

ORIGINAL

March 30, 1999

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Ms. Blanca S. Bayó, Director Division of Public Records and Reporting Florida Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399

Dear Ms. Bayó:

In accordance with Section 186.801, Florida Statutes, Seminole Electric hereby submits twenty five (25) copies of our 1999 Ten Year Site Plan (TYSP).

Any questions or comments regarding Seminole's submittal will be greatly appreciated. I will be happy to discuss the TYSP in more detail.

Sincerely,

James R. Duren Vice President Technical Division

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Ten Year Site Plan

1999 - 2008

(Detail as of December 31, 1998)

April 1999

Submitted To:

State of Florida Public Service Commission

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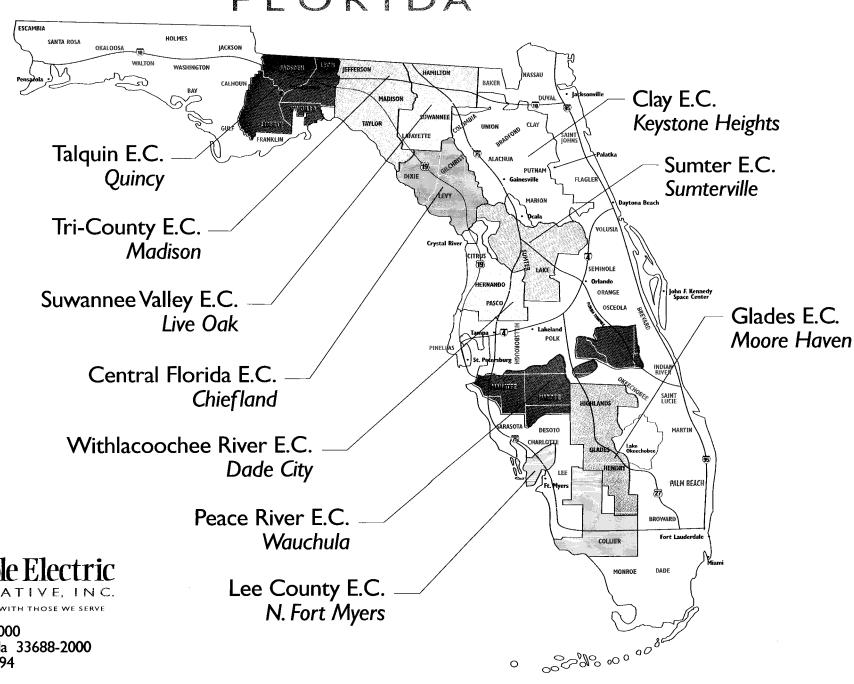
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Seminole's Member Distribution Cooperatives



Seminole Electric IN PARTNERSHIP WITH THOSE WE SERVE

> P.O. Box 272000 Tampa, Florida 33688-2000 (813) 963-0994

1. DESCRIPTION OF EXISTING FACILITIES

1.1 Overview

Seminole Electric Cooperative, Inc. (Seminole) is a corporation organized and existing under the laws of the State of Florida for the purpose of providing reliable electric power at the lowest feasible cost to its ten distribution members systems¹. This is accomplished by generating, transmitting, purchasing, selling, exchanging, etc. electric power and energy, and constructing, owning, leasing, etc. such facilities as required for this purpose.

The Seminole member cooperatives are as follows:

- Central Florida Electric Cooperative, Inc. Chiefland, Florida
- Clay Electric Cooperative, Inc. Keystone Heights, Florida
- Glades Electric Cooperative, Inc.
 Moore Haven, Florida
- Lee County Electric Cooperative, Inc.
 North Fort Myers, Florida
- Peace River Electric Cooperative, Inc.
 Wauchula, Florida
- Sumter Electric Cooperative, Inc. Sumterville, Florida
- Suwannee Valley Electric Cooperative, Inc. Live Oak, Florida

¹ The power supply contract between Seminole and Okefenoke Rural Electric Membership Corporation (OREMC) was terminated effective January 1, 1999. OREMC is headquartered in Nahunta, Georgia, and serves consumers in both Georgia and Florida. Termination of the contract with Seminole consolidated OREMC wholesale power supply service with its primary supplier, Oglethorpe Power Corporation, Atlanta, Georgia.



- ► Talquin Electric Cooperative, Inc. Quincy, Florida
- Tri-County Electric Cooperative, Inc. Madison, Florida
- Withlacoochee River Electric Cooperative, Inc.
 Dade City, Florida

Each of these members is at present engaged primarily in the distribution of electric power; Seminole supplies full requirements power to the members. The map at the beginning of this section indicates the counties in which each member of Seminole provides service.

1.2 Owned Resources

- 1.2.1 Generation. Seminole serves its total member system load with a combination of owned and purchased capacity resources. Seminole Units 1 & 2, 600 MW class coal-fired units, went into commercial operation on February 1, 1984 and January 1, 1985, respectively. Seminole owns a 14.5 MW share of Florida Power Corporation's (FPC's) Crystal River 3 nuclear generating unit. A more detailed description of Seminole's owned facilities is given on Schedule 1.
- 1.2.2 Transmission. Seminole owns 52 miles of 230 kV double circuit transmission line from the Seminole Plant to the Silver Springs North switching station, eight miles of line from the Seminole Plant to FPL's Rice Substation and nine miles of line from the Hardee power Station to FPC's Vandolah Substation. Seminole owns 78 miles of 230 kV single circuit transmission line from HPS to Lee County Electric Cooperative's Lee Substation (a tie with FPL), and 63 miles of line from the Seminole Plant to an interconnection with Jacksonville Electric Authority at the Clay-Duval County line. The company also jointly owns



with FPC two tie lines from Silver Springs North to FPC's Silver Springs substation.

