	1,282	9,800	302	368	308	79	217	125	9,683
2012	11,440	1,439	10,001	310	389	325	89	226	125	9,976
2013	11,657	1,464	10,193	316	403	342	98	235	125	10,138
2014	11,841	1,463	10,378	316	413	360	107	244	125	10,276
2015	12,027	1,475	10,552	316	417	367	112	248	125	10,442
2016	12,208	1,491	10,717	317	424	380	115	256	125	10,591
2017	12,366	1,510	10,856	318	429	393	119	263	125	10,719

Historical Values (1998 - 2007):

Col. (2) = recorded peak + implemented load control + residential and commercial/industrial conservation and customer-owned self-service cogeneration.

Cols. (5) - (9) = Represent total cumulative capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) - Customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

Projected Values (2008 - 2017):

Cols. (2) - (4) = forecasted peak without load control, conservation, and customer-owned self-service cogeneration.

Cols. (5) - (9) = cumulative conservation and load control capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) - customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

PROGRESS ENERGY FLORIDA

SCHEDULE 3.2.1
HISTORY AND FORECAST OF WINTER PEAK DEMAND (MW)
BASE CASE

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(OTH)	(10)
YEAR	TOTAL	WHOLESALE	RETAIL	INTERRUPTIBLE	RESIDENTIAL LOAD MANAGEMENT	RESIDENTIAL CONSERVATION	COMM. / IND. LOAD MANAGEMENT	COMM. / IND. CONSERVATION	OTHER DEMAND REDUCTIONS	NET FIRM DEMAND
1997/98	7,752	941	6,811	318	663	166	17	114	168	6,306
1998/99	10,473	1,741	8,732	305	874	200	18	119	187	8,770
1999/00	10,047	1,728	8,319	225	849	234	20	121	182	8,416
2000/01	11,458	1,984	9,474	255	826	259	23	123	187	9,785
2001/02	10,685	1,624	9,061	285	819	285	24	123	188	8,961
2002/03	11,555	1,538	10,017	271	793	313	27	124	198	9,829
2003/04	9,325	1,167	8,158	498	786	343	26	125	262	7,286
2004/05	10,833	1,600	9,233	575	777	371	26	125	282	8,676
2005/06	10,700	1,467	9,233	298	768	413	26	126	239	8,830
2006/07	9,899	1,576	8,323	248	758	454	27	128	262	8,022
2007/08	12,125	2,035	10,090	312	774	495	37	135	297	10,075
2008/09	12,002	1,715	10,288	305	791	538	47	142	299	9,881
2009/10	12,515	1,999	10,516	292	809	580	57	149	318	10,311
2010/11	12,819	2,073	10,747	302	827	623	67	155	321	10,524
2011/12	13,351	2,382	10,969	304	844	666	76	162	325	10,974
2012/13	13,721	2,518	11,203	316	862	710	86	169	328	11,250
2013/14	13,873	2,448	11,425	317	880	754	96	176	332	11,318
2014/15	14,182	2,538	11,644	315	897	798	105	183	335	11,549
2015/16	14,484	2,628	11,855	316	906	837	110	189	339	11,786
2016/17	14,771	2,716	12,054	317	914	876	115	195	342	12,011
2017/18	15,059	2,807	12,253	318	921	913	118	201	345	12,242

Historical Values (1998 - 2007):

Col. (2) = recorded peak + implemented load control + residential and commercial/industrial conservation and customer-owned self-service cogeneration.

Cols. (5) - (9) - Represent total cumulative capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) = Voltage reduction and customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

Projected Values (2008 - 2018):

Cols. (2) - (4) forecasted peak without load control and conservation.

Cols. (5) - (9) - Represent cumulative conservation and load control capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) = Voltage reduction and customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

PROGRESS ENERGY FLORIDA

SCHEDULE 3.2.2
HISTORY AND FORECAST OF WINTER PEAK DEMAND (MW)
HIGH LOAD FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(OTH)	(10)
YEAR	TOTAL	WHOLESALE	RETAIL	INTERRUPTIBLE	RESIDENTIAL LOAD MANAGEMENT	RESIDENTIAL CONSERVATION	COMM. / IND. LOAD MANAGEMENT	COMM. / IND. CONSERVATION	OTHER DEMAND REDUCTIONS	NET FIRM DEMAND
1997/98	7,752	941	6,811	318	663	166	17	114	168	6,306
1998/99	10,473	1,741	8,732	305	874	200	18	119	187	8,770
1999/00	10,047	1,728	8,319	225	849	234	20	121	182	8,416
2000/01	11,458	1,984	9,474	255	826	259	23	123	187	9,785
2001/02	10,685	1,624	9,061	285	819	285	24	123	188	8,961
2002/03	11,555	1,538	10,017	271	793	313	27	124	198	9,829
2003/04	9,325	1,167	8,158	498	786	343	26	125	262	7,286
2004/05	10,833	1,600	9,233	575	777	371	26	125	282	8,676
2005/06	10,700	1,467	9,233	298	768	413	26	126	239	8,830
2006/07	9,899	1,576	8,323	248	758	454	27	128	262	8,022
2007/08	12,267	2,035	10,232	312	774	495	37	135	297	10,217
2008/09	12,165	1,715	10,451	305	791	538	47	142	299	10,044
2009/10	12,704	1,999	10,704	292	809	580	57	149	318	10,499
2010/11	13,026	2,073	10,954	302	827	623	67	155	321	10,731
2011/12	13,593	2,382	11,210	304	844	666	76	162	325	11,215
2012/13	13,982	2,518	11,464	316	862	710	86	169	328	11,511
2013/14	14,168	2,448	11,720	317	880	754	96	176	332	11,613
2014/15	14,530	2,538	11,992	315	897	798	105	183	335	11,897
2015/16	14,870	2,628	12,242	316	906	837	110	189	339	12,173
2016/17	15,208	2,716	12,492	317	914	876	115	195	342	12,449
2016/17	15,568	2,807	12,761	318	921	913	118	201	345	12,751

Historical Values (1998 - 2007):

Col. (2) = recorded peak + implemented load control + residential and commercial/industrial conservation and customer-owned self-service cogeneration.

Cols. (5) - (9) = Represent total cumulative capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) = Voltage reduction and customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

Projected Values (2008 - 2018):

Cols. (2) - (4) forecasted peak without load control and conservation.

Cols. (5) - (9) = Represent cumulative conservation and load control capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) = Voltage reduction and customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

PROGRESS ENERGY FLORIDA

SCHEDULE 3.2.3
HISTORY AND FORECAST OF WINTER PEAK DEMAND (MW)
LOW LOAD FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(OTH)	(10)
YEAR	TOTAL	WHOLESALE	RETAIL	INTERRUPTIBLE	RESIDENTIAL LOAD MANAGEMENT	RESIDENTIAL CONSERVATION	COMM. / IND. LOAD MANAGEMENT	COMM. / IND. CONSERVATION	OTHER DEMAND REDUCTIONS	NET FIRM DEMAND
1997/98	7,752	941	6,811	318	663	166	17	114	168	6,306
1998/99	10,473	1,741	8,732	305	874	200	18	119	187	8,770
1999/00	10,047	1,728	8,319	225	849	234	20	121	182	8,416
2000/01	11,458	1,984	9,474	255	826	259	23	123	187	9,785
2001/02	10,685	1,624	9,061	285	819	285	24	123	188	8,961
2002/03	11,555	1,538	10,017	271	793	313	27	124	198	9,829
2003/04	9,325	1,167	8,158	498	786	343	26	125	262	7,286
2004/05	10,833	1,600	9,233	575	777	371	26	125	282	8,676
2005/06	10,700	1,467	9,233	298	768	413	26	126	239	8,830
2006/07	9,899	1,576	8,323	248	758	454	27	128	262	8,022
2007/08	11,981	2,035	9,946	312	774	495	37	135	297	9,931
2008/09	11,851	1,715	10,137	305	791	538	47	142	299	9,730
2009/10	12,346	1,999	10,346	292	809	580	57	149	318	10,141
2010/11	12,620	2,073	10,548	302	827	623	67	155	321	10,325
2011/12	13,121	2,382	10,738	304	844	666	76	162	325	10,743
2012/13	13,454	2,518	10,936	316	862	710	86	169	328	10,983
2013/14	13,568	2,448	11,120	317	880	754	96	176	332	11,013
2014/15	13,835	2,538	11,297	315	897	798	105	183	335	11,202
2015/16	14,099	2,628	11,471	316	906	837	110	189	339	11,402
2016/17	14,326	2,716	11,610	317	914	876	115	195	342	11,567

Historical Values (1998 - 2007):

Col. (2) = recorded peak + implemented load control + residential and commercial/industrial conservation and customer-owned self-service cogeneration.

Cols. (5) - (9) = Represent total cumulative capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) = Voltage reduction and customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

Projected Values (2008 - 2018):

Cols. (2) - (4) forecasted peak without load control and conservation.

Cols. (5) - (9) = Represent cumulative conservation and load control capabilities at peak. Col. (8) includes commercial load management and standby generation.

Col. (OTH) = Voltage reduction and customer-owned self-service cogeneration.

Col. (10) = (2) - (5) - (6) - (7) - (8) - (9) - (OTH).

PROGRESS ENERGY FLORIDA

SCHEDULE 3.3.1
HISTORY AND FORECAST OF ANNUAL NET ENERGY FOR LOAD (GWh)
BASE CASE

(1)	(2)	(3)	(4)	(OTH)	(5)	(6)	(7)	(8)	(9)
YEAR	TOTAL	RESIDENTIAL CONSERVATION	COMM. / IND. CONSERVATION	OTHER ENERGY REDUCTIONS*	RETAIL	WHOLESALE	UTILITY USE & LOSSES	NET ENERGY FOR LOAD	LOAD FACTOR (%) **
1998	38,949	289	333	564	33,387	2,340	2,036	37,763	53.9
1999	40,375	312	339	564	33,441	3,267	2,452	39,160	50.0
2000	42,486	334	345	565	34,832	3,732	2,678	41,242	50.5
2001	42,200	354	349	564	35,263	3,839	1,831	40,933	47.5
2002	43,860	377	352	564	36,859	3,173	2,535	42,567	50.0
2003	45,233	402	357	564	37,957	3,359	2,595	43,911	47.7
2004	46,833	426	360	780	38,193	4,301	2,774	45,268	56.5
2005	48,474	455	363	779	39,177	5,195	2,506	46,878	52.3
2006	47,399	484	365	509	39,432	4,220	2,389	46,041	52.1
2007	49,306	511	383	779	39,282	5,598	2,753	47,633	52.3
2008	50,467	552	401	780	41,208	4,798	2,728	48,734	55.1
2009	51,548	582	419	779	42,395	4,527	2,846	49,768	57.5
2010	53,535	612	437	871	43,407	5,238	2,970	51,615	57.1
2011	54,881	642	455	871	44,563	5,363	2,987	52,913	57.4
2012	56,711	672	473	871	45,708	5,892	3,095	54,695	56.7
2013	58,109	702	491	871	46,884	6,032	3,129	56,045	56.9
2014	59,017	732	509	871	47,999	5,708	3,198	56,905	57.4
2015	60,321	760	525	871	49,113	5,795	3,258	58,166	57.5
2016	61,646	786	540	871	50,245	5,874	3,329	59,448	57.4
2017	63,075	812	556	871	51,469	5,953	3,414	60,836	57.8

* Column (OTH) includes Conservation Energy For Lighting and Public Authority Customers, Customer-Owned Self-service Cogeneration.

** Load Factors for historical years are calculated using the actual winter peak demand except the 1998, 2004 and 2007 historical load factors which are based on the actual summer peak demand.
Load Factors for future years are calculated using the net firm winter peak demand (Schedule 3.2.3)

PROGRESS ENERGY FLORIDA

SCHEDULE 3.3.2
HISTORY AND FORECAST OF ANNUAL NET ENERGY FOR LOAD (GWh)
HIGH LOAD FORECAST

(1)	(2)	(3)	(4)	(OTH)	(5)	(6)	(7)	(8)	(9)
YEAR	TOTAL	RESIDENTIAL CONSERVATION	COMM. / IND. CONSERVATION	OTHER ENERGY REDUCTIONS*	RETAIL	WHOLESALE	UTILITY USE & LOSSES	NET ENERGY FOR LOAD	LOAD FACTOR (%) **
1998	38,949	289	333	564	33,387	2,340	2,036	37,763	53.9
1999	40,375	312	339	564	33,441	3,267	2,452	39,160	50.0
2000	42,486	334	345	565	34,832	3,732	2,678	41,242	50.5
2001	42,200	354	349	564	35,263	3,839	1,831	40,933	47.5
2002	43,860	377	352	564	36,859	3,173	2,535	42,567	50.0
2003	45,233	402	357	564	37,957	3,359	2,595	43,911	47.7
2004	46,833	426	360	780	38,193	4,301	2,774	45,268	56.5
2005	48,474	455	363	779	39,177	5,195	2,506	46,878	52.3
2006	47,399	484	365	509	39,432	4,220	2,389	46,041	52.1
2007	49,306	511	383	779	39,282	5,598	2,753	47,633	52.3
2008	51,137	552	401	780	41,835	4,798	2,771	49,404	55.0
2009	52,320	582	419	779	43,116	4,527	2,897	50,540	57.4
2010	54,442	612	437	871	44,257	5,238	3,027	52,522	57.1
2011	55,882	642	455	871	45,498	5,363	3,053	53,914	57.4
2012	57,890	672	473	871	46,814	5,892	3,168	55,874	56.7
2013	59,392	702	491	871	48,085	6,032	3,211	57,328	56.9
2014	60,481	732	509	871	49,366	5,708	3,295	58,369	57.4
2015	62,052	760	525	871	50,735	5,795	3,367	59,897	57.5
2016	63,588	786	540	871	52,062	5,874	3,454	61,390	57.6
2017	65,292	812	556	871	53,541	5,953	3,559	63,053	57.8

* Column (OTH) includes Conservation Energy For Lighting and Public Authority Customers, Customer-Owned Self-service Cogeneration.

** Load Factors for historical years are calculated using the actual winter peak demand except the 1998, 2004 and 2007 historical load factors which are based on the actual summer peak demand.
Load Factors for future years are calculated using the net firm winter peak demand (Schedule 3.2.3)

PROGRESS ENERGY FLORIDA

SCHEDULE 3.3.3
HISTORY AND FORECAST OF ANNUAL NET ENERGY FOR LOAD (GWh)
LOW LOAD FORECAST

(1)	(2)	(3)	(4)	(OTH)	(5)	(6)	(7)	(8)	(9)
YEAR	TOTAL	RESIDENTIAL CONSERVATION	COMM. / IND. CONSERVATION	OTHER ENERGY REDUCTIONS*	RETAIL	WHOLESALE	UTILITY USE & LOSSES	NET ENERGY FOR LOAD	LOAD FACTOR (%) **
1998	38,949	289	333	564	33,387	2,340	2,036	37,763	53.9
1999	40,375	312	339	564	33,441	3,267	2,452	39,160	50.0
2000	42,486	334	345	565	34,832	3,732	2,678	41,242	50.5
2001	42,200	354	349	564	35,263	3,839	1,831	40,933	47.5
2002	43,860	377	352	564	36,859	3,173	2,535	42,567	50.0
2003	45,233	402	357	564	37,957	3,359	2,595	43,911	47.7
2004	46,833	426	360	780	38,193	4,301	2,774	45,268	56.5
2005	48,474	455	363	779	39,177	5,195	2,506	46,878	52.3
2006	47,399	484	365	509	39,432	4,220	2,389	46,041	52.1
2007	49,306	511	383	779	39,282	5,598	2,753	47,633	52.3
2008	49,791	552	401	780	40,574	4,798	2,686	48,058	55.1
2009	50,822	582	419	779	41,715	4,527	2,800	49,042	57.5
2010	52,722	612	437	871	42,648	5,238	2,916	50,802	57.2
2011	53,913	642	455	871	43,657	5,363	2,925	51,945	57.4
2012	55,590	672	473	871	44,660	5,892	3,022	53,574	56.8
2013	56,795	702	491	871	45,655	6,032	3,044	54,731	56.9
2014	57,509	732	509	871	46,588	5,708	3,101	55,397	57.4
2015	58,596	760	525	871	47,496	5,795	3,150	56,441	57.5
2016	59,719	786	540	871	48,444	5,874	3,203	57,521	57.6
2017	60,829	812	556	871	49,358	5,953	3,279	58,590	57.8

* Column (OTH) includes Conservation Energy For Lighting and Public Authority Customers, Customer-Owned Self-service Cogeneration.

** Load Factors for historical years are calculated using the actual winter peak demand except the 1998, 2004 and 2007 historical load factors which are based on the actual summer peak demand.
Load Factors for future years are calculated using the net firm winter peak demand (Schedule 3.2.3)

PROGRESS ENERGY FLORIDA

SCHEDULE 4
PREVIOUS YEAR ACTUAL AND TWO-YEAR FORECAST OF PEAK DEMAND
AND NET ENERGY FOR LOAD BY MONTH

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	ACTUAL		FORECAST		FORECAST	
	2007		2008		2009	
	PEAK DEMAND	NEL	PEAK DEMAND	NEL	PEAK DEMAND	NEL
MONTH	MW	GWh	MW	GWh	MW	GWh
JANUARY	8,803	3,387	10,075	3,896	9,881	3,946
FEBRUARY	9,097	3,309	8,236	3,363	7,968	3,402
MARCH	6,990	3,459	7,030	3,631	6,895	3,687
APRIL	7,474	3,491	7,603	3,521	7,688	3,636
MAY	8,123	4,035	8,722	4,241	8,680	4,358
JUNE	9,398	4,430	9,097	4,520	9,108	4,622
JULY	9,842	4,902	9,343	4,901	9,370	4,991
AUGUST	10,405	5,229	9,424	4,961	9,451	5,071
SEPTEMBER	9,443	4,448	8,626	4,474	8,712	4,577
OCTOBER	8,618	4,242	8,170	3,993	8,271	4,083
NOVEMBER	6,812	3,270	6,150	3,410	6,285	3,490
DECEMBER	7,212	3,431	7,585	3,823	7,641	3,905
TOTAL		47,633		48,734		49,768

NOTE: "Actual" = "Total" - "Interruptible" - "Res. LM" - "C/I LM" - "Voltage Reduction & Standby Generation"

FUEL REQUIREMENTS AND ENERGY SOURCES

PEF's two-year actual and ten-year projected nuclear, coal, oil, and gas requirements (by fuel unit) are shown in Schedule 5. PEF's two-year actual and ten-year projected energy sources by fuel type, are presented in Schedules 6.1 and 6.2, in GWh and percent respectively. PEF's fuel requirements and energy sources reflect a diverse fuel supply system that is not dependent on any one fuel source. Near term natural gas consumption is projected to increase as plants and purchases with tolling agreements are added to meet future load growth. However, a decrease in future fossil fuel consumption is projected with the addition of planned nuclear units in the years 2016 and 2017.