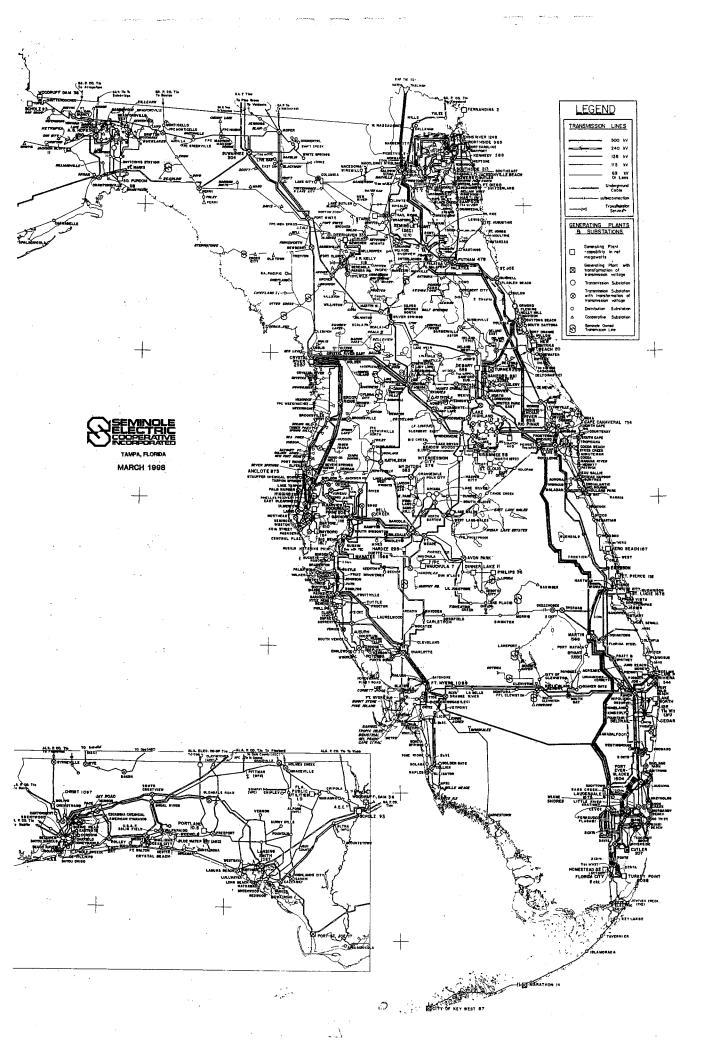
Seminole owns the following fourteen 69 kV transmission lines for a total of 143.2 miles: Clewiston-Cowbone Hammock, Otter Creek-Bronson, Otter Creek-Cedar Key, Cross City-Steinhatchee, Ortona Tap-Ortona, Spring Lakes-Lorida, Andersen-Lake Panasoffkee, Belleview-Marion Oaks, Central Florida- Continental, Howey-Astatula, Altoona-Linadale, Scanlon Tap-Scanlon, Ft. Basinger-Basinger and Moore Haven-Lakeport. These facilities are shown on the following page.

1.3 Purchased Power

Seminole has contracts with the Jacksonville Electric Authority (JEA) for 53 MW of firm capacity through 2001, with an option to extend the contract through May,21 2004. Seminole has also contracted with the Orlando Utilities Commission (OUC) for 75 MW of firm capacity through 2004 and for an additional 50 MW of firm capacity through 2000. Further, Seminole has contracted with FPC for the following purchases: 450 MW of firm capacity for the period 1999 through 2001; 150 MW of firm system intermediate capacity for the period 1999 through 2013; 150 MW of firm system peaking capacity for the period 2000 through 2002; and additional 150 MW of firm system peaking capacity for the period 2001 through 2002. Seminole purchases partial and/or full requirements power from FPC, the City of Gainesville, and Tampa Electric Company. (A contract with FPL for partial requirements purchases was terminated effective January 1, 1999.)

Seminole, through a contract with TECO Power Services (TPS), purchases 145 MW of capacity from the Big Bend No. 4 coal unit (a 488 MW unit) and a nominal 295 MW of first call reserve capacity from the Hardee Power Station (HPS). Seminole has first priority





use of its Big Bend No. 4 capacity for any purpose, subject to an annual energy cap. Seminole has first priority use of the Hardee Power Station as a reserve resource to cover a forced or scheduled outage or reduced capability of Seminole's owned capacity resources.

1.4 Demand Side Management (DSM)

Seminole and its member systems utilize a variety of demand side management and energy conservation programs. These programs include direct load control, distribution system voltage reduction, contractually interruptible load, energy audits, insulation up-grades, and lighting conversion. Seminole's coordinated DSM program lowers Seminole's peak demand and minimizes the demands placed on the FPC system by PR purchases. The load forecast reflects reductions due to DSM which are estimated through a detailed analysis which incorporates trends in consumer growth, housing size and appliance saturations with load reduction data and member implementation schedules. While the effect of conservation is also reflected in the load forecast, it's value is not estimated because of the difficulty in measuring the impact of the diverse programs.