PROGRESS ENERGY FLORIDA

SCHEDULE 5

FUEL REQUIREMENTS

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
				-ACTUAL-											
	FUEL REQUIREMENTS		UNITS	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
(1)	NUCLEAR		TRILLION BTU	66	63	69	53	68	60	79	75	80	75	131	211
(2)	COAL		1,000 TON	5,977	6,108	5,865	5,873	6,246	6,789	6,739	6,661	6,755	6,877	6,644	5,751
(3)	RESIDUAL	TOTAL	1,000 BBL	7,353	7,360	7,881	5,825	4,571	4,653	4,472	3,533	3,612	3,588	3,442	3,095
(4)		STEAM	1,000 BBL	7,353	7,360	7,881	5,825	4,571	4,653	4,472	3,533	3,612	3,588	3,442	3,095
(5)		CC	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(6)		CT	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(7)		DIESEL	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(8)	DISTILLATE	TOTAL	1,000 BBL	713	692	745	876	853	1,064	1,105	918	905	1,254	937	1,182
(9)		STEAM	1,000 BBL	90	83	89	83	58	62	85	111	81	65	96	494
(10)		CC	1,000 BBL	2	22	0	0	0	0	0	0	0	0	0	0
(11)		CT	1,000 BBL	621	586	656	792	795	1,002	1,019	807	823	1,189	841	689
(12)		DIESEL	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(13)	NATURAL GAS	TOTAL	1,000 MCF	76,448	83,300	100,915	134,052	142,985	150,270	147,262	170,238	178,709	186,796	169,647	144,342
(14)		STEAM	1,000 MCF	1,731	5,054	0	0	0	0	0	0	0	0	0	0
(15)		CC	1,000 MCF	61,487	65,369	85,345	119,019	128,560	134,492	131,329	156,017	164,464	170,344	155,575	131,834
(16)		CT	1,000 MCF	13,230	12,877	15,571	15,033	14,425	15,778	15,933	14,222	14,245	16,453	14,073	12,508
	OTHER (SPECIFY)														
(17)	OTHER, DISTILLATE	ANNUAL	1,000 BBL	N/A		109	70	30	17	7	22	3	21	5	5
(18)	OTHER, NATURAL GAS	ANNUAL	1,000 MCF	N/A		0	0	0	0	0	0	0	0	0	0
(18.1)	OTHER, NATURAL GAS	ANNUAL	1,000 MCF	N/A		9,690	6,866	7,726	10,343	9,981	6,336	6,643	9,112	4,749	1,742

PROGRESS ENERGY FLORIDA

SCHEDULE 6.1

ENERGY SOURCES (GWh)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
				-ACTUAL-											
	ENERGY SOURCES		UNITS	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
(1)	ANNUAL FIRM INTERCHANGE 1/		GWh	2,091	2,956	1,347	1,028	1,098	1,063	981	627	638	909	454	43
(2)	NUCLEAR		GWh	6,382	6,124	6,751	5,156	6,954	6,107	7,974	7,533	8,042	7,490	13,268	21,505
(3)	COAL		GWh	14,968	15,293	14,457	14,506	14,906	16,034	15,894	15,724	15,956	16,247	15,630	13,511
(4)	RESIDUAL	TOTAL	GWh	4,656	4,575	4,766	3,508	2,749	2,799	2,682	2,128	2,195	2,186	2,084	1,853
(5)		STEAM	GWh	4,656	4,575	4,766	3,508	2,749	2,799	2,682	2,128	2,195	2,186	2,084	1,853
(6)		CC	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(7)		CT	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(8)		DIESEL	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(9)	DISTILLATE	TOTAL	GWh	258	307	242	299	301	391	396	309	313	474	326	258
(10)		STEAM	GWh	0	50	0	0	0	0	0	0	0	0	0	0
(11)		CC	GWh	1	13	0	0	0	0	0	0	0	0	0	0
(12)		CT	GWh	257	244	242	299	301	391	396	309	313	474	326	258
(13)		DIESEL	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(14)	NATURAL GAS	TOTAL	GWh	9,657	10,579	13,264	18,037	19,344	20,326	19,885	23,227	24,399	25,479	23,045	19,360
(15)		STEAM	GWh	161	475	0	0	0	0	0	0	0	0	0	0
(16)		CC	GWh	8,517	9,093	12,063	16,853	18,197	19,064	18,616	22,085	23,266	24,160	21,914	18,366
(17)		CT	GWh	979	1,011	1,201	1,184	1,147	1,262	1,269	1,142	1,133	1,319	1,131	994
(18)	OTHER 2/														
	QF PURCHASES		GWh	2,990	3,002	3,237	2,542	2,457	2,456	2,463	2,278	1,428	1,428	1,431	1,403
	RENEWABLES		GWh	1,404	1,210	1,220	1,216	1,221	1,849	2,613	2,580	2,255	2,217	2,214	2,108
	IMPORT FROM OUT OF STATE		GWh	3,683	3,658	3,450	3,476	2,585	1,888	1,807	1,639	1,679	1,736	996	795
	EXPORT TO OUT OF STATE		GWh	-48	-71	0	0	0	0	0	0	0	0	0	0
(19)	NET ENERGY FOR LOAD		GWh	46,041	47,633	48,734	49,768	51,615	52,913	54,695	56,045	56,905	58,166	59,448	60,836

1/ NET ENERGY PURCHASED (+) OR SOLD (-) WITHIN THE FRCC REGION.

2/ NET ENERGY PURCHASED (+) OR SOLD (-).

PROGRESS ENERGY FLORIDA

SCHEDULE 6.2

ENERGY SOURCES (PERCENT)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
				-ACTUAL-											
	ENERGY SOURCES		UNITS	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
(1)	ANNUAL FIRM INTERCHANGE 1/		%	4.5%	6.2%	2.8%	2.1%	2.1%	2.0%	1.8%	1.1%	1.1%	1.6%	0.8%	0.1%
(2)	NUCLEAR		%	13.9%	12.9%	13.9%	10.4%	13.5%	11.5%	14.6%	13.4%	14.1%	12.9%	22.3%	35.3%
(3)	COAL		%	32.5%	32.1%	29.7%	29.1%	28.9%	30.3%	29.1%	28.1%	28.0%	27.9%	26.3%	22.2%
(4)	RESIDUAL	TOTAL	%	10.1%	9.6%	9.8%	7.0%	5.3%	5.3%	4.9%	3.8%	3.9%	3.8%	3.5%	3.0%
(5)		STEAM	%	10.1%	9.6%	9.8%	7.0%	5.3%	5.3%	4.9%	3.8%	3.9%	3.8%	3.5%	3.0%
(6)		CC	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(7)		CT	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(8)		DIESEL	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(9)	DISTILLATE	TOTAL	%	0.6%	0.6%	0.5%	0.6%	0.6%	0.7%	0.7%	0.6%	0.6%	0.8%	0.5%	0.4%
(10)		STEAM	%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(11)		CC	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(12)		CT	%	0.6%	0.5%	0.5%	0.6%	0.6%	0.7%	0.7%	0.6%	0.6%	0.8%	0.5%	0.4%
(13)		DIESEL	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(14)	NATURAL GAS	TOTAL	%	21.0%	22.2%	27.2%	36.2%	37.5%	38.4%	36.4%	41.4%	42.9%	43.8%	38.8%	31.8%
(15)		STEAM	%	0.3%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(16)		CC	%	18.5%	19.1%	24.8%	33.9%	35.3%	36.0%	34.0%	39.4%	40.9%	41.5%	36.9%	30.2%
(17)		CT	%	2.1%	2.1%	2.5%	2.4%	2.2%	2.4%	2.3%	2.0%	2.0%	2.3%	1.9%	1.6%
(18)	OTHER 2/														
	QF PURCHASES		%	6.5%	6.3%	6.6%	5.1%	4.8%	4.6%	4.5%	4.1%	2.5%	2.5%	2.4%	2.3%
	RENEWABLES		%	3.0%	2.5%	2.5%	2.4%	2.4%	3.5%	4.8%	4.6%	4.0%	3.8%	3.7%	3.5%
	IMPORT FROM OUT OF STATE		%	8.0%	7.7%	7.1%	7.0%	5.0%	3.6%	3.3%	2.9%	3.0%	3.0%	1.7%	1.3%
	EXPORT TO OUT OF STATE		%	-0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(19)	NET ENERGY FOR LOAD		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

1/ NET ENERGY PURCHASED (+) OR SOLD (-) WITHIN THE FRCC REGION.

2/ NET ENERGY PURCHASED (+) OR SOLD (-).

FORECASTING METHODS AND PROCEDURES

INTRODUCTION

Accurate forecasts of long-range electric energy consumption, customer growth, and peak demand are essential elements in electric utility planning. Accurate projections of a utility's future load growth require a forecasting methodology with the ability to account for a variety of factors influencing electric energy usage over the planning horizon. PEF's forecasting framework utilizes a set of econometric models to achieve this end. This section will describe the underlying methodology of the customer, energy, and peak demand forecasts including the principal assumptions incorporated within each. Also included is a description of how Demand-Side Management (DSM) impacts the forecast, the development of high and low forecast scenarios and a review of DSM programs.

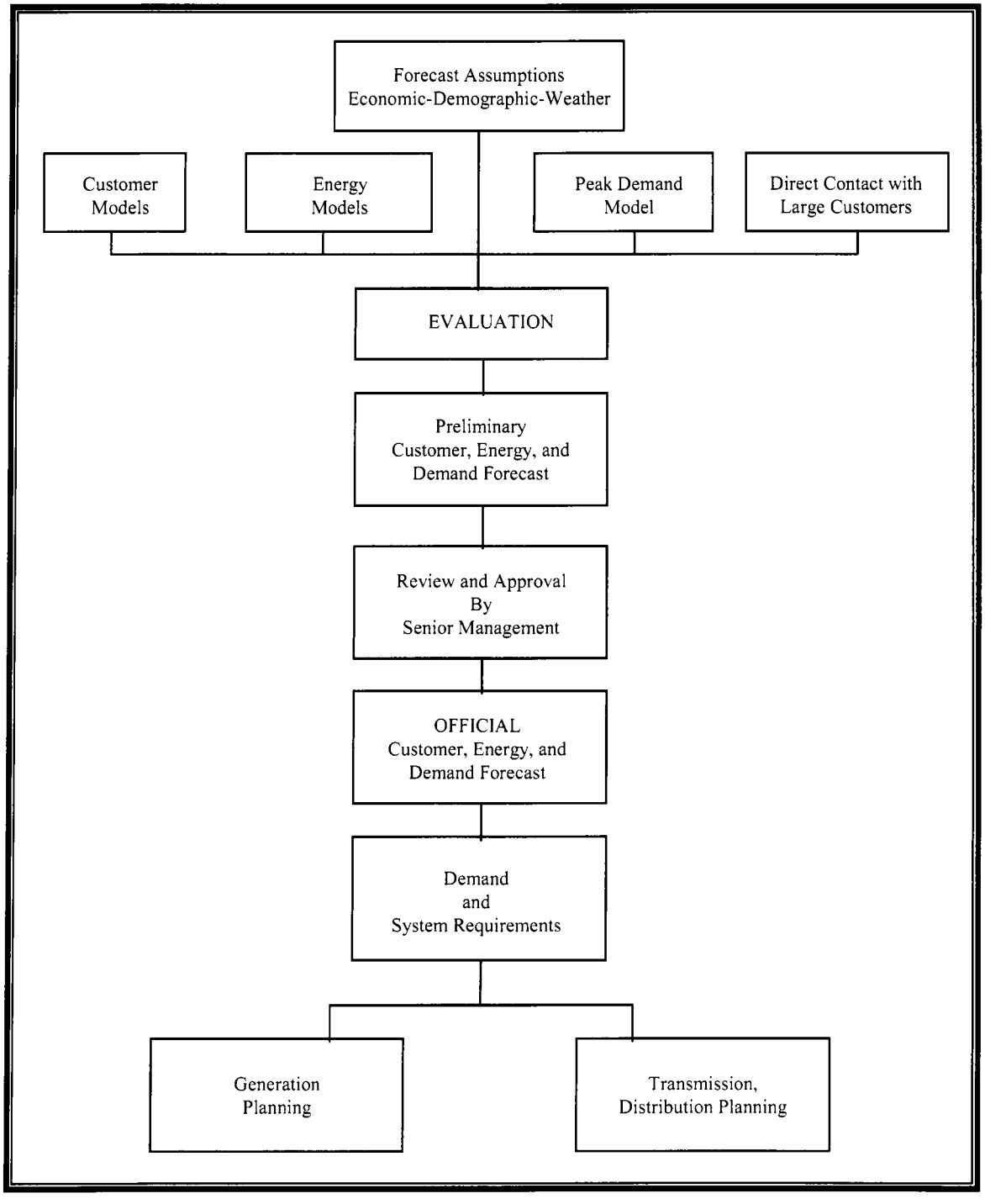
Figure 2.1, entitled "Customer, Energy and Demand Forecast", gives a general description of PEF's forecasting process. Highlighted in the diagram is a disaggregated modeling approach that blends the impacts of average class usage as well as customer growth based on a specific set of assumptions for each class. Also accounted for is some direct contact with large customers. These inputs provide the tools needed to frame the most likely scenario of the company's future demand.

FORECAST ASSUMPTIONS

The first step in any forecasting effort is the development of assumptions upon which the forecast is based. The Financial Services Department develops these assumptions based on discussions with a number of departments within PEF, as well as through the research efforts of a number of external sources. These assumptions specify major factors that influence the level of customers, energy sales, or peak demand over the forecast horizon. The following set of assumptions forms the basis for the forecast presented in this document.

FIGURE 2.1

Customer, Energy, and Demand Forecast



GENERAL ASSUMPTIONS

1. Normal weather conditions for energy sales are assumed over the forecast horizon using a sales-weighted thirty-year average of conditions at seven (7) weather stations across Florida (Saint Petersburg, Tampa, Orlando, Winter Haven, Gainesville, Daytona Beach, and Tallahassee). For kilowatt-hour sales projections, normal weather is based on a historical thirty-year average of the service area weighted billing month degree-days. Seasonal peak demand projections are based on a thirty-year historical average of system-weighted temperatures at time of seasonal peak at the Tampa, Orlando, and Tallahassee weather stations; the other weather stations are not used in developing the historic average because they lack the historic hourly data needed for peak-weather normalization.

2. The population projections produced by the Bureau of Economic and Business Research (BEBR) at the University of Florida as published in "Florida Population Studies Bulletin No. 147 (February 2007) provide the basis for development of the customer forecast. State and national economic assumptions produced by Economy.Com in their national and Florida forecasts (April 2007) are also incorporated.

3. Within the PEF service area, the phosphate mining industry is the dominant sector in the industrial sales class. Four (4) major customers accounted for 28 percent of the industrial class MWh sales in 2007. These energy intensive customers mine and process phosphate-based fertilizer products for the global marketplace. Both supply and demand for their products are dictated by global conditions that include, but are not limited to, foreign competition, national/international agricultural industry conditions, exchange-rate fluctuations, and international trade pacts. Load and energy consumption at the PEF-served mining or chemical processing sites depend heavily on plant operations, which are heavily influenced by these global as well as the local conditions. After years of excess mining capacity and weak product pricing power, the industry has consolidated down to just a few players in time to take advantage of better market conditions. In addition, a weaker U.S currency value on the foreign exchange is expected to help the industry in two (2) ways. First, American farm commodities will be more competitive overseas and lead to higher crop production at home. The demand for corn-based ethanol has also increased farm acreage. Therefore, both likely will result in greater

demand for fertilizer products. Second, a weak U.S. dollar results in U.S. fertilizer producers becoming more price competitive relative to foreign producers. Going forward, energy consumption is expected to increase in the near term, as a new mine operation is expected to open. A significant risk to this projection lies in the volatile price of energy (natural gas), which is a major cost of both mining and producing phosphoric fertilizers. The energy projection for this industry assumes no major reductions or shutdowns of operations in the service territory. This includes any change in output from self-owned generation facilities, which remove load from PEF generation facilities.

4. PEF supplies load and energy service to wholesale customers on a "full", "partial", and "supplemental" requirement basis. Full requirements (FR) customers' demand and energy is assumed to grow at a rate that approximates their historical trend. Contracts for this service include the cities of Bartow, Chattahoochee, Mt. Dora, Quincy, Williston, and Winter Park. Partial requirements (PR) customer load is assumed to reflect the current contractual obligations reflected by the nature of the stratified load they have contracted for, plus their ability to receive dispatched energy from power marketers any time it is more economical for them to do so. Contracts for PR service included in this forecast are with the Florida Municipal Power Agency (FMPA), Reedy Creek Utilities, TECO Energy, Seminole Electric Cooperative, Inc. (SECI) and the cities of New Smyrna Beach, Tallahassee, and Homestead. PEF's contractual arrangement with SECI includes a "supplemental" service contract (1983 contract) for service over and above stated levels they commit to supply themselves. This contract has been renegotiated and will become a seasonal purchase for "stratified peaking" capacity in 2014 when the term of this contract expires in December 2013. A firm contract with SECI for stratified intermediate service, which includes both 450 MW (October 1995 contract) and 150 MW in 2012, is contained in this projection. Two additional contracts, a 50 MW sale which began in December 2007 (Market Mitigation Sale) and a FR contract which will commence in 2010, and last through the forecast horizon, are also contained in this forecast. Finally, an agreement to provide interruptible service at a SECI metering site has also been included in this projection.