Schedule 1

Existing Generating Facilities As of December 31, 1998

				_	_	 Fu	el	Alt	Comm'l	Expected	Gen Max	Net Capability	
				Fu	iel	Trans		Fuel Days	In-Svc	Retiremnt		Summer	Winter
Plant	Unit No.	Location	Unit Type	Primary	Alt	Primary	Alt	Use	Mo/Yr	Mo/Yr	ĸw	MW	MW
Seminole	1	Palatka	FS	С	N/A	RR	N/A	N/A	02/84	Unk	714,600	638	665
Seminole	2	Palatka	FS	С	N/A	RR	N/A	N/A	01/85	Unk	714,600	638	665
Crystal River	3	Citrus City	N	N	N/A	Tk	Tk	N/A	03/77	Unk	890,490	15	15
TOTAL												1,291	1,345
Abbrevia						Unit Type			Fuel Typ			el Transpo	

Abbrev	iations:	Unit Type	Fuel Type	Fuel Transport
	Unk - Unknown	FS - Fossil Steam	C - Coal	RR - Railroad
	N/A - Not applicable	N - Nuclear	N - Nuclear	Tk - Truck



2. FORECAST OF ELECTRIC POWER DEMAND AND ENERGY CONSUMPTION

2.1 Latest Trends

2.1.1 Service Area Economy. Seminole's distribution members provide electricity to an area approximately 400 miles long, from the northern border down to southwestern parts of Florida. The variety of geographic and weather conditions provides a diverse mix of economic activity as well as demographic characteristics.

The northern region shares many physical and cultural characteristics with the two states to the north, Georgia and Alabama. Agriculture, mining, and manufacturing are important industries in the region. The region has experienced moderate, but continued growth in population and economic activities. The southwest coastal region is still growing but at slower rates, due to a slowdown in construction and service industries, which are prevalent in this region. Many of its new residents are relatively affluent retirees, leading the State in per capita income growth and stability. The interior peninsular region is quite diverse, both with respect to population and the economy. As Florida's coastal areas become more saturated, the interior regions are expected to experience stronger growth.

The nation-wide economic recession beginning the middle of 1990, made deep impacts not only on population, employment and income growth in Florida, but also on the growth in consumers and electricity sales of Seminole's distribution members.

2.1.2 Population and Consumers. The population growth in Florida including the Seminole members' service area depends largely on net in-migration. Therefore, national economic factors influencing migration have a large impact on Seminole members' population



growth changes.

In the 1980s, the population of Florida grew at rates far exceeding the national average. The Census data shows that between 1980 and 1990 the State's population grew from 9,747,000 to 12,938,000, an annual rate of 2.9 percent or an average annual increase of 319,000 people. This strong population growth, however, began to significantly slow down in the early 1990s - to an annual rate of 1.8 percent in 1997.

When the U.S. economy - after its then historic eight-year long economic growth plunged into a recession in 1990, Florida population growth slowed down and Seminole members' residential electric consumer growth, a very accurate population growth barometer, also followed suit. Annual residential consumer increases, having grown at an annual rate of approximately 20,000 or over 5 percent in the mid-1980s, dropped down to an annual rate of 12,000 in the early 1990s. It has increased to approximately 16,000 per year since 1995. Commercial consumer growth, having grown at an annual rate of almost 3,000 consumers or over 8 percent, displayed more dramatic declines, plunging to an estimated 1,000 consumers in 1990, followed by an increase of less than 500 consumers in 1991. Since then, the commercial consumer growth has picked up recently growing at over 3 percent. The significant impacts of the nation's recession in the early 90's on Florida population and Seminole members' consumer growth confirm the sensitivity of Seminole members' service area to national and regional economy.

Future population in Florida is projected to continue to grow, but at a slower pace. The annual population is projected by BEBR to grow at an annual rate of approximately 250,000, or 1.6 percent between 1995 and 2005, further slowing down to an annual rate of



280,000 or 1.4 percent in the following 10 years.

Through its ten member systems, Seminole currently supplies electricity to geographic areas covering approximately 40 percent of peninsular Florida. However, the estimated population in the members' service area is approximately 1.4 million, which represents less than 10 percent of Florida's population. The relatively low population density provides ample room for continued population growth in the Seminole members' service area. Historically, Seminole's residential consumers have grown at a much faster rate than the Florida average: 3.5 percent versus 3.2 percent per year. The fastest growing counties in the members' service area have above average proportions of individuals 65 years of age or older. Age distribution plays an important role in determining the economic characteristics and electricity usage of consumers in the service area.

2.1.3 Income. As population in the members' service area has grown faster than Florida as a whole, so has the service area's total income. Most counties in the five largest members' service areas experienced higher increases in per capita income than the Florida average.

Statistics indicate that over 40 percent of the income in Florida comes from non-wage sources such as dividends, interest, rent, and transfer payments. This is approximately 10 percentage points higher than national averages. This fact reflects the high concentration of retirees, especially in the more affluent parts of the service area. These types of income are relatively stable and consequently help absorb the impacts of economic changes on the Florida economy and service area.



2.2 Forecast Results

- 2.2.1 Overview Consumers, energy, and peak demand growth rates for the Seminole system have been higher than Florida as a whole during the past decade. This pattern is expected to continue in the future even though both Florida and the Seminole system are expected to grow at slower rates.
- 2.2.2 Population. Historical and forecasted population for Seminole's members' service area is shown on Schedule 2.1. The service area population experienced an annual growth rate of approximately 2.5 percent over the past ten years. In 1998, total population in the service area was estimated at approximately 1.45 million, which is projected to grow to 1.8 million by 2008, at an annual of 2.0 percent.

The projected population growth rates in the members' service area are only slightly higher than the medium forecast at county levels from the University of Florida's Bureau of Economic and Business Research. The higher growth rates for the members' service areas are consistent with the fact that these service areas are relatively sparsely populated and have grown faster than the average rates for counties in which they are located.

2.2.3 Consumers. Seminole's members supply electricity to significant portions of those areas generally less urbanized but located adjacent to metropolitan areas. It is therefore reasonable to expect continued higher consumer growth rates for Seminole's members than for Florida as a whole. Residential consumers are expected to grow at an annual average rate of approximately 14,900 or 2.3 percent between 1999 and 2008. The average number of residential consumers in 1999 is estimated at approximately 603,000, and it is projected to reach approximately 887,000 in 2018. The forecasts of residential consumers are shown in

Schedule 2.1.

Commercial consumers had grown faster than residential consumers during the mid1980s, due to underlying factors such as rapid population growth, the strength of the Florida
economy, and the continued urbanization of Seminole's members' service area. During the
period 1989 through 1992, however, commercial consumer growth rates sharply dropped off
and fell below those of residential consumers. As the economy recovers from the latest
recession, commercial consumer growth rates have begun to pick up since 1993, again
surpassing the residential class. Reflecting recent growth trends, commercial consumers are
projected to grow at a faster rate than residential consumers. Commercial consumers in the
service area are expected to grow from approximately 58,000 in 1999 to 71,000 in 2008 - at
an annual rate of 2.3. The forecasts of commercial consumers are shown in Schedule 2.2.

2.2.4 Usage per Consumer. Between 1987 and 1997, residential usage per consumer in Seminole members' service area increased at a compound annual rate of 2.2 percent as compared to the State average of 1.5 percent. The continued growth of average usage is consistent with the Residential Appliance Survey results which show steady increases in appliance saturations and larger homes during the last decade.

Table 1 below summarizes survey results for 1984 and 1994. Between 1986 and 1997, saturations of homes of 2000 ft² and larger increased to 20.2 percent from 12.5 percent, in contrast to decreases in homes of 1200 ft² or smaller, from 41.5 percent to 25.2 percent. Also appliance saturations steadily increased during the 10-year period. Saturations of space-conditioning appliances which are weather sensitive made substantial increases: primary electric heating made noticeable increases to 80.9 percent from 55.4 percent; electric air-



conditioning to 94.8 percent from 82.0 percent; water heaters to 92.2 percent from 88.6 percent. Other electric appliances also made steady increases. Particularly noteworthy are dishwasher, electric clothes washers and dryers.

Table 1									
Homes and Electric Appliance Saturations (%)									
1986 1997									
Single Family Homes	58.5	64.1							
Homes > 2000 sq ft	12.5	20.2							
Homes < 2000 sq ft	41.5	25.2							
Primary Space Heating	55.4	80.9							
Air Conditioning	82.0	94.8							
Water Heater	88.6	92.2							
Refrigerator	99.4	99.1							
Television	97.9	99.0							
Electric Range	69.7	78.1							
Microwave Oven	52.9	92.9							
Dishwasher	40.3	61.5							
Clothes Dryer	57.5	83.5							
Clothes Washer	81.2	91.7							
Pool Pump 10.2 14.8									
SOURCE: "Residential Survey," Semin	nole Electric Cooperative	, Inc., 1986 and 1997.							

It is also to be noted that electricity prices in nominal terms have declined over the last decade, which means real prices have steadily declined. The decline in real electricity prices



is presumed to have been an additional contributing factor for the increased energy usage per consumer.

Despite the continued increases which have helped narrow the gap between Seminole members' average residential usage and that of Florida, usage per consumer for the Seminole system is still lower than that of Florida as a whole. The 1996 annual average residential usage of Seminole members was 12,929 KWH compared to the State's average of 13,398 KWH. However, this difference is expected to diminish during the next 10 years. While Florida's average residential usage is projected to increase at 0.6 percent annually through 2006, the Seminole system is expected to grow at 1.0 percent in the next 10 years. The continued trend toward larger homes, continuing increases in appliance saturations, and stable electricity prices will contribute to higher energy consumption levels in the future.

Commercial/industrial usage per consumer is much lower on the Seminole system than in Florida as a whole: 50,376 KWH versus 72,028 KWH in 1996. It is to be noted that Seminole members' commercial usage also include industrial consumers, whereas the Florida average does not. Commercial/industrial usage per consumer is projected to grow to 56,065 KWH in 2006 - at an annual growth rate of 1.1 percent. This compares with the Florida forecast, which projects an annual growth of 0.6 percent from 72,028 KWH in 1996 to 76,953 KWH in 2006.

2.2.5 Energy Sales and Purchases. Residential energy sales are projected to grow at 3.3 percent annually between 1999 and 2008, reaching 10,480 GWH in 2008. This forecast incorporates anticipated increases in energy savings due to additional future conservation and load management programs of Seminole members. Commercial energy sales are projected to



grow at an annual average of 3.4 percent, reaching 4,090 GWH in 2008.

Combined with an annual growth rate of 2.4 percent in other energy sales, total retail energy sales are projected to be 14,717 GWH in 2008, growing at an annual rate of 3.4 percent. The forecasts of residential, commercial, and other classes sales are shown on Schedules 2.1 and 2.2.

2.2.6 Peak Demand. Seminole's winter peak demand is projected to increase to 4,230 MW in 2008, representing an annual growth rate of 3.2 percent in the next 10 years; Summer peak demand at an annual rate of 3.2 percent, from a projection of 2,458 MW in 1999 to 3,267 MW in 2008.

Seminole as a whole and most of the member systems are expected to continue to be winter peaking. For the Seminole system, winter peaks are expected to be approximately 25 percent higher than summer peaks. This expectation compares with Florida as a whole, whose two seasonal peaks have been more or less the same and are expected to be such in the future.

This continued winter-peaking nature of the Seminole system is due primarily to expectations of continued steady increases in electric space-heating appliance saturations in the foreseeable future. Some members in the northern part of service area, where saturations of electric heating system are relatively low due to higher saturations of gas heating appliances than members located in other regions of Seminole, have a greater potential for strong winter peak growth.