5. This forecast assumes that PEF will successfully renew all future franchise agreements.

6. This forecast incorporates demand and energy reductions from PEF's dispatchable and non-dispatchable DSM programs required to meet the approved goals set by the FPSC.

7. Expected energy and demand reductions from customer-owned self-service cogeneration facilities are also included in this forecast. PEF will supply the supplemental load of self-service cogeneration customers. While PEF offers "standby" service to all cogeneration customers, the forecast does not assume an unplanned need for power at time of peak.

8. This forecast assumes that the regulatory environment and the obligation to serve our retail customers will continue throughout the forecast horizon. Regarding wholesale customers, the company does not plan for generation resources unless a long-term contract is in place. Current FR customers are assumed to renew their contracts with PEF except those who have given notice to terminate. Current PR contracts are projected to terminate as terms reach their expiration date. Deviation from these assumptions can occur based on information provided by the Regulated Commercial Operations Department.

SHORT-TERM ECONOMIC ASSUMPTIONS

The economic outlook for this forecast was developed in 2007 as the homebuilding market continued its significant slowdown. The general consensus was that the U.S. economy in 2007 would log its most sluggish growth in five (5) years. Initial claims for unemployment insurance had begun to increase, gains in employment diminished and energy prices remained high. The Federal Reserve Board continued to warn of potential inflation risks, which meant that monetary policy easing was not expected in the near-term. In Florida, where the homebuilding and real estate sectors appeared worse than the national average, rising property tax and homeowner's insurance premiums were also considered to have a negative impact. Recent housing statistics showed large increases in unsold houses on the market. Significant home price declines have occurred; as a result, a more stable market is expected to return for homebuyers.

Compared with years past, the forecast for the U.S. economy lacks a strong engine for stimulus (e.g. limited tax cuts or incentives being proposed; limited ability to draw equity from homes to boost

consumption; a weakening job market.) The increase in energy prices, medical expenses and, adjustable rate mortgage payments are considered contributors to the forecast of a slower economy. In the PEF service area the average total cost per kWh to the residential customer increased by over 36 percent between 2003 and 2006, home prices have risen beyond the reach of some local residents, and school-aged population in some counties has begun to decline.

There are positive factors considered in this slow economic forecast. The significantly weaker U.S. currency is expected to boost American manufacturing and draw in more foreign tourists. As of mid-2007, U.S. exports had increased. This impact likely will become more apparent as China continues to strengthen its currency relative to the U.S. Dollar and slow China's fast-paced economy. In Florida, a large inventory of unsold homes has forced down housing prices to more affordable levels. Also with recent legislative efforts to decrease property taxes and homeowner's insurance premiums, a positive outlook is expected for future home sales.

LONG-TERM ECONOMIC ASSUMPTIONS

The long-term economic outlook assumes that changes in economic and demographic conditions, as well as technological change in the electric utility industry, will follow a trended behavior pattern. The main focus involves identifying these trends. No attempt is made to predict business cycle fluctuations or rapid penetration of a significant technological breakthrough impacting electric utility energy sales during this period.

Population Growth Trends

This forecast assumes Florida will experience slower in-migration and population growth over parts of the long term, as reflected in the BEBR projections. Florida's climate and low cost of living have historically attracted a major share of the retirement population from the eastern half of the United States. This will continue to occur primarily because the soon to be retiring baby-boom generation will increase the size of available retirees capable of moving to the South. Working against this significant trend will be several aesthetic and economic factors. First, the enormous growth in population and corresponding development of the 1980s, 1990s and early 2000s made portions of Florida less desirable and less affordable for retirement living. This perceived diminished quality of retiree life, along with increasing competition from neighboring

states, is expected to cause a slight decline in Florida's share of these prospective new residents over the long term. Second, and to a lesser extent, there is a lingering fear for safety and expense from hurricane damage.

Economic Growth Trends

Since the beginning of the Post-911 period, Florida experienced a 1980s-style population explosion and rapid service sector job creation. The State has benefited greatly from generational lows in interest rates, which, along with investors' unfriendly attitude toward the equity markets, set the stage for a tremendous surge in home construction. The national level of homebuilding in 2005-2006, set an all time record. This growth produced strong gains in both the construction industry and service-producing sectors of the Florida economy.

We now see that this pace of growth was not sustainable and that the economic environment that produced this construction boom has scaled back significantly. Interest rates tend to reflect more "long-term" norms. Investment in equities over housing has also returned. More importantly, affordability rates have dropped as housing prices in many parts of Florida have out-paced many areas of the country. While some of this affordability issue is diminishing, this could still have an impact on retiree decisions to move into the area. The availability and affordability of homeowners insurance also a concern of increasing importance since the 2004 and 2005 hurricane seasons.

Florida's rapid population growth of late has created a period of strong job creation, especially in the service sector industries. While the service-oriented economy expanded to support an increasing population level, there were also a number of corporations migrating to Florida capitalizing on the low cost, low tax, pro-business environment. This being the case, increased job opportunities in Florida created greater in-migration among the nation's working age population. Florida's ability to attract businesses from other states because of its "comparative advantage" is expected to continue throughout the forecast period but at a less significant level. Florida's successful effort to attract several biotech firms has the potential to draw a whole new growth industry to the State, the same way Disney and NASA once did.

The forecast assumes stable growth in real electricity price over the long term. That is, the change in the nominal price of electricity per kWh over time is expected to be close to the overall rate of inflation. This also implies that future fuel price escalation will track at or below the general rate of inflation throughout the forecast horizon.

Real personal incomes are assumed to increase throughout the forecast period thereby boosting the average customer's ability to purchase electricity. As incomes grow faster than the price of electricity, consumers, on average, will remain inclined to purchase additional electric appliances and increase their utilization of existing end-uses.

FORECAST METHODOLOGY

The PEF forecast of customers, energy sales, and peak demand is developed using customer class-specific econometric models. These models are expressly designed to capture class-specific variation over time. By modeling customer growth and average energy usage individually, subtle changes in existing customer usage are better captured as well as growth from new customers. Peak demand models are projected on a disaggregated basis as well. This allows for appropriate handling of individual assumptions in the areas of wholesale contracts, load management, and interruptible service.

ENERGY AND CUSTOMER FORECAST

In the retail jurisdiction, customer class models have been specified showing a historical relationship to weather and economic/demographic indicators using monthly data for sales models and annual data for customer models. Sales are regressed against "driver" variables that best explain monthly fluctuations over the historical sample period. Forecasts of these input variables are either derived internally or come from a review of the latest projections made by several independent forecasting concerns. The external sources of data include Moody's Economy.Com and the University of Florida's Bureau of Economic and Business Research. Internal company forecasts are used for projections of electricity price, weather conditions, and the length of the billing month. Normal weather, which is assumed throughout the forecast horizon, is based on the 30-year average of heating and cooling degree-days by month as measured at several weather stations throughout Florida for energy projections and temperatures around the hour of peak for the

firm retail demand forecast. Projections of PEF's demand-side management (conservation programs) are also incorporated as reductions to the forecast. Specific sectors are modeled as follows:

Residential Sector

Residential kWh usage per customer is modeled as a function of real Florida personal income, cooling degree-days, heating degree-days, the real price of electricity to the residential class and the average number of billing days in each sales month. This equation captures significant variation in residential usage caused by economic cycles, weather fluctuations, electric price movements, and sales month duration. Projections of kWh usage per customer combined with the customer forecast provide the forecast of total residential energy sales. The residential customer forecast is developed by correlating annual customer growth with PEF service area population growth and mortgage rates. County level population projections for the twenty-nine (29) counties, in which PEF serves residential customers, are provided by the BEBR.

Commercial Sector

Commercial MWh energy sales are forecast based on commercial sector (non-agricultural, non-manufacturing and non-governmental) employment, the real price of electricity to the commercial class, the average number of billing days in each sales month and heating and cooling degree-days. The measure of cooling degree-days utilized here differs slightly from that used in the residential sector reflecting different temperature base sensitivities, when heating and cooling load become observable. Commercial customers are projected as a function of the number of residential customers served.

Industrial Sector

Energy sales to this sector are separated into two sub-sectors. A significant portion of industrial energy use is consumed by the phosphate mining industry. Because this one (1) industry comprises a 28 percent share of the total industrial class, it is separated and modeled apart from the rest of the class. The term "non-phosphate industrial" is used to refer to those customers who comprise the remaining portion of total industrial class sales. Both groups are impacted significantly by changes in economic activity. However, adequately explaining sales levels requires separate explanatory

variables. Non-phosphate industrial energy sales are modeled using Florida manufacturing employment and a Florida industrial production index, the real price of electricity to the industrial class, and the average number of sales month billing days.

The industrial phosphate mining industry is modeled using customer-specific information with respect to expected market conditions. Since this sub-sector is comprised of only four (4) customers, the forecast is dependent upon information received from direct customer contact. PEF industrial customer representatives provide specific phosphate customer information regarding customer production schedules, inventory levels, area mine-out and start-up predictions, and changes in self-service generation or energy supply situations over the forecast horizon.

Street Lighting

Electricity sales to the street and highway lighting class are projected to increase due to growth in the service area population base. Because this class comprised less than 0.01 percent of PEF's 2007 electric sales and just 0.1 percent of total customers, a simple time trend was used to project energy consumption and customer growth in this class.

Public Authorities

Energy sales to public authorities (SPA), comprised mostly of government operated services, is also projected to grow with the size of the service area. The level of government services, and thus energy use per customer, can be tied to the population base, as well as to the state of the economy. Factors affecting population growth will affect the need for additional governmental services (i.e., public schools, city services, etc.) thereby increasing SPA energy usage per customer. Government employment has been determined to be the best indicator of the level of government services provided. This variable, along with heating and cooling degree-days (class specific), the real price of electricity and the average number of sales month billing days, results in a significant level of explained variation over the historical sample period. Intercept shift variables are also included in this model to account for the large change in school-related energy use in the billing months of January, July, and August. SPA customers are projected linearly as a function of a time-trend.

Sales for Resale Sector

The Sales for Resale sector encompasses all firm sales to other electric power entities. This includes sales to other utilities (municipal or investor-owned) as well as power agencies (rural electric authority or municipal).

Seminole Electric Cooperative, Inc. (SECI) is a wholesale, or sales for resale, customer of PEF on both a supplemental contract basis and contract demand basis. Under the supplemental contract, PEF provides service for those energy requirements above the level of generation capacity served by either SECI's own facilities or its firm purchase obligations. Monthly supplemental energy is developed using an average historical load shape of total SECI load in the PEF control area, subtracting out the level of SECI "committed" capacity from each hour. Beyond supplemental service, PEF has agreements with SECI to serve stratified base (50 MW) and intermediate (450-600 MW) energy. Both are assumed to remain a requirement on the PEF system throughout the forecast horizon. A "winter-only" seasonal peaking strata contract for 600 MW will replace the supplemental contract in 2014. An agreement to provide non-firm service is currently in effect between PEF and SECI amounting to an estimated 15 MW. Another contract, signed in 2004 to supply full requirements service for 150 MW, will begin in 2010.

The municipal sales for resale class includes a number of customers, divergent not only in scope of service, (i.e., full or partial requirement), but also in composition of ultimate consumers. Each customer is modeled separately in order to accurately reflect its individual profile. Several of the customers in this class are municipalities whose full energy requirements are met by PEF. The full requirement customers' energy projections grow at a rate that approximates their historical trend. Since the ultimate consumers of electricity in this sector are, to a large degree, residential and commercial customers, it is assumed that their use patterns will follow those of the PEF retail-based residential and commercial customer classes. PEF serves partial requirement service (PR) to municipalities such as New Smyrna Beach (NSB), Homestead, and Tallahassee, and other power providers like FMPA and Reedy Creek Utilities. In each case, these customers contract with PEF for a specific level and type of demand needed to provide their particular electrical system with an appropriate level of reliability. The terms of the FMPA contract is subject to change each year via a letter of "declared" MW nomination. More specifically, this means that the level and type of

demand and energy under contract can increase or decrease for each year a value is nominated. The energy forecast for each contract is derived using its historical load factors where enough history exists, or typical load factors for a given type of contracted stratified load. The energy projections for FMPA also include a "losses service contract" for energy PEF supplies to FMPA for transmission losses incurred when "wheeling" power to their ultimate customers in PEF's transmission area. This projection is based on the projected requirements of the aggregated needs of the cities of Ocala, Leesburg, Bushnell, Havana, and Newberry.

PEAK DEMAND FORECAST

The forecast of peak demand also employs a disaggregated econometric methodology. For seasonal (winter and summer) peak demands, as well as each month of the year, PEF's coincident system peak is separated into five (5) major components. These components consist of potential firm retail load, conservation and load management program capability, wholesale demand, company use demand and interruptible demand.

Potential firm retail load refers to projections of PEF retail hourly seasonal net peak demand (excluding the non-firm interruptible/curtailable/standby services) before the cumulative effects of any conservation activity or the activation of PEF's Load Management program. The historical values of this series are constructed to show the size of PEF's firm retail net peak demand assuming no utility-induced conservation or load control had taken place. The value of constructing such a "clean" series enables the forecaster to observe and correlate the underlying trend in retail peak demand to total system customer levels and coincident weather conditions at the time of the peak without the impacts of year-to-year variation in conservation activity or load control reductions. Seasonal peaks are projected using historical seasonal peak data regardless of which month the peak occurred. The projections become the potential retail demand projection for the month of January (winter) and August (summer) since this is typically when the seasonal peaks occur. The non-seasonal peak months are projected the same as the seasonal peaks, but the analysis is limited to the specific month being projected.

Energy conservation and direct load control estimates are consistent with PEF's DSM goals that have been approved by the FPSC. These estimates are incorporated into the MW forecast.

Projections of dispatchable and cumulative non-dispatchable DSM are subtracted from the projection of potential firm retail demand resulting in a projected series of retail monthly peak demand figures one would expect to occur.

Sales for Resale demand projections represent load supplied by PEF to other electric utilities such as SECI, FMPA, and other electric distribution companies. The SECI supplemental demand projection is based on a trend of their historical demand within the PEF control area. The level of MW to be served by PEF is dependent upon the amount of generation resources SECI supplies itself or contracts from others. An assumption has been made that beyond the last year of committed capacity declaration (five years out), SECI will shift their level of self-serve resources to meet their base and intermediate load needs. For FMPA demand projections, historical ratios of coincident-to-contract levels of demand are applied to future MW contract levels. Demand requirements continue at the MW level indicated by the final year in their respective contract declaration letter. The full requirements municipal demand forecast is estimated for individual cities using historically trended growth rates.

PEF "company use" at the time of system peak is estimated using load research metering studies and is assumed to remain stable over the forecast horizon. The interruptible and curtailable service (IS and CS) load component is developed from historic trends, as well as the incorporation of specific information obtained from PEF's large industrial accounts by field representatives.

Each of the peak demand components described above is a positive value except for the DSM program MW impacts and IS and CS load. These impacts represent a reduction in peak demand and are assigned a negative value. Total system firm peak demand is then calculated as the arithmetic sum of the five (5) components.

HIGH AND LOW FORECAST SCENARIOS

The high and low bandwidth scenarios around the base MWh energy sales forecast are developed using a Monte Carlo simulation applied to a multivariate regression model that closely replicates the base retail MWh energy forecast in aggregate. This model accounts for variation in Gross Domestic Product, retail customers and electricity price. The base forecasts for these variables were developed based on input from Economy.Com and internal company price projections. Variation around the base forecast predictor variables used in the Monte Carlo simulation was based on an 80 percent confidence interval calculated around variation in each variable's historic growth rate. While the total number of degree-days (weather) was also incorporated into the model specification, the high and low scenarios do not attempt to capture extreme weather conditions. Normal weather conditions were assumed in all three (3) scenarios.

The Monte Carlo simulation was produced through the estimation of 1,000 scenarios for each year of the forecast horizon. These simulations allowed for random normal variation in the growth trajectories of the economic input variables (while accounting for cross-correlation amongst these variables), as well as simultaneous variation in the equation (model error) and coefficient estimates. These scenarios were then sorted and rank ordered from one to a thousand, while the simulated scenario with no variation was adjusted to equal the base forecast.

The low retail scenario was chosen from among the ranked scenarios resulting in a bandwidth forecast reflecting an approximate probability of occurrence of 0.10. The high retail scenario similarly represents a bandwidth forecast with an approximate probability of occurrence also at 0.10. In both scenarios, the high and low peak demand bandwidth forecasts are projected from the energy forecasts using the load factor implicit in the base forecast scenario.

CONSERVATION

PEF's DSM performance is presented in the following tables, which compare the conservation savings actually achieved through PEF's DSM programs for the reporting years of 2005 through 2007 with the Commission-approved conservations goals.

On August 9, 2004, the FPSC issued a PAA Order approving new conservation goals for PEF that span the ten-year period from 2005 through 2014, as well as a new DSM Plan for PEF that was specifically designed to meet the new conservation goals (Docket 040031-EG, Order No. PSC-04-0769-PAA-EG). On January 5, 2007, the FPSC issued a PAA Order approving thirty-nine (39) additional DSM measures and two (2) residential programs, which will serve to increase the demand and energy savings available through PEF's DSM Plan (Docket 060647: Consummating Order PSC-07-0017-CO-EG making Order PSC-06-1018-TRF-EG effective and final).

Residential Conservation Savings Goals and Achievements

	Summer MW		Winter MW		Annual GWh Energy	
Year	Goal	Achieved	Goal	Achieved	Goal	Achieved
2005	13	18	43	48	21	29
2006	21	37	75	99	35	58
2007	30	58	108	153	50	85

Commercial Conservation Savings Goals and Achievements

	Summer MW		Winter MW		Annual GWh Energy	
Year	Goal	Achieved	Goal	Achieved	Goal	Achieved
2005	4	8	3	6	3	3
2006	7	16	7	12	6	9
2007	11	44	10	38	9	30

The forecasts contained in this Ten-Year Site Plan document are based on these 2007 program additions and modifications to PEF's DSM Plan and, therefore, appropriately reflect the most current projection of DSM savings over the next ten (10) years. PEF's DSM Plan consists of seven (7) residential programs, eight (8) commercial and industrial programs, and one (1) research and development program. The programs are subject to periodic monitoring and evaluation for the purpose of ensuring that all DSM resources are acquired in a cost-effective manner and that the program savings are durable. The following is a brief description of these programs.

RESIDENTIAL PROGRAMS

Home Energy Check Program

This energy audit program provides customers with an analysis of their current energy use and recommendations on how they can save on their electricity bills through low-cost or no-cost energy-saving practices and measures. The Home Energy Check program offers PEF customers the following types of audits: Type 1: Free Walk-Through Audit (Home Energy Check); Type 2: Customer-Completed Mail In Audit (Do It Yourself Home Energy Check); Type 3: Online Home Energy Check (Internet Option)-a customer-completed audit; Type 4: Phone Assisted Audit – a customer assisted survey of structure and appliance use; Type 5: Computer Assisted Audit; Type 6: Home Energy Rating Audit (Class I, II, III); Type7: Student Mail In Audit - a student-completed audit. The Home Energy Check Program serves as the foundation of the Home Energy Improvement Program in that the audit is a prerequisite for participation in the energy saving measures offered in the Home Energy Improvement Program.

Home Energy Improvement Program

This is the umbrella program to increase energy efficiency for existing residential homes. It combines efficiency improvements to the thermal envelope with upgraded electric appliances. The program provides incentives for attic insulation upgrades, duct testing and repair, and high efficiency electric heat pumps. The additional measures within this program include spray-in wall insulation, central AC 14 SEER non-electric heat, supply and return plenum duct seal, proper sizing of high efficiency HVAC, HVAC commissioning, reflective roof coating for

manufactured homes, reflective roof for single-family homes, window film or screen, and replacement windows.

Residential New Construction Program

This program promotes energy efficient new home construction in order to provide customers with more efficient dwellings combined with improved environmental comfort. The program provides education and information to the design and building community on energy efficient equipment and construction. It also facilitates the design and construction of energy efficient homes by working directly with the builders to comply with program requirements. The program provides incentives to the builder for high efficiency electric heat pumps and high performance windows. The highest level of the program incorporates the U.S. Environmental Protection Agency's Energy Star Homes Program and qualifies participants for cooperative advertising. New measures within the Residential New Construction Program include HVAC commissioning, window film or screen, reflective roof for single-family homes, attic spray-on foam insulation, conditioned space air handler, and energy recovery ventilation.

Low Income Weatherization Assistance Program

This umbrella program seeks to improve energy efficiency for low-income customers in existing residential dwellings. It combines efficiency improvements to the thermal envelope with upgraded electric appliances. The program provides incentives for attic insulation upgrades, duct testing and repair, reduced air infiltration, water heater wrap, HVAC maintenance, high efficiency heat pumps, heat recovery units, and dedicated heat pump water heaters.

Neighborhood Energy Saver Program

The newly approved Neighborhood Energy Saver (NES) Program consists of twelve (12) measures including compact fluorescent bulb replacement, water heater wrap and insulation for water pipes, water heater temperature check and adjustment, low-flow faucet aerator, low-flow showerhead, refrigerator coil brush, HVAC filters, and weatherization measures (weather stripping / door sweeps / etc.). In addition to the installation of new conservation measures, an important component of this program is educating families on energy efficiency techniques and the promotion of behavioral changes to help customers control their energy usage.

Residential Energy Management Program (EnergyWise)

This is a voluntary customer program that allows PEF to reduce peak demand and thus defer generation construction. Peak demand is reduced by interrupting service to selected electrical equipment with radio controlled switches installed on the customer's premises. These interruptions are at PEF's option, during specified time periods, and coincident with hours of peak demand. Participating customers receive a monthly credit on their electricity bills prorated above 600 kWh/month.

Renewable Energy Program

The Renewable Energy Program is designed to reduce system peak demand and increase renewable energy generation on the PEF grid. The program seeks to meet the following overall goals:

1. Obtain energy and demand reductions that are significant and measurable.
2. Enhance customers/contractors awareness of the capabilities of renewable energy technologies.
3. Educate customers/contractors about additional opportunities to generate and use renewable energy.
4. Develop and offer renewable energy measures to the marketplace.
5. Minimize "lost opportunities" in the renewable energy market.
6. Increase participation in the PEF Load Management program.

The Renewable Energy Program consists of two (2) measures:

- Solar Water Heater with EnergyWise – This measure encourages residential customers to install a solar thermal water heating system. The customer must have whole house electric cooling, electric water heating, and electric heating to be eligible for this program. Pool heaters and photovoltaic systems would not qualify. In order to qualify for this incentive, the heating, air conditioning, and water heating systems must be on the Energy Management Program (EnergyWise) and the solar thermal system must provide a minimum of 50 percent of the water-heating load.

- Solar Photovoltaics with Energy Wise (SolarWise for Schools) – This measure promotes environmental stewardship and renewable energy education through the installation of solar energy systems at schools within PEF's service territory. Customers participating in the Winter-Only Energy Management or Year-Round Energy Management plan can elect to donate their monthly credit toward the SolarWise for Schools. The program will accumulate associated participant credits in a separate fund for a period of two (2) years, at which time the customer may elect to renew for an additional two (2) years. All proceeds collected from participating customers, and their associated monthly credits, will be used to promote photovoltaics and renewable energy education opportunities.

COMMERCIAL/INDUSTRIAL (C/I) PROGRAMS

Business Energy Check Program

This energy audit program provides commercial and industrial customers with an assessment of the current energy usage at their facilities, recommendations on how they can improve the environmental conditions of their facilities while saving on their electricity bills, and information on low-cost energy efficiency measures. The Business Energy Check consists of the following types of audits: a free walk-through audit, and a paid walk-through audit. Small business customers also have the option to complete a Business Energy Check online at Progress Energy's website. In most cases, this program is a prerequisite for participation in the other C/I programs.

Better Business Program

This is the umbrella efficiency program for existing commercial and industrial customers. The program provides customers with information, education, and advice on energy-related issues and incentives on efficiency measures that are cost-effective to PEF and its customers. The Better Business Program promotes energy efficient heating, ventilation, air conditioning (HVAC), and some building retrofit measures (in particular, ceiling insulation upgrade, duct leakage test and repair, energy-recovery ventilation, and Energy Star cool roof coating products.) Newly approved measures within this program include demand-control ventilation, efficient compressed air systems, efficient motors, efficient indoor lighting, green roof, occupancy sensors, packaged AC steam cleaning, roof insulation, roof-top unit recommissioning, thermal energy storage and window film or screen.

Commercial/Industrial New Construction Program

The primary goal of this program is to foster the design and construction of energy efficient buildings. The new construction program: 1) provides education and information to the design community on all aspects of energy efficient building design; 2) requires that the building design, at a minimum, surpass the State of Florida energy code; 3) provides financial incentives for specific energy efficient equipment; and 4) provides energy design awards to building design teams. Incentives will be provided for high efficiency HVAC equipment, energy recovery ventilation and Energy Star cool roof coating products. Newly approved measures within this program include demand-control ventilation, efficient compressed air systems, efficient motors, efficient indoor lighting, green roof, occupancy sensors, roof insulation, thermal energy storage and window film or screen.

Innovation Incentive Program

This program promotes a reduction in demand and energy by subsidizing energy conservation projects for customers in PEF's service territory. The intent of the program is to encourage legitimate energy efficiency measures that reduce kW demand and/or kWh energy, but are not addressed by other programs. Energy efficiency opportunities are identified by PEF representatives during a Business Energy Check audit. If a candidate project meets program specifications, it will be eligible for an incentive payment, subject to PEF approval.

Commercial Energy Management Program (Rate Schedule GSLM-1)

This direct load control program reduces PEF's demand during peak or emergency conditions. As described in PEF's DSM Plan, this program is currently closed to new participants. It is applicable to existing program participants who have electric space cooling equipment suitable for interruptible operation and are eligible for service under the Rate Schedule GS-1, GST-1, GSD-1, or GSDT-1. The program is also applicable to existing participants who have any of the following electrical equipment installed on permanent residential structures and utilized for domestic (household) purposes: 1) water heater(s), 2) central electric heating systems(s), 3) central electric cooling system(s), and/or 4) swimming pool pump(s). Customers receive a

monthly credit on their bills depending on the type of equipment in the program and the interruption schedule.

Standby Generation Program

This demand control program reduces PEF's demand based upon the indirect control of customer generation equipment. This is a voluntary program available to all commercial, industrial, and agricultural customers who have on-site generation capability and are willing to reduce their PEF demand when PEF deems it necessary. The customers participating in the Standby Generation program receive a monthly credit on their electricity bills according to the demonstrated ability of the customer to reduce demand at PEF's request.

Interruptible Service Program

This direct load control program reduces PEF's demand at times of capacity shortage during peak or emergency conditions. The program is available to qualified non-residential customers with an average billing demand of 500 kW or more, who are willing to have their power interrupted. PEF will have remote control of the circuit breaker or disconnect switch supplying the customer's equipment. In return for this ability to interrupt load, customers participating in the Interruptible Service program receive a monthly interruptible demand credit applied to their electric bills.

Curtailable Service

This direct load control program reduces PEF's demand at times of peak or emergency conditions. The program is available to qualified non-residential customers with an average billing demand of 500 kW or more, who are willing to curtail 25 percent of their average monthly billing demand. Customers participating in the Curtailable Service program receive a monthly curtailable demand credit applied to their electric bills.

RESEARCH AND DEVELOPMENT PROGRAMS

Technology Development Program

The primary purpose of this program is to establish a system to "Aggressively pursue research, development and demonstration projects jointly with others as well as individual projects" (Rule 25-17.001(5)(f), Florida Administration Code). PEF will undertake certain development, educational and demonstration projects that have promise to become cost-effective demand reduction and energy efficiency programs. This would include projects like Price Responsive Demand Reduction with a Home Area Network for load management capabilities, which the Company is currently evaluating and testing. The objective of this project is to develop the next generation of load management with goals of increasing customer awareness to use energy more efficiently, while advancing demand response capabilities. Additional projects include the evaluation of off-peak generation with energy storage for on-peak demand consumption, and Plug-In Hybrid Electric Vehicles with vehicle-to-grid discharge. In most cases, each demand reduction and energy efficiency project that is proposed and investigated under this program requires field-testing with customers.

CHAPTER 3

FORECAST OF FACILITIES REQUIREMENTS

Progress Energy

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CHAPTER 3
FORECAST OF FACILITIES REQUIREMENTS

RESOURCE PLANNING FORECAST

OVERVIEW OF CURRENT FORECAST

Supply-Side Resources

PEF has a summer total capacity resource of 11,215 MW (see Table 3.1). This capacity resource includes nuclear (769 MW), fossil steam (3,889 MW), combined cycle plants (2,134 MW), combustion turbine (2,501 MW; 143 MW of which is owned by Georgia Power for the months June through September), utility purchased power (484 MW), independent power purchases (636 MW), and non-utility purchased power (802 MW). Table 3.2 presents PEF's firm capacity contracts with Qualifying Facilities (QF's).

Demand-Side Programs

Total DSM resources are presented in Schedules 3.1.1 and 3.2.1 of Chapter 2. These programs include Non-Dispatchable DSM, Interruptible Load, and Dispatchable Load Control resources. PEF's 2008 Ten-Year Site Plan Demand-Side Management projections are consistent with the DSM Goals established by the Commission in Docket No. 040031-EG.

Capacity and Demand Forecast

PEF's forecasts of capacity and demand for the projected summer and winter peaks can been found in Schedules 7.1 and 7.2, respectively. PEF's forecasts of capacity and demand are based on serving expected growth in retail requirements in its regulated service area and meeting commitments to wholesale power customers who have entered into supply contracts with PEF. In its planning process, PEF balances its supply plan for the needs of retail and wholesale customers and endeavors to ensure that cost-effective resources are available to meet the needs across the customer base. Over the years, as wholesale markets have grown more competitive, PEF has remained active in the competitive solicitations while planning in a manner that maintains an appropriate balance of commitments and resources within the overall regulated supply framework.

Base Expansion Plan

PEF's planned supply resource additions and changes are shown in Schedule 8 and are referred to as PEF's Base Expansion Plan. This Plan includes a net gain in summer capacity of 3,903 MWs through the summer of 2017. As identified in Schedule 8, PEF's next planned unit is the Bartow Repowering Project with an expected completion date of June 2009. This project is followed by the planned installation of natural gas fired combined cycle technology in 2013 at the Suwannee River Plant and new nuclear generation at the Company's Levy County site in 2016 and 2017.

PEF's Base Expansion Plan projects the need for additional units with proposed in-service dates during the ten-year period from 2008 through 2017. These units, together with purchases from Qualifying Facilities (QF), Investor Owned Utilities, and Independent Power Producers including but not limited to Reliant/Osceola (January 2007 - March 2009), Mirant Shady Hills (April 2007 - April 2024), and Southern Company (June 2010 - December 2015), help the PEF system meet the growing energy requirements of its customer base. The capacity needs identified in this plan may be impacted by PEF's ability to extend or replace existing purchase power cogenerator and QF contracts and to secure the new renewable purchased power resources in their respective projected timeframes. Status reports and specifications for the planned new generation facilities are included in Schedule 9. The new transmission lines associated with the Bartow Repowering Project as well as the planned Suwannee River Plant combined cycle project and the Levy County nuclear units are shown in Schedule 10.

TABLE 3.1

PROGRESS ENERGY FLORIDA

TOTAL CAPACITY RESOURCES OF POWER PLANTS AND PURCHASED POWER CONTRACTS

AS OF DECEMBER 31, 2007

PLANTS	NUMBER OF UNITS	SUMMER NET DEPENDABLE CAPABILITY (MW)	
Nuclear Steam			
Crystal River	1	769	*(1)*
Total Nuclear Steam	1	769	
Fossil Steam			
Crystal River	4	2,310	
Anclote	2	1,006	
Bartow	3	444	
Suwannee River	3	129	
Total Fossil Steam	12	3,889	
Combined Cycle			
Hines Energy Complex	4	1,930	
Tiger Bay	1	204	
Total Combined cycle	5	2,134	
Combustion Turbine			
DeBary	10	642	
Intercession City	14	984	*(2)*
Bayboro	4	178	
Bartow	4	176	
Suwannee	3	153	
Turner	4	148	
Higgins	4	113	
Avon Park	2	49	
University of Florida	1	46	
Rio Pinar	1	12	
Total Combustion Turbine	47	2,501	
Total Units	**65**		
Total Net Generating Capability		**9,293**	

(1) Adjusted for sale of approximately 8.2% of total capacity
(2) Includes 143 MW owned by Georgia Power Company (Jun-Sep)

Purchased Power			
Qualifying Facility Contracts	16	802	
Investor Owned Utilities	2	484	
Independent Power Producers	2	636	
TOTAL CAPACITY RESOURCES		**11,215**	

TABLE 3.2

PROGRESS ENERGY FLORIDA

QUALIFYING FACILITY GENERATION CONTRACTS

AS OF DECEMBER 31, 2007

Facility Name	Firm Capacity (MW)
Cargill	15.0
Dade County Resource Recovery	43.0
El Dorado	114.2
Lake Cogen	110.0
Lake County Resource Recovery	12.8
LFC Jefferson	8.5
LFC Madison	8.5
Mulberry	79.2
Orange Cogen (CFR-Biogen)	74.0
Orlando Cogen	79.2
Pasco Cogen	109.0
Pasco County Resource Recovery	23.0
Pinellas County Resource Recovery 1	40.0
Pinellas County Resource Recovery 2	14.8
Ridge Generating Station	39.6
Royster	30.8
TOTAL	**801.6**

PROGRESS ENERGY FLORIDA

SCHEDULE 7.1

FORECAST OF CAPACITY, DEMAND AND SCHEDULED MAINTENANCE

AT TIME OF SUMMER PEAK

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	TOTAL[a]	FIRM[b]	FIRM		TOTAL	SYSTEM FIRM					
	INSTALLED	CAPACITY	CAPACITY		CAPACITY	SUMMER PEAK	RESERVE MARGIN		SCHEDULED	RESERVE MARGIN	
	CAPACITY	IMPORT	EXPORT	QF	AVAILABLE	DEMAND	BEFORE MAINTENANCE		MAINTENANCE	AFTER MAINTENANCE	
YEAR[c]	MW	MW	MW	MW	MW	MW	MW	% OF PEAK	MW	MW	% OF PEAK
2008	9,160	2,087	0	173	11,420	9,424	1,996	21%	0	1,996	21%
2009	9,859	1,467	0	173	11,499	9,451	2,048	22%	0	2,048	22%
2010	9,890	1,592	0	173	11,655	9,689	1,966	20%	0	1,966	20%
2011	9,900	1,680	0	323	11,903	9,873	2,030	21%	0	2,030	21%
2012	10,035	1,989	0	439	12,463	10,195	2,268	22%	0	2,268	22%
2013	11,065	1,879	0	439	13,383	10,393	2,990	29%	0	2,990	29%
2014	11,065	1,748	0	439	13,252	10,568	2,684	25%	0	2,684	25%
2015	11,065	1,748	0	439	13,252	10,776	2,476	23%	0	2,476	23%
2016	11,961	1,336	0	439	13,736	10,961	2,775	25%	0	2,775	25%
2017	13,053	1,336	0	439	14,828	11,150	3,678	33%	0	3,678	33%

Notes:

a. Total Installed Capacity does not include the 143 MW to Southern Company from Intercession City, P11.

b. FIRM Capacity Import includes Cogeneration, Utility and Independent Power Producers, and Short Term Purchase Contracts.

c. Progress Energy is pursuing summer seasonal purchases of approximately 250 MW in 2008. The deals are not yet consummated as of the time of the Ten-Year Site Plan filing. Since the purchase is expected to be from peaking capacity, no energy impact has been included in the plan at this time.