The peak demand forecasts reflect estimated load reductions due to future load management. The annual load factor for the Seminole system is expected to moderately increase to a level of 45.3 percent during the forecast period, which is slightly higher than



historical average of 44.5 percent in 1990-1998. Increases in load reduction due to load management are expected to help offset the unfavorable effects of increases in space-conditioning electric appliance saturations on load factors.

Schedules 2.1, 2.2, and 2.3 summarize energy usage and consumer members by customer class. Schedules 3.1.1, 3.1.2, and 3.1.3 provide summer peak demand forecasts for vase, high population and low population scenarios. Schedules 3.2.1,3.2.2, and 3.2.3 provide similar date for winter peak demand.

2.2.7 Forecast Scenarios. Four scenarios are analyzed, which are grouped into two types: economic and weather. Economic scenarios are represented by high and low population scenarios, and weather scenarios by extremely hot and mild weather.

The population scenario results reflect the population growth differences. The high scenario purchases are projected to grow at an average annual rate of 4.8 percent, and 1.2 percent for the low scenario. The growth rate of winter peak is projected at 4.8 percent for the high scenario and 1.2 percent for the low scenario; summer peaks at 4.6 percent and 1.1 percent, respectively.

In terms of growth rate, the weather scenario results are basically the same as the base case, because (1) over the forecast period weather remains the same in each scenario and (2) sales and peak demand growth rates are determined mainly by non-weather trend variables, which remain the same for the weather scenarios.



Schedule 2.1

History and Forecast of Energy Consumption and
Number of Customers by Customer Class

			RESIDENTIAL				
Year	Population	Members Per Household	GWh	Average Number of Customers	Average KWh Consumption Per Customer		
1989	1,162,964	2.51	5,077	462,593	10,975		
1990	1,198,308	2.49	5,340	481,194	11,097		
1991	1,229,204	2.48	5,525	495,363	11,153		
1992	1,259,689	2.49	5,698	506,754	11,244		
1993	1,278,571	2.47	5,999	518,690	11,566		
1994	1,307,299	2.46	6,250	531,032	11,770		
1995	1,329,788	2.43	6,907	546,831	12,631		
1996	1,364,147	2.43	7,266	561,981	12,929		
1997	1,411,994	2.44	7,238	578,344	12,515		
1998	1,448,174	2.43	8,035	595,967	13,482		
1999	1,482,294	2.46	7,808	602,703	12,955		
2000	1,516,416	2.45	8,099	618,184	13,101		
2001	1,548,236	2.45	8,374	633,011	13,229		
2002	1,580,054	2.44	8,658	647,853	13,364		
2003	1,611,873	2.43	8,946	662,711	13,499		
2004	1,643,691	2.43	9,243	677,574	13,641		
2005	1,675,510	2.42	9,536	692,443	13,772		
2006	1,707,311	2.41	9,844	707,230	13,919		
2007	1,739,110	2.41	10,155	722,019	14,065		
2008	1,770,910	2.40	10,480	736,812	14,223		



Schedule 2.2 History and Forecast of Energy Consumption and Number of Customers by Customer Class

GWh 1,922 1,985 2,031 2,123 2,261 2,399 2,564 2,681 2,809	Average Number of 42,964 43,963 44,376 47,322 49,074 50,739 51,418 53,220 55,282	Average KWh Consumption 44,735 45,152 45,768 44,863 46,073 47,281 49,866 50,376	Other Sales GWh 137 61 91 109 102 86 101 105	Total Sales GWh 7,136 7,386 7,647 7,930 8,362 8,735 9,572
1,985 2,031 2,123 2,261 2,399 2,564 2,681	43,963 44,376 47,322 49,074 50,739 51,418 53,220	45,152 45,768 44,863 46,073 47,281 49,866	61 91 109 102 86 101	7,386 7,647 7,930 8,362 8,735
2,031 2,123 2,261 2,399 2,564 2,681	44,376 47,322 49,074 50,739 51,418 53,220	45,768 44,863 46,073 47,281 49,866	91 109 102 86 101	7,647 7,930 8,362 8,735
2,123 2,261 2,399 2,564 2,681	47,322 49,074 50,739 51,418 53,220	44,863 46,073 47,281 49,866	109 102 86 101	7,930 8,362 8,735
2,261 2,399 2,564 2,681	49,074 50,739 51,418 53,220	46,073 47,281 49,866	102 86 101	8,362 8,735
2,399 2,564 2,681	50,739 51,418 53,220	47,281 49,866	86 101	8,735
2,564 2,681	51,418 53,220	49,866	101	
2,681	53,220			9,572
		50,376	105	
2,809	55 282		103	10,052
	33,202	50,812	123	10,170
3,020	57,012	52,971	118	11,173
3,044	58,465	52,065	119	10,971
3,158	59,994	52,639	122	11,379
3,266	61,423	53,172	125	11,765
3,376	62,847	53,718	128	12,162
3,489	64,270	54,287	131	12,566
3,605	65,688	54,881	134	12,982
3,721	67,103	55,452	137	13,394
3,842	68,528	56,065	141	13,827
3,964	69,932	56,684	144	14,263
4.090	71,333	57,337	147	14,717
	3,489 3,605 3,721 3,842	3,489 64,270 3,605 65,688 3,721 67,103 3,842 68,528 3,964 69,932 4,090 71,333	3,489 64,270 54,287 3,605 65,688 54,881 3,721 67,103 55,452 3,842 68,528 56,065 3,964 69,932 56,684 4,090 71,333 57,337	3,489 64,270 54,287 131 3,605 65,688 54,881 134 3,721 67,103 55,452 137 3,842 68,528 56,065 141 3,964 69,932 56,684 144

Other sales class includes lighting customers.