PROGRESS ENERGY FLORIDA

SCHEDULE 7.2

FORECAST OF CAPACITY, DEMAND AND SCHEDULED MAINTENANCE

AT TIME OF WINTER PEAK

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	TOTAL[a] INSTALLED CAPACITY	FIRM[b] CAPACITY IMPORT	FIRM CAPACITY EXPORT	QF	TOTAL CAPACITY AVAILABLE	SYSTEM FIRM WINTER PEAK DEMAND	RESERVE MARGIN BEFORE MAINTENANCE		SCHEDULED MAINTENANCE	RESERVE MARGIN AFTER MAINTENANCE	
YEAR	MW	MW	MW	MW	MW	MW	MW	% OF PEAK	MW	MW	% OF PEAK
2007/08	10,285	1,934	0	173	12,392	10,075	2,317	23%	0	2,317	23%
2008/09	10,295	1,667	0	173	12,135	9,881	2,254	23%	0	2,254	23%
2009/10	11,131	1,478	0	173	12,782	10,311	2,471	24%	0	2,471	24%
2010/11	11,125	1,636	0	173	12,934	10,524	2,410	23%	0	2,410	23%
2011/12	11,263	1,725	0	439	13,427	10,974	2,453	22%	0	2,453	22%
2012/13	11,270	2,077	0	439	13,786	11,250	2,536	23%	0	2,536	23%
2013/14	12,403	1,836	0	439	14,678	11,318	3,360	30%	0	3,360	30%
2014/15	12,403	1,836	0	439	14,678	11,549	3,129	27%	0	3,129	27%
2015/16	12,403	1,424	0	439	14,266	11,786	2,480	21%	0	2,480	21%
2016/17	13,272	1,424	0	439	15,135	12,011	3,124	26%	0	3,124	26%
2017/18	14,392	1,424	0	439	16,255	12,242	4,013	33%	0	4,013	33%

Notes:

a. Total Installed Capacity does not include the 143 MW to Southern Company from Intercession City, P11.

b. FIRM Capacity Import includes Cogeneration, Utility and Independent Power Producers, and Short Term Purchase Contracts.

PROGRESS ENERGY FLORIDA

SCHEDULE 8
PLANNED AND PROSPECTIVE GENERATING FACILITY ADDITIONS AND CHANGES

AS OF JANUARY 1, 2008 THROUGH DECEMBER 31, 2017

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
								CONST.	COM'L IN-	EXPECTED	GEN. MAX.	NET CAPABILITY[a]			
	UNIT	LOCATION	UNIT	FUEL		FUEL TRANSPORT		START	SERVICE	RETIREMENT	NAMEPLATE	SUMMER	WINTER		
PLANT NAME	NO.	(COUNTY)	TYPE	PRI.	ALT.	PRI.	ALT.	MO. / YR	MO. / YR	MO. / YR	KW	MW	MW	STATUS[b]	NOTES[c]
TIGER BAY	1	POLK	CC						5/2008			10	10	A	(5)
CRYSTAL RIVER	5	CITRUS	ST						5/2009			(30)	(30)	D	(2)
CRYSTAL RIVER	5	CITRUS	ST						5/2009			14	14	A	(6)
BARTOW	1-3	PINELLAS	ST							6/2009		(444)	(464)	RP	(4)
BARTOW	4	PINELLAS	CC	NG	DFO	PL	WA	01/2007	6/2009			1159	1279	RP	(4)
CRYSTAL RIVER	3	CITRUS	NP						12/2009			37	37	A	(3)
CRYSTAL RIVER	4	CITRUS	ST						4/2010			(30)	(30)	D	(2)
ANCLOTE	2	PASCO	ST						5/2010			10	10	P	(6)
CRYSTAL RIVER	4	CITRUS	ST						5/2010			14	14	A	(6)
ANCLOTE	1	PASCO	ST						5/2011			10	10	P	(6)
CRYSTAL RIVER	3	CITRUS	NP						12/2011			129	129	A	(3)
CRYSTAL RIVER	1	CITRUS	ST						3/2012			7	7	A	(6)
SUWANNEE RIVER	1-3	SUWANNEE	ST							d.		(129)	(146)		(1)
SUWANNEE RIVER	4	SUWANNEE	CC	NG	DFO	PL	TK	12/2010	6/2013			1159	1279	P	(1)
RIO PINAR	P1	ORGANGE	CT							d.		(12)	(16)		(1)
TURNER	P1-P2	VOLUSIA	CT							d.		(22)	(32)		(1)
AVON PARK	P1-P2	HIGHLANDS	CT							d.		(49)	(70)		(1)
HIGGINS	P1-P4	PINELLAS	CT							d.		(113)	(133)		(1)
LEVY	1	LEVY	NP	NUC		RR		01/2010	6/2016			1092	1120	P	(1)
LEVY	2	LEVY	NP	NUC		RR		01/2011	6/2017			1092	1120	P	(1)

a. Net capability of Crystal River 3 represents approximately 91.8% PEF Ownership.
b. See page v. for Code Legend of Future Generating Unit Status.
c. NOTES
(1) Planned, Prospective, or Committed project.
(2) Planned derations due to FGD scrubber installations.
(3) Planned uprates.
(4) Repowering.
(5) Scheduled major inspection and rotor exhange.
(6) Turbine Project.
d. Suwanneee 1-3 expect to be shut down with the start-up of Suwannee 4-on-1 CC unit by 6/2013. Peakers at Avon Park, Higgins, Rio Pinar, Turner estimated to be in cold stand-by or retired by 6/2016.

PROGRESS ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2008

(1)	Plant Name and Unit Number:	**Bartow Repowering - Unit No. 4**
(2)	Capacity	
	a. Summer:	1,159
	b. Winter:	1,279
(3)	Technology Type:	COMBINED CYCLE
(4)	Anticipated Construction Timing	
	a. Field construction start date:	01/2007
	b. Commercial in-service date:	06/2009 (EXPECTED)
(5)	Fuel	
	a. Primary fuel:	NATURAL GAS
	b. Alternate fuel:	DISTILLATE FUEL OIL
(6)	Air Pollution Control Strategy:	DRY LOW NOx COMBUSTION with SELECTIVE CATALYTIC REDUCTION
(7)	Cooling Method:	COOLING WATER
(8)	Total Site Area:	1,348 ACRES
(9)	Construction Status:	UNDER CONSTRUCTION
(10)	Certification Status:	N/A
(11)	Status with Federal Agencies:	IN PROCESS
(12)	Projected Unit Performance Data	
	a. Planned Outage Factor (POF):	6.9 %
	b. Forced Outage Factor (FOF):	4.6 %
	c. Equivalent Availability Factor (EAF):	88.8 %
	d. Resulting Capacity Factor (%):	65.3 %
	e. Average Net Operating Heat Rate (ANOHR):	7,236 BTU/kWh
(13)	Projected Unit Financial Data	
	a. Book Life (Years):	25
	b. Total Installed Cost (In-service year $/kW):	512.72 (INCREMENTAL COST)
	c. Direct Construction Cost ($/kW):	445.45
	d. AFUDC Amount ($/kW):	67.27
	e. Escalation ($/kW):	0.00
	f. Fixed O&M ($/kW-yr):	3.84
	g. Variable O&M ($/MWh):	2.75
	h. K Factor:	NO CALCULATION

PROGRESS ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2008

(1)	Plant Name and Unit Number:	**Suwannee River Plant - Unit No. 4 (4-on-1 CC)**
(2)	Capacity	
	a. Summer:	1,159
	b. Winter:	1,279
(3)	Technology Type:	COMBINED CYCLE
(4)	Anticipated Construction Timing	
	a. Field construction start date:	12/2010
	b. Commercial in-service date:	6/2013 (EXPECTED)
(5)	Fuel	
	a. Primary fuel:	NATURAL GAS
	b. Alternate fuel:	DISTILLATE FUEL OIL
(6)	Air Pollution Control Strategy:	DRY LOW NOx COMBUSTION with SELECTIVE CATALYTIC REDUCTION
(7)	Cooling Method:	UNKNOWN
(8)	Total Site Area:	596 ACRES
(9)	Construction Status:	PLANNED
(10)	Certification Status:	PLANNED
(11)	Status with Federal Agencies:	PLANNED
(12)	Projected Unit Performance Data	
	a. Planned Outage Factor (POF):	6.9 %
	b. Forced Outage Factor (FOF):	4.6 %
	c. Equivalent Availability Factor (EAF):	88.8 %
	d. Resulting Capacity Factor (%):	65.3 %
	e. Average Net Operating Heat Rate (ANOHR):	7,236 BTU/kWh
(13)	Projected Unit Financial Data	
	a. Book Life (Years):	25
	b. Total Installed Cost (In-service year $/kW):	799.89
	c. Direct Construction Cost ($/kW):	615.99
	d. AFUDC Amount ($/kW):	102.88
	e. Escalation ($/kW):	81.03
	f. Fixed O&M ($/kW-yr):	3.84
	g. Variable O&M ($/MWh):	2.75
	h. K Factor:	NO CALCULATION

PROGRESS ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2008

(1)	Plant Name and Unit Number:	**Levy County Unit No. 1**
(2)	Capacity	
	a. Summer:	1,092
	b. Winter:	1,120
(3)	Technology Type:	ADVANCED LIGHT WATER NUCLEAR
(4)	Anticipated Construction Timing	
	a. Field construction start date:	1/2010
	b. Commercial in-service date:	6/2016 (EXPECTED)
(5)	Fuel	
	a. Primary fuel:	URANIUM
	b. Alternate fuel:	--
(6)	Air Pollution Control Strategy:	N/A
(7)	Cooling Method:	COOLING TOWER
(8)	Total Site Area:	3,100 ACRES
(9)	Construction Status:	PLANNED
(10)	Certification Status:	PLANNED
(11)	Status with Federal Agencies:	PLANNED
(12)	Projected Unit Performance Data	
	a. Planned Outage Factor (POF):	5.1 %
	b. Forced Outage Factor (FOF):	3.0 %
	c. Equivalent Availability Factor (EAF):	92.0 %
	d. Resulting Capacity Factor (%):	90 %
	e. Average Net Operating Heat Rate (ANOHR):	9,715 BTU/kWh
(13)	Projected Unit Financial Data	
	a. Book Life (Years):	40
	b. Total Installed Cost (In-service year $/kW):	7425.01
	c. Direct Construction Cost ($/kW):	5165.91
	d. AFUDC Amount ($/kW):	1620.30
	e. Escalation ($/kW):	638.80
	f. Fixed O&M ($/kW-yr):	52.96
	g. Variable O&M ($/MWh):	2.86 in current year 2008$
	h. K Factor:	NO CALCULATION

PROGRESS ENERGY FLORIDA

SCHEDULE 9
STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2008

(1)	Plant Name and Unit Number:	**Levy County Unit No. 2**
(2)	Capacity	
	a. Summer:	1,092
	b. Winter:	1,120
(3)	Technology Type:	ADVANCED LIGHT WATER NUCLEAR
(4)	Anticipated Construction Timing	
	a. Field construction start date:	1/2011
	b. Commercial in-service date:	6/2017 (EXPECTED)
(5)	Fuel	
	a. Primary fuel:	URANIUM
	b. Alternate fuel:	--
(6)	Air Pollution Control Strategy:	N/A
(7)	Cooling Method:	COOLING TOWER
(8)	Total Site Area:	3,100 ACRES
(9)	Construction Status:	PLANNED
(10)	Certification Status:	PLANNED
(11)	Status with Federal Agencies:	PLANNED
(12)	Projected Unit Performance Data	
	a. Planned Outage Factor (POF):	5.1 %
	b. Forced Outage Factor (FOF):	3.0 %
	c. Equivalent Availability Factor (EAF):	92.0 %
	d. Resulting Capacity Factor (%):	90 %
	e. Average Net Operating Heat Rate (ANOHR):	9,715 BTU/kWh
(13)	Projected Unit Financial Data	
	a. Book Life (Years):	40
	b. Total Installed Cost (In-service year $/kW):	5155.09
	c. Direct Construction Cost ($/kW):	3390.06
	d. AFUDC Amount ($/kW):	1278.60
	e. Escalation ($/kW):	486.43
	f. Fixed O&M ($/kW-yr):	37.07
	g. Variable O&M ($/MWh):	2.86 in current year 2008$
	h. K Factor:	NO CALCULATION

PROGRESS ENERGY FLORIDA

SCHEDULE 10
STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

BARTOW REPOWERING

(1) POINT OF ORIGIN AND TERMINATION:	Bartow Plant - Northeast Substation
(2) NUMBER OF LINES:	3
(3) RIGHT-OF-WAY:	Existing transmission line right-of-way
(4) LINE LENGTH:	4 miles
(5) VOLTAGE:	230 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	06/2009
(7) ANTICIPATED CAPITAL INVESTMENT:	$72,408,125 *
(8) SUBSTATIONS:	N/A
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

* The projected capital estimate may vary during construction of the Bartow Repowering Project

PROGRESS ENERGY FLORIDA

SCHEDULE 10
STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

BARTOW REPOWERING

(1) POINT OF ORIGIN AND TERMINATION:	Northeast Substation - Thirty-Second Street Substation
(2) NUMBER OF LINES:	1
(3) RIGHT-OF-WAY:	New and existing transmission line right-of-ways
(4) LINE LENGTH:	2.4 miles
(5) VOLTAGE:	115 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	09/2008
(7) ANTICIPATED CAPITAL INVESTMENT:	$4,000,000 *
(8) SUBSTATIONS:	Thirty-Second Street Substation - Addition
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

* The projected capital estimate may vary during construction of the Bartow Repowering Project

PROGRESS ENERGY FLORIDA

SCHEDULE 10
STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

BARTOW REPOWERING

(1) POINT OF ORIGIN AND TERMINATION:	Northeast Substation - Fortieth Street Substation
(2) NUMBER OF LINES:	1
(3) RIGHT-OF-WAY:	New and existing transmission line right-of-ways
(4) LINE LENGTH:	8.3 miles
(5) VOLTAGE:	230 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	09/2008
(7) ANTICIPATED CAPITAL INVESTMENT:	$11,000,000 *
(8) SUBSTATIONS:	N/A
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

* The projected capital estimate may vary during construction of the Bartow Repowering Project

PROGRESS ENERGY FLORIDA

SCHEDULE 10
STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

BARTOW REPOWERING

(1) POINT OF ORIGIN AND TERMINATION:	Pasadena Substation - Fifty-First Street Substation
(2) NUMBER OF LINES:	2
(3) RIGHT-OF-WAY:	Existing transmission line right-of-way
(4) LINE LENGTH:	0.4 miles
(5) VOLTAGE:	230 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	09/2008
(7) ANTICIPATED CAPITAL INVESTMENT:	$12,000,000 *
(8) SUBSTATIONS:	Fifty-First Street Substation - Addition
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

* The projected capital estimate may vary during construction of the Bartow Repowering Project

PROGRESS ENERGY FLORIDA

SCHEDULE 10
STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

SUWANNEE RIVER PLANT - Unit No. 4

(1) POINT OF ORIGIN AND TERMINATION:	Ft. White - Suwannee Substation
(2) NUMBER OF LINES:	1
(3) RIGHT-OF-WAY:	Existing and new transmission line rights-of-way
(4) LINE LENGTH:	40 miles
(5) VOLTAGE:	230 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	06/2013
(7) ANTICIPATED CAPITAL INVESTMENT:	$80,000,000 *
(8) SUBSTATIONS:	N/A
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

* The projected capital estimate may vary during construction of the combined cycle project.

PROGRESS ENERGY FLORIDA

SCHEDULE 10
STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

LEVY UNITS 1 & 2

(1) POINT OF ORIGIN AND TERMINATION:	Levy - Central Florida South Substation
(2) NUMBER OF LINES:	1
(3) RIGHT-OF-WAY:	Existing and new transmission line rights-of-way
(4) LINE LENGTH:	50 miles
(5) VOLTAGE:	500 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	06/2016
(7) ANTICIPATED CAPITAL INVESTMENT:	$150,000,000 *
(8) SUBSTATIONS:	Levy, Central Florida South
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

* Each of these projects is part of one or more transmission options for the Levy Nuclear project. Out of several options under consideration, the final option is yet to be chosen, and thus this list of projects is subject to change. In addition, the projected capital estimate for this project may vary during construction of the Levy Units.

PROGRESS ENERGY FLORIDA

SCHEDULE 10
STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

LEVY UNITS 1 & 2

(1) POINT OF ORIGIN AND TERMINATION:	Levy - Crystal River Substation
(2) NUMBER OF LINES:	1
(3) RIGHT-OF-WAY:	New transmission line right-of-way
(4) LINE LENGTH:	10 miles
(5) VOLTAGE:	500 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	06/2016
(7) ANTICIPATED CAPITAL INVESTMENT:	$30,000,000 *
(8) SUBSTATIONS:	Levy
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

* Each of these projects is part of one or more transmission options for the Levy Nuclear project. Out of several options under consideration, the final option is yet to be chosen, and thus this list of projects is subject to change. In addition, the projected capital estimate for this project may vary during construction of the Levy Units.

PROGRESS ENERGY FLORIDA

SCHEDULE 10
STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

LEVY UNITS 1 & 2

(1) POINT OF ORIGIN AND TERMINATION:	Levy - Citrus Substation
(2) NUMBER OF LINES:	2
(3) RIGHT-OF-WAY:	New transmission line right-of-way
(4) LINE LENGTH:	10 miles
(5) VOLTAGE:	500 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	06/2016
(7) ANTICIPATED CAPITAL INVESTMENT:	$50,000,000 *
(8) SUBSTATIONS:	Levy
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

* Each of these projects is part of one or more transmission options for the Levy Nuclear project. Out of several options under consideration, the final option is yet to be chosen, and thus this list of projects is subject to change. In addition, the projected capital estimate for this project may vary during construction of the Levy Units.

PROGRESS ENERGY FLORIDA

SCHEDULE 10
STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

LEVY UNITS 1 & 2

(1) POINT OF ORIGIN AND TERMINATION:	Crystal River - Brookridge Substation
(2) NUMBER OF LINES:	1
(3) RIGHT-OF-WAY:	Existing and new transmission line rights-of-way
(4) LINE LENGTH:	35 miles
(5) VOLTAGE:	230 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	06/2016
(7) ANTICIPATED CAPITAL INVESTMENT:	$70,000,000 *
(8) SUBSTATIONS:	N/A
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

* Each of these projects is part of one or more transmission options for the Levy Nuclear project. Out of several options under consideration, the final option is yet to be chosen, and thus this list of projects is subject to change. In addition, the projected capital estimate for this project may vary during construction of the Levy Units.

PROGRESS ENERGY FLORIDA

SCHEDULE 10
STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

LEVY UNITS 1 & 2

(1) POINT OF ORIGIN AND TERMINATION:	Brookridge - Brooksville West Substation
(2) NUMBER OF LINES:	1
(3) RIGHT-OF-WAY:	Existing and new transmission line rights-of-way
(4) LINE LENGTH:	4 miles
(5) VOLTAGE:	230 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	06/2016
(7) ANTICIPATED CAPITAL INVESTMENT:	$8,000,000 *
(8) SUBSTATIONS:	N/A
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

* Each of these projects is part of one or more transmission options for the Levy Nuclear project. Out of several options under consideration, the final option is yet to be chosen, and thus this list of projects is subject to change. In addition, the projected capital estimate for this project may vary during construction of the Levy Units.

PROGRESS ENERGY FLORIDA

SCHEDULE 10
STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

LEVY UNITS 1 & 2

(1) POINT OF ORIGIN AND TERMINATION:	Kathleen - Lake Tarpon Substation
(2) NUMBER OF LINES:	1
(3) RIGHT-OF-WAY:	Existing and new transmission line rights-of-way
(4) LINE LENGTH:	45 miles
(5) VOLTAGE:	230 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	06/2016
(7) ANTICIPATED CAPITAL INVESTMENT:	$100,000,000 *
(8) SUBSTATIONS:	N/A
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

* Each of these projects is part of one or more transmission options for the Levy Nuclear project. Out of several options under consideration, the final option is yet to be chosen, and thus this list of projects is subject to change. In addition, the projected capital estimate for this project may vary during construction of the Levy Units.

PROGRESS ENERGY FLORIDA

SCHEDULE 10
STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

LEVY UNITS 1 & 2

(1) POINT OF ORIGIN AND TERMINATION:	Citrus - Crystal River East Substation
(2) NUMBER OF LINES:	2
(3) RIGHT-OF-WAY:	Existing and new transmission line rights-of-way
(4) LINE LENGTH:	6 miles
(5) VOLTAGE:	230 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	06/2016
(7) ANTICIPATED CAPITAL INVESTMENT:	$12,000,000 *
(8) SUBSTATIONS:	Citrus
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

* Each of these projects is part of one or more transmission options for the Levy Nuclear project. Out of several options under consideration, the final option is yet to be chosen, and thus this list of projects is subject to change. In addition, the projected capital estimate for this project may vary during construction of the Levy Units.

PROGRESS ENERGY FLORIDA

SCHEDULE 10
STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

LEVY UNITS 1 & 2

(1) POINT OF ORIGIN AND TERMINATION:	Citrus - Brookridge Substation
(2) NUMBER OF LINES:	1
(3) RIGHT-OF-WAY:	Existing and new transmission line rights-of-way
(4) LINE LENGTH:	35 miles
(5) VOLTAGE:	500 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	06/2016
(7) ANTICIPATED CAPITAL INVESTMENT:	$105,000,000 *
(8) SUBSTATIONS:	Citrus
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

* Each of these projects is part of one or more transmission options for the Levy Nuclear project. Out of several options under consideration, the final option is yet to be chosen, and thus this list of projects is subject to change. In addition, the projected capital estimate for this project may vary during construction of the Levy Units.

PROGRESS ENERGY FLORIDA

SCHEDULE 10
STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

LEVY UNITS 1 & 2

(1) POINT OF ORIGIN AND TERMINATION:	Brookridge - Lake Tarpon Substation
(2) NUMBER OF LINES:	1
(3) RIGHT-OF-WAY:	Existing and new transmission line rights-of-way
(4) LINE LENGTH:	40 miles
(5) VOLTAGE:	500 kV
(6) ANTICIPATED CONSTRUCTION TIMING:	06/2016
(7) ANTICIPATED CAPITAL INVESTMENT:	$120,000,000 *
(8) SUBSTATIONS:	Citrus
(9) PARTICIPATION WITH OTHER UTILITIES:	N/A

* Each of these projects is part of one or more transmission options for the Levy Nuclear project. Out of several options under consideration, the final option is yet to be chosen, and thus this list of projects is subject to change. In addition, the projected capital estimate for this project may vary during construction of the Levy Units.

INTEGRATED RESOURCE PLANNING OVERVIEW

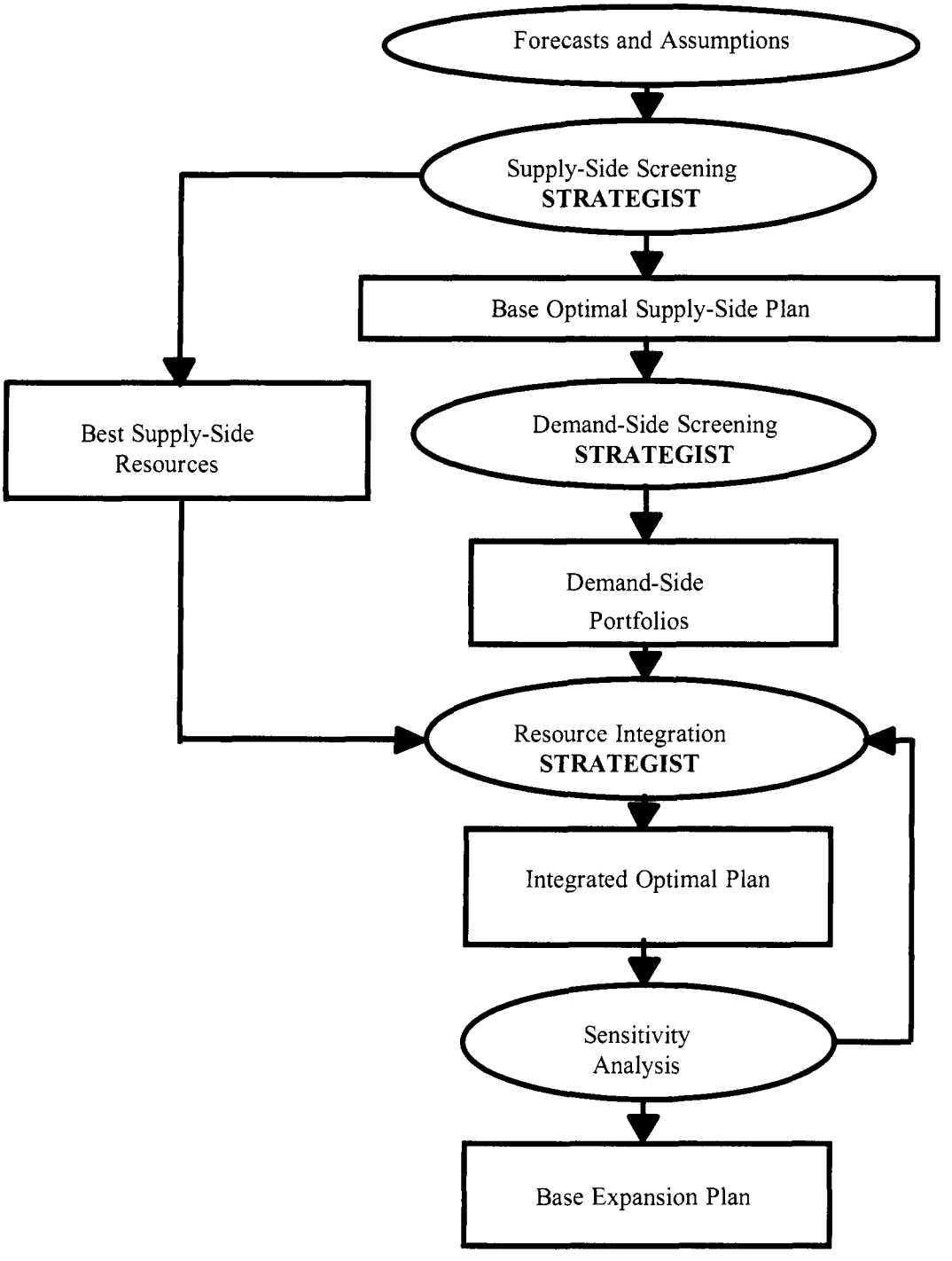
PEF employs an Integrated Resource Planning (IRP) process to determine the most cost-effective mix of supply- and demand-side alternatives that will reliably satisfy our customers' future demand and energy needs. PEF's IRP process incorporates state-of-the-art computer models used to evaluate a wide range of future generation alternatives and cost-effective conservation and dispatchable demand-side management programs on a consistent and integrated basis.

An overview of PEF's IRP Process is shown in Figure 3.1. The process begins with the development of various forecasts, including demand and energy, fuel prices, and economic assumptions. Future supply- and demand-side resource alternatives are identified and extensive cost and operating data are collected to enable these to be modeled in detail. These alternatives are optimized together to determine the most cost-effective plan for PEF to pursue over the next ten (10) years to meet the company's reliability criteria. The resulting ten-year plan, the Integrated Optimal Plan, is then tested under different relevant sensitivity scenarios to identify variances, if any, which would warrant reconsideration of any of the base plan assumptions. If the plan is judged robust under sensitivity analysis and works within the corporate framework, it evolves as the Base Expansion Plan. This process is discussed in more detail in the following section titled "The Integrated Resource Planning (IRP) Process".

The Integrated Resource Plan provides PEF with substantial guidance in assessing and optimizing the Company's overall resource mix on both the supply side and the demand side. When a decision supporting a significant resource commitment is being developed (e.g. plant construction, power purchase, DSM program implementation), the Company will move forward with directional guidance from the IRP and delve much further into the specific levels of examination required. This more detailed assessment will typically address very specific technical requirements and cost estimates, detailed corporate financial considerations, and the most current dynamics of the business and regulatory environments.

FIGURE 3.1

Integrated Resource Planning (IRP) Process Overview



THE INTEGRATED RESOURCE PLANNING (IRP) PROCESS

Forecasts and Assumptions

The evaluation of possible supply- and demand-side alternatives, and development of the optimal plan, is an integral part of the IRP process. These steps together comprise the integration process that begins with the development of forecasts and collection of input data. Base forecasts that reflect PEF's view of the most likely future scenarios are developed, along with high and low forecasts that reflect alternative future scenarios. Computer models used in the process are brought up-to-date to reflect this data, along with the latest operating parameters and maintenance schedules for PEF's existing generating units. This establishes a consistent starting point for all further analysis.

Reliability Criteria

Utilities require a margin of generating capacity above the firm demands of their customers in order to provide reliable service. Periodic scheduled outages are required to perform maintenance and inspections of generating plant equipment and to refuel nuclear plants. At any given time during the year, some capacity may be out of service due to unanticipated equipment failures resulting in forced outages of generation units. Adequate reserve capacity must be available to accommodate these outages and to compensate for higher than projected peak demand due to forecast uncertainty and abnormal weather. In addition, some capacity must be available for operating reserves to maintain the balance between supply and demand on a moment-to-moment basis.

PEF plans its resources in a manner consistent with utility industry planning practices, and employs both deterministic and probabilistic reliability criteria in the resource planning process. A Reserve Margin criterion is used as a deterministic measure of PEF's ability to meet its forecasted seasonal peak load with firm capacity. PEF plans its resources to satisfy a twenty (20) percent Reserve Margin criterion.

Loss of Load Probability (LOLP) is a probabilistic criterion that measures the probability that a company will be unable to meet its load throughout the year. While Reserve Margin considers the peak load and amount of installed resources, LOLP takes into account generating unit sizes, capacity mix, maintenance scheduling, unit availabilities, and capacity assistance available from

other utilities. A standard probabilistic reliability threshold commonly used in the electric utility industry, and the criterion employed by PEF, is a maximum of one (1) day in ten (10) years loss of load probability.

PEF has based its resource planning on the use of dual reliability criteria since the early 1990s, a practice that has been accepted by the FPSC. PEF's resource portfolio is designed to satisfy the twenty (20) percent Reserve Margin requirement and probabilistic analyses are periodically conducted to ensure that the one (1) day in ten (10) years LOLP criterion is also satisfied. By using both the Reserve Margin and LOLP planning criteria, PEF's resource portfolio is designed to have sufficient capacity available to meet customer peak demand, and to provide reliable generation service under expected load conditions. PEF has found that resource additions are typically triggered to meet the twenty (20) percent Reserve Margin thresholds before LOLP becomes a factor.

Supply-Side Screening

Potential supply-side resources are screened to determine those that are the most cost-effective. Data used for the screening analysis is compiled from various industry sources and PEF's experiences. The wide range of resource options is pre-screened to set aside those that do not warrant a detailed cost-effectiveness analysis. Typical screening criteria are costs, fuel source, technology maturity, environmental parameters, and overall resource feasibility.

Economic evaluation of generation alternatives is performed using the STRATEGIST optimization program. This optimization tool evaluates revenue requirements for specific resource plans generated from multiple combinations of future resource additions that meet system reliability criteria and other system constraints. All resource plans are then ranked by system revenue requirements.

Demand-Side Screening

Like supply-side resources, data for large numbers of potential demand-side resources are also collected. These resources are pre-screened to eliminate those alternatives that are still in research and development, addressed by other regulations (e.g. building code), or not applicable to PEF's

customers. STRATEGIST is updated with cost data and load impact parameters for each potential DSM measure to be evaluated.

The Base Optimal Supply-Side Plan is used to establish avoidable units for screening future demand-side resources. Each future demand-side alternative is individually tested in this plan over the ten-year planning horizon to determine the benefit or detriment that the addition of this demand-side resource provides to the overall system. STRATEGIST calculates the benefits and costs for each demand-side measure evaluated and reports the appropriate ratios for the Rate Impact Measure (RIM), the Total Resource Cost Test (TRC), and the Participant Test. Demand-side programs that pass the RIM test are then bundled together to create demand-side portfolios. These portfolios contain the appropriate DSM options and make the optimization solvable with the STRATEGIST model.

Resource Integration and the Integrated Optimal Plan

The cost-effective generation alternatives and the demand-side portfolios developed in the screening process can then be optimized together to formulate integrated optimal plans. The optimization program considers all possible future combinations of supply- and demand-side alternatives that meet the company's reliability criteria in each year of the ten-year study period and reports those that provide both flexibility and low revenue requirements (rates) for PEF's ratepayers.

Developing the Base Expansion Plan

The integrated optimized plans that provide the lowest revenue requirements are then further tested using sensitivity analysis. The economics of the plan may be evaluated under high and low forecast scenarios for fuel, load and financial assumptions, or any other sensitivities which the planner deems relevant. From the sensitivity assessment, the ten-year plan that is identified as achieving the best balance of flexibility and cost is then reviewed within the corporate framework to determine how the plan potentially impacts or is impacted by many other factors. If the plan is judged robust under this review, it evolves as the Base Expansion Plan.

KEY CORPORATE FORECASTS

Load Forecast

The assumptions and methodology used to develop the base case load and energy forecast is described in Chapter 2 of this TYSP.

Fuel Forecast

Base Fuel Case: The base case fuel price forecast was developed using short-term and long-term spot market price projections from industry-recognized sources. Coal prices are expected to be relatively stable month to month; however, oil and natural gas prices are expected to be more volatile on a day-to-day and month-to-month basis.

In the short term, the base cost for coal is based on the existing contracts and spot market coal prices and transportation arrangements between PEF and its various suppliers. For the longer term, the prices are based on spot market forecasts reflective of expected market conditions. Oil and natural gas prices are estimated based on current and expected contracts and spot purchase arrangements as well as near-term and long-term market forecasts. Oil and natural gas commodity prices are driven primarily by open market forces of supply and demand. Natural gas firm transportation cost is determined primarily by pipeline tariff rates and tends to change less frequently than commodity prices.

Financial Forecast

The key financial assumptions used in PEF's most recent planning studies were 45 percent debt and 55 percent equity capital structure, projected debt cost of 5.9 percent, and an equity return of 11.75 percent. These assumptions resulted in a weighted average cost of capital of 9.1 percent and an after-tax discount rate of 8.1 percent.

TEN-YEAR SITE PLAN (TYSP) RESOURCE ADDITIONS

In this TYSP, PEF's supply-side resources include the repowering of the P.L. Bartow Plant with F-Class combined cycle technology with an expected in-service date of June 2009. The planned units in this TYSP include the installation of combined cycle technology at the Suwannee River Plant as well as two (2) nuclear units on a greenfield site in Levy County.