Schedule 2.3

History and Forecast of Energy Consumption and
Number of Customers by Customer Class

Year	Sales for Resale GWh	Utility Use & Losses GWh	Net Energy for Load GWh	Other Customers (Average Number)	Total Number of Customers
1989	7,690	339	8,029	3,325	508,887
1990	7,833	323	8,156	3,356	528,519
1991	8,176	376	8,552	3,242	542,992
1992	8,434	373	8,807	3,248	557,329
1993	8,978	348	9,326	3,304	571,073
1994	9,218	431	9,649	3,341	585,764
1995	10,218	406	10,624	3,366	601,618
1996	10,579	243	10,822	3,324	618,671
1997	10,656	342	10,998	3,515	636,954
1998	11,739	294	12,033	3,586	656,566
1999	11,691	247	11,938	3,661	664,318
2000	12,142	257	12,399	3,746	681,379
2001	12,539	265	12,804	3,825	697,683
2002	12,962	274	13,236	3,902	713,995
2003	13,393	282	13,675	3,981	730,324
2004	13,856	292	14,148	4,058	746,651
2005	14,275	301	14,576	4,135	762,981
2006	14,736	310	15,046	4,213	779,240
2007	15,202	320	15,522	4,291	795,480
2008	15,708	331	16,039	4,370	811,722
NOTE:	Sales for Resale is	Seminole's sales to	its distribution mer	nbers.	



Schedule 3.1.1
History and Forecast of Summer Peak Demand (MW)
Base Case

L									
					Resid	lential	Comn	nercial	
Year	Total	Whole- sale	Retail	Interrup- tible	Load Manage- ment	Conser- vation	Load Manage- ment	Conser- vation	Net Firm Demand
1989	1,663	1,663	0	N/A	34	N/A	N/A	N/A	1,629
1990	1,762	1,762	0	N/A	48	N/A	N/A	N/A	1,714
1991	1,734	1,734	0	N/A	41	N/A	N/A	N/A	1,693
1992	1,918	1,918	0	N/A	58	N/A	N/A	N/A	1,860
1993	1,994	1,994	0	N/A	70	N/A	N/A	N/A	1,924
1994	1,993	1,993	0	N/A	60	N/A	N/A	N/A	1,933
1995	2,329	2,329	0	N/A	112	N/A	N/A	N/A	2,217
1996	2,347	2,347	0	N/A	95	N/A	N/A	N/A	2,252
1997	2,443	2,443	0	N/A	123	N/A	N/A	N/A	2,320
1998	2,756	2,756	0	N/A	150	N/A	N/A	N/A	2,606
1999	2,704	2,704	0	110	136	N/A	N/A	N/A	2,458
2000	2,800	2,800	0	112	140	N/A	N/A	N/A	2,548
2001	2,892	2,892	0	115	144	N/A	N/A	N/A	2,633
2002	2,985	2,985	0	117	149	N/A	N/A	N/A	2,719
2003	3,080	3,080	0	119	154	N/A	N/A	N/A	2,807
2004	3,174	3,174	0	121	158	N/A	N/A	N/A	2,895
2005	3,272	3,272	0	124	163	N/A	N/A	N/A	2,985
2006	3,372	3,372	0	126	168	N/A	N/A	N/A	3,078
2007	3,472	3,472	0	129	172	N/A	N/A	N/A	3,171
2008	3,575	3,575	0	131	177	N/A	N/A	N/A	3,267
	Historical	load manager	nent data is a	ctual amount	exercised at	the time of t	he seasonal r	neak demand	Forecast

NOTE Historical load management data is actual amount exercised at the time of the seasonal peak demand. Forecast data is the maximum amount available.



Schedule 3.1.2

Forecast of Summer Peak Demand (MW)

High Case

					Resid	lential	Comn	nercial	
Year	Total	Whole- sale	Retail	Interrup- tible	Load Manage- ment	Conser- vation	Load Manage- ment	Conser- vation	Net Firm Demand
1999	2,934	2,934	0	110	136	N/A	N/A	N/A	2,688
2000	3,097	3,097	0	112	140	N/A	N/A	N/A	2,845
2001	3,249	3,249	0	115	143	N/A	N/A	N/A	2,991
2002	3,405	3,405	0	117	147	N/A	N/A	N/A	3,141
2003	3,566	3,566	0	121	151	N/A	N/A	N/A	3,294
2004	3,729	3,729	0	126	155	N/A	N/A	N/A	3,448
2005	3,895	3,895	0	130	159	N/A	N/A	N/A	3,606
2006	4,079	4,079	0	135	163	N/A	N/A	N/A	3,781
2007	4,262	4,262	0	139	167	N/A	N/A	N/A	3,956
2008	4,453	4,453	0	145	171	N/A	N/A	N/A	4,137



Schedule 3.1.3

Forecast of Summer Peak Demand (MW)

Low Case

					Resid	lential	Comm	nercial	
Year	Total	Whole- sale	Retail	Interrup- tible	Load Manage- ment	Conser- vation	Load Manage- ment	Conser- vation	Net Firm Demand
1999	2,522	2,522	0	110	131	N/A	N/A	N/A	2,281
2000	2,550	2,550	0	112	134	N/A	N/A	N/A	2,304
2001	2,596	2,596	0	115	136	N/A	N/A	N/A	2,345
2002	2,640	2,640	0	117	138	N/A	N/A	N/A	2,385
2003	2,680	2,680	0	118	140	N/A	N/A	N/A	2,422
2004	2,722	2,722	0	120	142	N/A	N/A	N/A	2,460
2005	2,763	2,763	0	121	144	N/A	N/A	N/A	2,498
2006	2,794	2,794	0	122	145	N/A	N/A	N/A	2,527
2007	2,826	2,826	0	123	146	N/A	N/A	N/A	2,557
2008	2,860	2,860	0	124	148	N/A	N/A	N/A	2,588