The Company recently submitted a petition for a Determination of Need for the nuclear units at Levy County, proposing to proceed with development of two 1,100 MW units. The Company selected Levy Units 1 and 2 for projected commercial service in 2016 and 2017, respectively, to meet its generation capacity needs in the period 2016 to 2019 and beyond after carefully evaluating planning options through the Company's on-going Integrated Resource Planning ("IRP") process outlined herein. The nuclear units were identified as the most cost-effective option to meet the need, taking into account the need to improve fuel diversity, reduce Florida's dependence on fuel oil and natural gas, reduce current and potential future air emission compliance costs, and contribute to the long-term stability of the electric grid. Since nuclear units involve very long licensing and construction lead times, PEF plans to continue with the design and development of the infrastructure and transmission requirements, negotiations for procurement and construction contracts and permitting and licensing to support the current planned in-service dates.

Through its ongoing planning process, PEF will continue to evaluate the timetables for all projected resource additions and assess alternatives for the future considering, among other things, projected load growth, fuel prices, current lead times in the construction marketplace, project development timelines for new fuels, and technologies, and environmental compliance considerations. The Company will continue to examine the merits of new generation alternatives and adjust its resource plans accordingly to ensure optimal selection of resource additions based on the best information available.

RENEWABLE ENERGY

PEF continues to make purchases from the following facilities listed by fuel type:

Municipal Solid Waste Facilities:

Lake County Resource Recovery (12.8 MW)

Metro-Dade County Resource Recovery (43 MW)

Pasco County Resource Recovery (23 MW)

Pinellas County Resource Recovery (54.8 MW)

Waste Heat from Exothermic Processes:

PCS Phosphate (As Available)

Waste Wood, Tires, and Landfill Gas:

Ridge Generating Station (39.6 MW)

SI Group Energy (5 MW) (As-Available)

Photovoltaics

Various customer and PEF owned installations (524 kW connected to PEF)

In addition, PEF has entered into contracts with Biomass Energy Group (116 MW) and BG&E (150 MW). The Biomass Energy Group facility will utilize an energy crop, while the BG&E units will fire gas from wood products.

PEF continues to seek out renewable suppliers that can provide reliable capacity and energy at economic rates. In July 2007, PEF issued a Request for Renewables (RFR) soliciting proposals for renewable energy projects. Over 55 responses were received, and discussions with potential suppliers are ongoing. PEF will submit renewable standard offer contracts in compliance with FPSC rules.

PLAN SENSITIVITIES

Load Forecast

In general, higher-than-projected load growth would shift the need for new capacity to an earlier year and lower-than-projected load growth would delay the need for new resources. PEF's TYSP includes in the short-term the Bartow Repowering Project currently under construction

and additions of combined cycle and nuclear units in the long-term. The Company's resource plan provides the flexibility to shift certain resources to earlier or later in-service dates should a significant change in projected customer demand begin to materialize.

Fuel Forecast

PEF's current TYSP includes new natural gas fueled resources in 2009 and 2013. The plan also includes uprates to the Crystal River nuclear unit No. 3 in 2009 and 2011, and new nuclear units in 2016 and 2017. PEF focused its fuel forecast sensitivity on price projections for natural gas. Higher gas prices would improve the economics for non gas-fueled resources and lower gas prices would benefit gas-fueled resources. Uncertainty over future environmental regulation, particularly as it relates carbon, as well as fuel security and reliability considerations, favors pursuit of the nuclear option.

Fuel price forecasts can have a significant impact on the economics of generation alternatives. Consideration of fuel forecast sensitivity for this TYSP did not suggest reconsideration of the base plan. PEF will continue to monitor fuel price relationships to identify long-term structural changes and assess the potential impacts on the economics of resource selection.

Financial Forecast

PEF's current TYSP includes a combined cycle addition in 2013 with nuclear unit additions in 2016 and 2017. Lower cost of capital and escalation rates would favor options with longer construction lead times and higher capital costs such as the nuclear addition. However, PEF does not expect these assumptions to go much lower than the current base case forecast and nuclear generation is not projected to be feasible before 2016. PEF will continue to assess the economics of future generation alternatives including consideration of the uncertainties in planning assumptions.

TRANSMISSION PLANNING

PEF's transmission planning assessment practices are developed to test the ability of the planned system to meet the reliability criteria as outlined in the FERC Form 715 filing, and to assure the system meets PEF, Florida Reliability Coordinating Council, Inc. (FRCC) and NERC criteria. This involves the use of load flow and transient stability programs to model various contingency situations that may occur, and determining if the system response meets the reliability criteria. In general, this involves running simulations for the loss of any single line, generator, or transformer. PEF normally runs this analysis for system peak and off-peak load levels for possible contingencies, and for both summer and winter. Additional studies are performed to determine the system response to credible, but less probable criteria. These studies include the loss of multiple generators or lines, combinations of each, and some load loss is permissible under these more severe disturbances. These credible, but less probable scenarios are also evaluated at various load levels, since some of the more severe situations occur at average or minimum load conditions. In particular, critical fault clearing times are typically the shortest (most severe) at minimum load conditions, with just a few large base load units supplying the system needs.

As noted in the PEF reliability criteria, some remedial actions are allowed to reduce system loadings, in particular, sectionalizing is allowed to reduce loading on lower voltage lines for bulk system contingencies, but the risk to load on the sectionalized system must be reasonable (it would not be considered prudent to operate for long periods with a sectionalized system). In addition, the number of remedial action steps and the overall complexity of the scheme are evaluated to determine overall acceptability.

Presently, PEF uses the following reference documents to calculate Available Transfer Capability (ATC) for required transmission path postings on the Florida Open Access Same-Time Information System (OASIS):

- FRCC: FRCC ATC Calculation and Coordination Procedures, April 4, 2006, which can be found on the FRCC's website: https://www.frcc.com/ATCWG/Shared%20Documents/FRCC%20ATC%20Coordination%20Procedures.pdf

- NERC: Transmission Transfer Capability, May 1, 1995,

- NERC: Available Transfer Capability – Definitions and Determination, July 30, 1996.

PEF uses the FRCC Capacity Benefit Margin (CBM) methodology to assess its CBM needs. This methodology is summarized as follows:

> "FRCC Transmission Providers make an assessment of the CBM needed on their respective systems by using either deterministic or probabilistic generation reliability analysis. The appropriate amount of transmission interface capability is then reserved for CBM on a per interface basis, taking into account the amount of generation available on other interconnected systems, the respective load peaking diversities of those systems, and Transmission Reliability Margin (TRM). Operating reserves may be included if appropriate in TRM and subsequently subtracted from the CBM if needed."

PEF currently has zero CBM reserved on each of its interfaces (posted paths). PEF's CBM on each path is currently established through the transmission provider functions within PEF using deterministic and probabilistic generation reliability analysis.

Currently, PEF proposes several bulk transmission additions that must be certified under either the Florida Transmission Line Siting Act (TLSA) or the Power Plant Siting Act (PPSA). PEF proposed bulk transmission line additions are summarized in the following Table 3.3. PEF has listed only the larger transmission projects. These projects may change depending upon the outcome of PEF's final corridor and specific route selection process.

TABLE 3.3

PROGRESS ENERGY FLORIDA

LIST OF PROPOSED BULK TRANSMISSION LINE ADDITIONS

2008 – 2017

MVA RATING WINTER	LINE OWNERSHIP	TERMINALS		LINE LENGTH (CKT.-MILES)	COMMERCIAL IN-SERVICE DATE (MO./YEAR)	NOMINAL VOLTAGE (kV)
1141	PEF	LAKE BRYAN	WINDERMERE #1	10 *	5 / 2008	230
1141	PEF	LAKE BRYAN	WINDERMERE #2	10	5 / 2008	230
1141	PEF	AVALON	GIFFORD	7	5 / 2009	230
612	PEF	BARTOW	NORTHEAST - Circuit 1	4	6/2009	230
612	PEF	BARTOW	NORTHEAST -Circuit 2	4	6/2009	230
612	PEF	BARTOW	NORTHEAST -Circuit 3	4	6/2009	230
525	PEF	NORTHEAST	32ND STREET	2.4	9/2008	115
810	PEF	NORTHEAST	40TH STREET	8.3*	9/2008	230
810	PEF	PASADENA	51ST STREET	0.4	9/2008	230
810	PEF	51ST STREET	40TH STREET	0.2	9/2008	230
837	PEF	AVON PARK	FORT MEADE	26†	6/2009	230
1141	PEF	HINES ENERGY COMPLEX	WEST LAKE WALES #2	21	5 / 2010	230
1141	PEF	INTERCESSION CITY	WEST LAKE WALES #2	30	6 / 2010	230
1141	PEF/TECO	LAKE AGNES (TECO)	GIFFORD	32	6/2011	230
1141	PEF	INTERCESSION CITY	WEST LAKE WALES #1	30 *	6/2011	230
1141	PEF	BITHLO	STANTON (OUC)	6**	5/2010	230
1141	PEF	FT. WHITE	SUWANNEE	40	6/2013	230
2870	PEF	LEVY	CENTRAL FLA SOUTH	50***	6/2016	500
2870	PEF	LEVY	CRYSTAL RIVER	10***	6/2016	500
2870	PEF	LEVY	CITRUS #1	10***	6/2016	500
2870	PEF	LEVY	CITRUS #2	10***	6/2016	500
2870	PEF	CITRUS	BROOKRIDGE	35***	6/2016	500
2870	PEF	BROOKRIDGE	LAKE TARPON	40***	6/2016	500
1141	PEF	CRYSTAL RIVER	BROOKRIDGE	35***	6/2016	230
1141	PEF	BROOKRIDGE	BROOKSVILLE WEST	4***	6/2016	230
1141	PEF	CITRUS	CRYSTAL RIVER EAST #1	6***	6/2016	230
1141	PEF	CITRUS	CRYSTAL RIVER EAST #2	6***	6/2016	230
1141	PEF	KATHLEEN	LAKE TARPON	45***	6/2016	230

* Rebuild existing circuit

** 6 miles is the present estimated distance for PEF's portion of this 12-mile PEF-OUC tie line

***Each of these projects is part of one or more transmission options for the Levy County Nuclear Power Plant project. Out of several options under consideration, the final option has yet to be chosen, and thus the above list of projects is subject to change.

† Convert existing 115 kV line to 230 kV

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CHAPTER 4

ENVIRONMENTAL AND LAND USE INFORMATION

Progress Energy

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CHAPTER 4

ENVIRONMENTAL AND LAND USE INFORMATION

PREFERRED SITES

PEF's base expansion plan includes the repowering of the existing P.L. Bartow Plant in Pinellas County with combined cycle technology, the potential installation of combined cycle technology at the Suwannee River Plant, and the installation of two (2) nuclear power units at the Levy County greenfield site. While these sites are suitable for new generation, PEF continues to evaluate other available options for future supply alternatives.

PEF is currently undergoing construction of the P.L. Bartow Plant repowering project , which is scheduled to begin commercial operation in June 2009. The planned combined cycle technology installation at the Suwannee River Plant with a possible operation date of summer 2013 as well as installation of the Levy County nuclear power units with operation planned to begin in 2016 and 2017 are being evaluated. Appropriate permitting requirements for PEF's preferred sites are discussed in the following site descriptions.

P.L. BARTOW PLANT – PINELLAS COUNTY

As mentioned above, PEF is in the process of repowering the existing P.L. Bartow Plant with natural gas-fired 4-on-1 combined cycle technology, which is scheduled to begin commercial operation in June 2009.

The P.L. Bartow Plant site (see Figure 4.1) consists of 1,348 acres in Pinellas County, on the west shore of Tampa Bay. The site is located on Weedon Island, just north of downtown Saint Petersburg. An adjacent barge fuel oil off-loading facility, a natural gas supply from the Florida Gas Transmission (FGT) pipeline, and a proposed Gulfstream natural gas pipeline provide the necessary fuel. The existing site consists of three (3) boilers, and four (4) combustion turbine peaking units. The repowered site will consist of a 4-on-1 combined cycle unit and the four (4) combustion turbine peaking units.

FIGURE 4.1.a

P.L. Bartow Plant (Pinellas County)

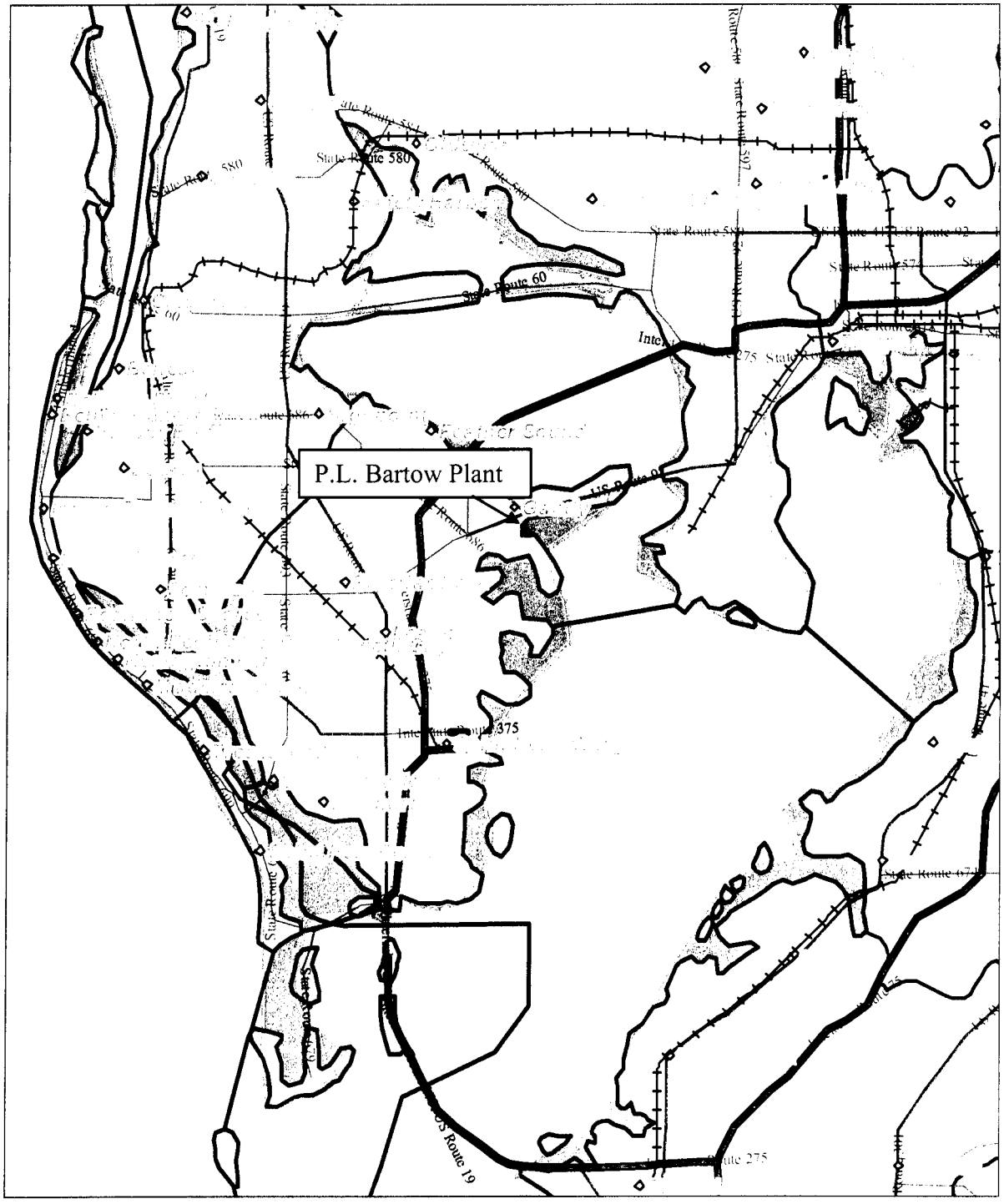
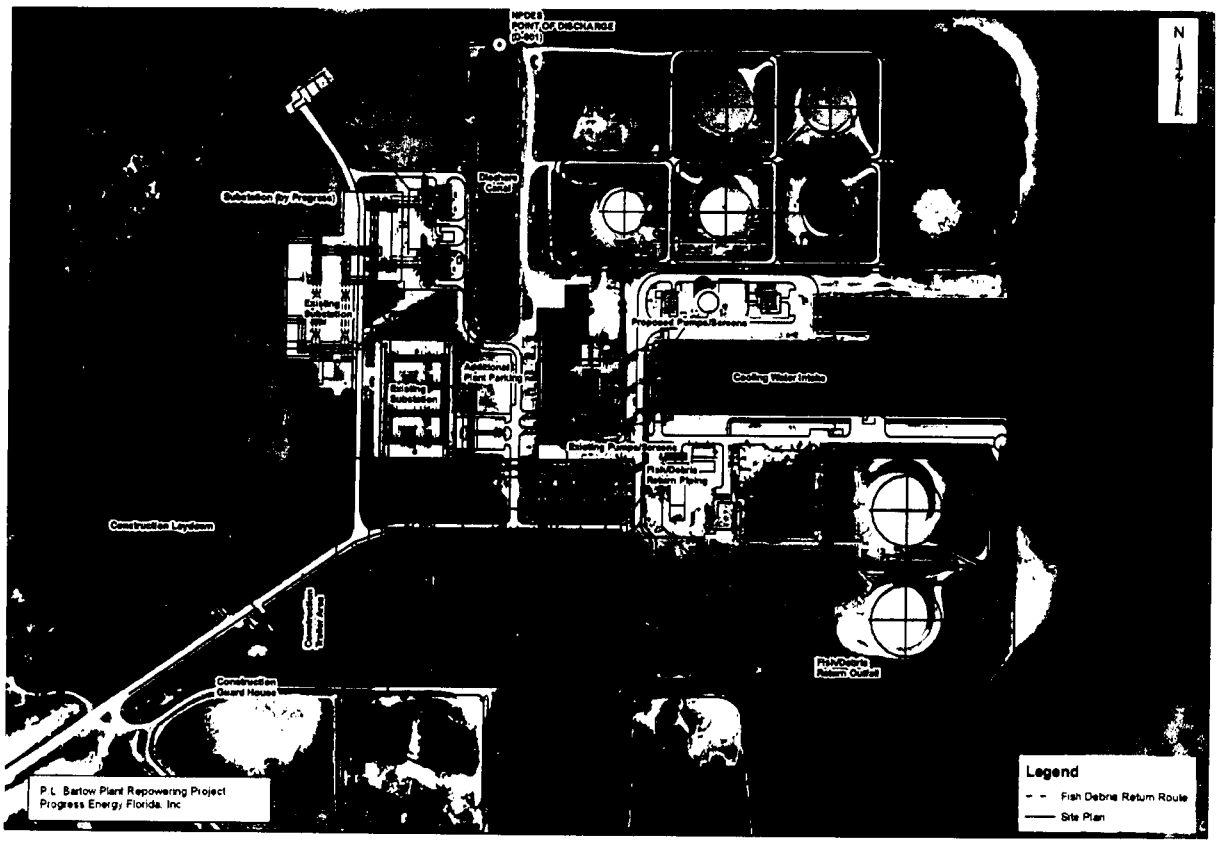


FIGURE 4.1.b

P.L. Bartow Plant (Pinellas County) – Plant Layout



In addition to this repowered unit combusting clean fuels, controls will also be utilized to minimize air emissions. These controls include dry low NO_x (DLN) burners, water injection, and selective catalytic reduction (SCR) systems. This project will have a positive impact on the surrounding air quality.

The repowered site will utilize existing water intake and discharge facilities. It will also use the existing water supply and ground water discharge treatment system. This repowered site has been designed and will operate such that no net new impact on water quality and water use will result.

Transmission modifications will be required to accommodate the repowering of these steam units (see Chapter 3).

SUWANNEE RIVER PLANT – SUWANNEE COUNTY

PEF is considering the installation of combined cycle technology at the Suwannee River Plant in place of existing fuel oil generation. The base expansion plan predicts a commercial operation start-up of June 2013 to meet the forecasted load.

The Suwannee River Plant site (see Figure 4.2) consists of 596 acres in unincorporated northwest Suwannee County, on the Suwannee River and approximately eleven (11) miles northwest of Live Oak, FL.

Three (3) fuel oil boilers as well as three (3) combustion turbine peaking units make up the current generation at this site. Fuel oil is transported in by rail car and truck, while pipeline natural gas is supplied by Southern Natural Gas. If this project is completed, the site will no longer utilize the fuel oil boilers and it will then consist of a combined cycle unit and the three (3) combustion turbines peaking units.

The installation of natural gas-fired combined cycle technology, combustion of clean fuels, as well as use of current combustion and control technology will have a positive effect on the surrounding air quality.

FIGURE 4.2.a.

Suwannee River Plant (Suwannee County)

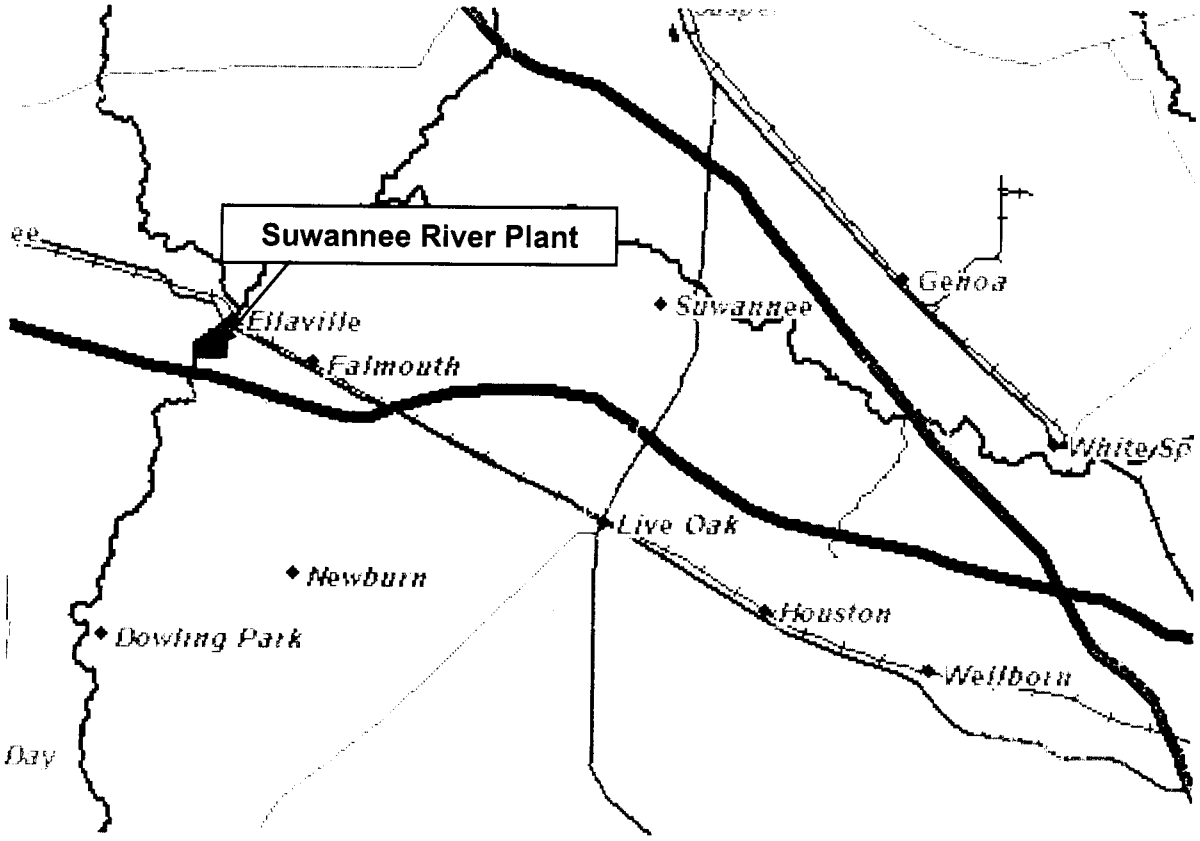
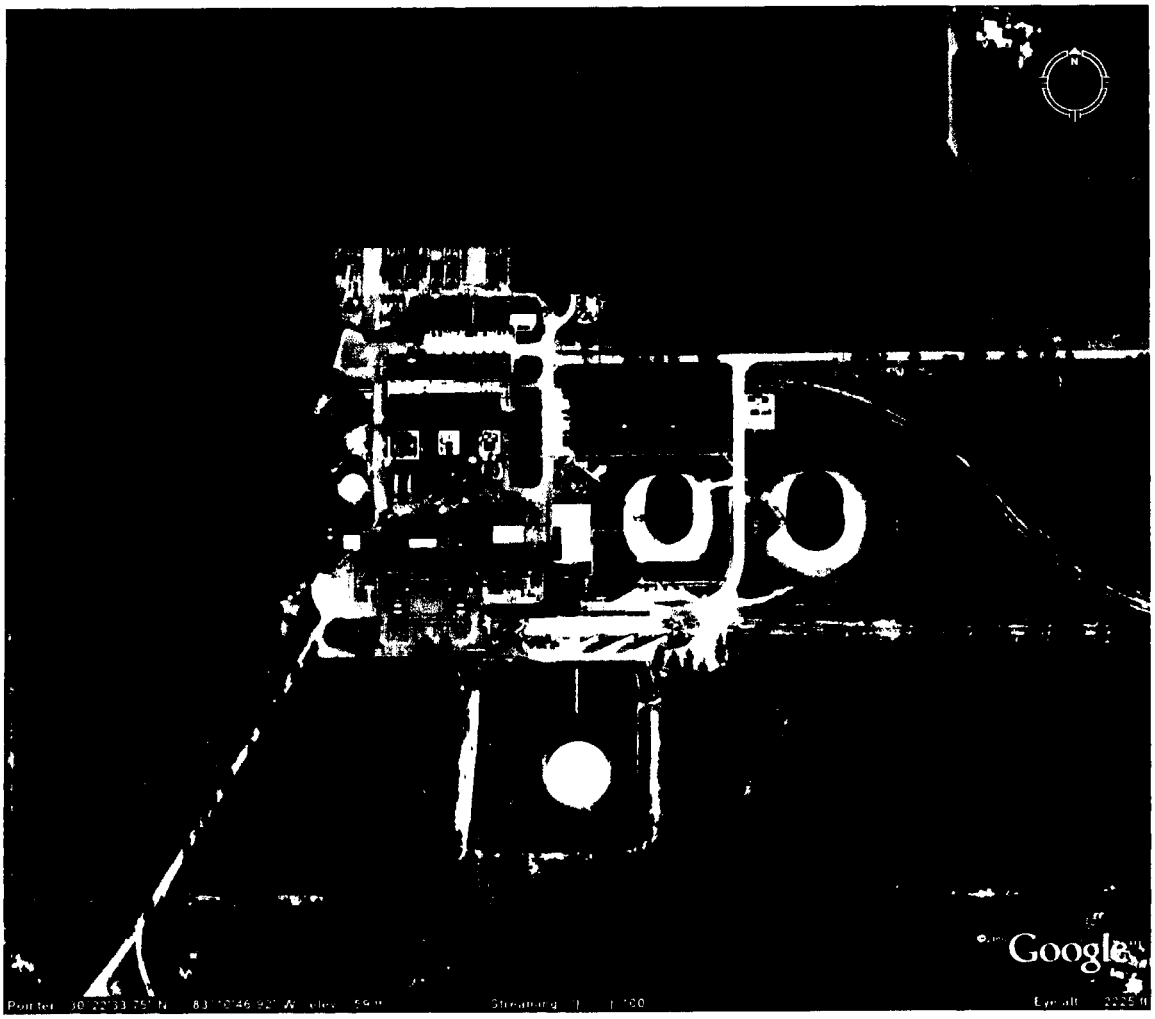


FIGURE 4.2.b.

Suwannee River Plant (Suwannee County) –Plant Layout



If the combined cycle technology project uses a closed cycle or off stream once through cooling, potentially the river water usage may change from the existing configuration. Additionally if closed cycle cooling is utilized, cooling tower blowdown treatment may possibly be required prior to discharge to the river. Applicable requirements related to water quality and water usage as a result of this project will be evaluated in more detail as this project moves forward.

With the potential project site located on or near the existing Suwannee River Plant, local land use and zoning requirements will be evaluated. In addition, noise, natural resources, and wetland impacts will be evaluated and mitigated for, as part of the site design and permitting process.

Transmission modifications are expected in support of this Suwannee River Plant project (see Chapter 3).

LEVY COUNTY NUCLEAR POWER PLANT – LEVY COUNTY

PEF recently named a site in southern Levy County as the preferred location for construction of new generation. The Company is planning the construction of two (2) new nuclear units at this plant site with planned operation to begin in 2016 and 2017.

The Levy County site (see Figure 4.3) is approximately 3,100 acres and located eight (8) miles inland from the Gulf of Mexico and roughly ten (10) miles north of the existing PEF Crystal River Energy Complex.

The site is about 2.5 miles from the Cross Florida Barge Canal, from which the Levy units may draw their makeup water to supply the on-site cooling water system. The Levy County Plant Units 1 and 2, together with the necessary associated site facilities, will occupy approximately ten (10) percent of the 3,100 acre site and the remaining acreage will be preserved as an exclusionary boundary around the developed plant site and a buffer preserve. PEF purchased an additional 2,100 acre tract contiguous with the southern boundary of the Levy site that secures access to a water supply for the site from the Cross Florida Barge Canal as well as transmission corridors from the plant site. The property for many years had been used for silviculture and was

designated as Forestry/Rural Residential. The surrounding area land use is predominantly vacant, commercial forestry lands.

This site was chosen based on several considerations including availability of land and water resources, access to the electric transmission system, and environmental considerations. First, the Levy County site had access to an adequate water supply. Second, the site is at a relatively high elevation, which provides additional protection from wind damage and flooding. Third, unlike a number of other sites considered, the Levy site has more favorable geotechnical qualities, which are critical to siting a nuclear power plant. Fourth, the Levy site provides geographical separation from other electrical generating facilities. Even though the Crystal River Energy Complex site has many favorable qualities, adding new nuclear generating capacity to the Crystal River Energy Complex at this time would result in a significant concentration of PEF's generating assets in one geographical location. This increases the likelihood of a significant generation loss from a single event and a potential large scale impact on the PEF system. The Levy County location also would assist in avoiding a potential loss from a single significant transmission system event that might result in a large-scale impact on the PEF system.

PEF's assessment of the Levy County site addressed whether any threatened and endangered species or archeological and cultural resources would be adversely impacted by the development of the site for nuclear generation units and related facilities. No significant issues were identified in PEF's evaluations of the property.

The proximity of the Levy County site to the PEF's existing Crystal River Unit 3 nuclear plant provides opportunities for efficiencies in shared support functions. The two (2) Levy units will be located on a greenfield site where site and transmission infrastructure must be constructed along with the buildings necessary for the power units. The site will include cooling towers, intake and discharge structures, containment buildings, auxiliary buildings, turbine buildings, diesel generators, warehouses, related site work and infrastructure, including roads, transmission lines, and a transmission substation. The Company will submit a Site Certification Application ("SCA") to the Florida Department of Environmental Protection ("DEP") for the entire site, including plants and associated facilities for the units.

Nuclear power is a clean source of electric power generation. Electric power generation from nuclear fuel produces no sulfur dioxide (SO_2), nitrogen oxide (NO_x), green house gases (GHG), or other emissions. Therefore, it will have a positive effect on the surrounding air quality.

Water discharged from nuclear plants must meet federal Clean Water Act requirements and state water-quality standards. Before operating, a nuclear plant's licensing process requires an environmental impact statement that carefully examines and resolves all potential impacts to water quality from the operation of the plant. These issues include concerns about the discharge of heated water and the impacts on aquatic life in cooling water used by the plant.

Transmission modifications will be required to accommodate the Levy County Nuclear Power Plant.

FIGURE 4.3.a.

Levy County Nuclear Power Plant (Levy County)

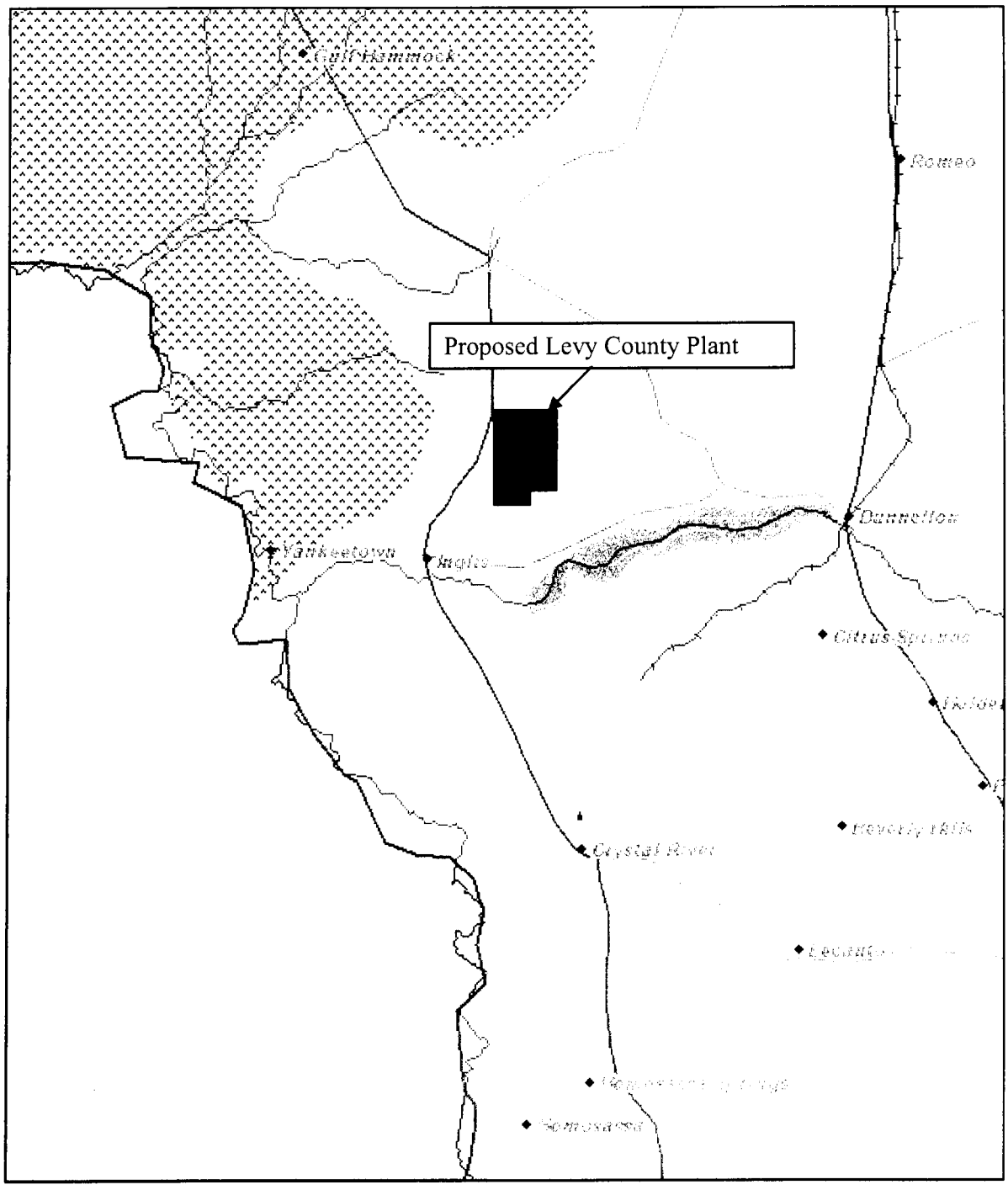


FIGURE 4.3.b.

Levy County Nuclear Power Plant (Levy County) – Aerial View