Schedule 3.2.1
History and Forecast of Winter Peak Demand (MW)
Base Case

					Resid	lential	Comn	nercial	
Year	Total	Whole- sale	Retail	Interrup- tible	Load Manage- ment	Conser- vation	Load Manage- ment	Conser- vation	Net Firm Demand
1988-89	1,994	1,994	0	N/A	33	N/A	N/A	N/A	1,961
1989-90	2,314	2,314	0	N/A	44	N/A	N/A	N/A	2,270
1990-91	2,081	2,081	0	N/A	72	N/A	N/A	N/A	2,009
1991-92	2,322	2,322	0	N/A	77	N/A	N/A	N/A	2,245
1992-93	2,196	2,196	0	N/A	84	N/A	N/A	N/A	2,112
1993-94	2,472	2,472	0	N/A	88	N/A	N/A	N/A	2,384
1994-95	2,825	2,825	0	N/A	159	N/A	N/A	N/A	2,666
1995-96	2,896	2,896	0	N/A	165	N/A	N/A	N/A	2,731
1996-97	3,040	3,040	0	N/A	128	N/A	N/A	N/A	2,912
1997-98	2,529	2,260	0	N/A	115	N/A	N/A	N/A	2,414
1998-99	3,383	3,383	0	106	192	N/A	N/A	N/A	3,085
1999-00	3,505	3,505	0	109	198	N/A	N/A	N/A	3,198
2000-01	3,622	3,622	0	111	205	N/A	N/A	N/A	3,306
2001-02	3,739	3,739	0	113	212	N/A	N/A	N/A	3,414
2002-03	3,859	3,859	0	116	218	N/A	N/A	N/A	3,525
2003-04	3,982	3,982	0	118	225	N/A	N/A	N/A	3,639
2004-05	4,102	4,102	0	120	231	N/A	N/A	N/A	3,751
2005-06	4,228	4,228	0	122	238	N/A	N/A	N/A	3,868
2006-07	4,355	4,355	0	124	245	N/A	N/A	N/A	3,986
2007-08	4,486	4,486	0	127	251	N/A	N/A	N/A	4,108
2008-09	4,617	4,617	0	129	258	N/A	N/A	N/A	4,230
NOTE	Historic	al load manag	gement data is	s actual amou	nt exercised	at the time o	f the seasona	l peak dema	nd.

NOTE Historical load management data is actual amount exercised at the time of the seasonal peak demand. Forecast data is the maximum amount available.



Schedule 3.2.2

Forecast of Winter Peak Demand (MW)

High Case

					Resid	ential	Comm	nercial	
Year	Total	Whole- sale	Retail	Interru p-tible	Load Manage- ment	Conser- vation	Load Manage- ment	Conser- vation	Net Firm Demand
1998-99	3,625	3,625	0	106	197	N/A	N/A	N/A	3,322
1999-00	3,840	3,840	0	109	205	N/A	N/A	N/A	3,526
2000-01	4,044	4,044	0	111	213	N/A	N/A	N/A	3,720
2001-02	4,248	4,248	0	113	222	N/A	N/A	N/A	3,913
2002-03	4,453	4,453	0	118	230	N/A	N/A	N/A	4,105
2003-04	4,664	4,664	0	122	238	N/A	N/A	N/A	4,304
2004-05	4,875	4,875	0	126	247	N/A	N/A	N/A	4,502
2005-06	5,102	5,102	0	131	255	N/A	N/A	N/A	4,716
2006-07	5,338	5,338	0	136	264	N/A	N/A	N/A	4,938
2007-08	5,582	5,582	0	141	273	N/A	N/A	N/A	5,168



Schedule 3.2.3

Forecast of Winter Peak Demand (MW)

Low Case

			1		Resid	ential	Comn	nercial	i
Year	Year Total Whole-sale		Retail	Interrup- tible	Load Manage- ment	Conser- vation	Load Manage- ment	Conser- vation	Net Firm Demand
1998-99	3,152	3,152	0	106	188	N/A	N/A	N/A	2,858
1999-00	3,188	3,188	0	109	192	N/A	N/A	N/A	2,887
2000-01	3,239	3,239	0	111	196	N/A	N/A	N/A	2,932
2001-02	3,297	3,297	0	113	200	N/A	N/A	N/A	2,984
2002-03	3,351	3,351	0	115	203	N/A	N/A	N/A	3,033
2003-04	3,405	3,405	0	116	206	N/A	N/A	N/A	3,083
2004-05	3,459	3,459	0	117	209	N/A	N/A	N/A	3,133
2005-06	3,506	3,506	0	118	211	N/A	N/A	N/A	3,177
2006-07	3,550	3,550	0	119	213	N/A	N/A	N/A	3,218
2007-08	3,595	3,595	0	120	215	N/A	N/A	N/A	3,260



Schedule 3.3.1

History and Forecast of Annual Net Energy for Load (GWh)

Base Case

Year	Total	Conse	rvation	Retail	Wholesale	Utility Use &	Net Energy	Load Factor %
		Residential	Commercial			Losses	for Load	racioi %
1989	8,029	N/A	N/A	0	7,690	339	8,029	44.80
1990	8,156	N/A	N/A	0	7,833	323	8,156	39.40
1991	8,552	N/A	N/A	0	8,176	376	8,552	46.50
1992	8,807	N/A	N/A	0	8,434	373	8,807	42.80
1993	9,326	N/A	N/A	0	8,978	348	9,326	48.50
1994	9,649	N/A	N/A	0	9,218	431	9,649	45.90
1995	10,624	N/A	N/A	0	10,218	406	10,624	44.00
1996	10,822	N/A	N/A	0	10,579	243	10,822	39.10
1997	10,998	N/A	N/A	0	10,656	342	10,998	42.40
1998	12,033	N/A	N/A	0	11,739	294	12,033	49.80
1999	11,938	N/A	N/A	0	11,691	247	11,938	44.50
2000	12,399	N/A	N/A	0	12,142	257	12,399	44.40
2001	12,804	N/A	N/A	0	12,539	265	12,804	44.50
2002	13,236	N/A	N/A	0	12,962	274	13,236	44.60
2003	13,675	N/A	N/A	0	13,393	282	13,675	44.60
2004	14,148	N/A	N/A	0	13,856	292	14,148	44.60
2005	14,576	N/A	N/A	0	14,275	301	14,576	44.70
2006	15,046	N/A	N/A	0	14,736	310	15,046	44.70
2007	15,522	N/A	N/A	0	15,202	320	15,522	44.80
2008	16,039	N/A	N/A	0	15,708	331	16,039	44.80



Schedule 3.3.2

History and Forecast of Annual Net Energy for Load (GWh)

High Case

		<u></u>				T 74:1:4	Net	
Year	Total	Conse	rvation	Retail	Wholesale	Utility Use &	Energy	Load
		Residential	Commercial			Losses	for Load	Factor %
1999	13,077	N/A	N/A	0	12,658	419	13,077	41.20
2000	13,875	N/A	N/A	0	13,419	456	13,875	41.20
2001	14,578	N/A	N/A	0	14,080	498	14,578	41.10
2002	15,320	N/A	N/A	0	14,902	418	15,320	41.10
2003	16,078	N/A	N/A	0	15,639	439	16,078	41.20
2004	16,881	N/A	N/A	0	16,422	459	16,881	41.30
2005	17,635	N/A	N/A	0	17,154	481	17,635	41.30
2006	18,500	N/A	N/A	0	17,995	505	18,500	41.40
2007	19,380	N/A	N/A	0	18,851	529	19,380	41.40
2008	20,318	N/A	N/A	0	19,767	551	20,318	41.50



 $\label{eq:Schedule 3.3.3}$ History and Forecast of Annual Net Energy for Load (GWh) $\label{eq:Low Case}$ Low Case

Year	Total	Conse Residential	rvation Commercial	Retail	Wholesale	Utility Use & Losses	Net Energy for Load	Load Factor %
1999	11,168	N/A	N/A	0	10,862	306	11,168	40.40
2000	11,307	N/A	N/A	0	10,999	308	11,307	40.50
2001	11,491	N/A	N/A	0	11,177	314	11,491	40.50
2002	11,696	N/A	N/A	0	11,377	319	11,696	40.50
2003	11,890	N/A	N/A	0	11,565	325	11,890	40.50
2004	12,108	N/A	N/A	0	11,779	329	12,108	40.60
2005	12,284	N/A	N/A	0	11,948	336	12,284	40.50
2006	12,445	N/A	N/A	0	12,105	340	12,445	40.50
2007	12,607	N/A	N/A	0	12,262	345	12,607	40.50
2008	12,796	N/A	N/A	0	12,448	348	12,796	40.60



Schedule 4
Previous Year and 2-Year Forecast of Retail Peak Demand
and Net Energy for Load by Month

	1998	3 Actual	1999 F	orecast	2000 F	orecast
Month	Peak Demand MW	NEL GWh	Peak Demand MW	NEL GWh	Peak Demand MW	NET GWh
January	2,198	890	3,085	1,020	3,198	1,059
February	2,125	823	2,967	902	3,081	959
March	2,414	889	2,368	892	2,454	925
April	1,749	809	1,799	843	1,863	875
May	2,277	1,048	2,129	983	2,205	1,019
June	2,606	1,276	2,358	1,069	2,441	1,108
July	2,458	1,248	2,404	1,164	2,491	1,206
August	2,523	1,216	2,458	1,177	2,548	1,219
September	2,211	1,064	2,338	1,078	2,417	1,116
October	2,154	983	2,020	927	2,088	961
November	1,632	813	2,191	900	2,270	933
December	2,135	887	2,751	983	2,848	1,019
ANNUAL		11,946		11,938		12,399



	Schedule 5													
		_				Fuel	Require	ments		r				
- 15		****	Ac	tual	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Fuel Requirements		Units	1997	1998	1999	2000	2001	2002	2003	2004	2003	2000	2007	2000
Nuclear	Nuclear		0	1,134	1,039	1,219	1,039	1,215	1,039	1,219	1,049	1,215	1,039	1,219
Coal		1000	3,803	3,727	3,573	3,753	3,857	3,565	3,713	3,716	3,917	4,005	3,984	3,979
Residual	Total	1000	0	0	0	0	0	0	0	0	0	0	0	0
	Steam	1000	0	0	0	0	0	0	0	0	0	0	0	0
	cc	1000	0	0	0	0	0	0	0	0	0	0	0	0
	СТ	1000	0	0	0	0	0	0	0	0	0	0	0	0
	Diesel	1000	0	0	0 .	0	0	0	0	0	0	0	0	0
Distillate	Total	1000	29	41	37	37	37	37	37	37	37	37	37	37
	Steam	1000	29	41	37	37	37	37	37	37	37	37	37	37
	сс	1000	0	0	0	0	0	0	0	0	0	0	0	0
	СТ	1000	0	0	0	0	0	0	0	0	0	0	0	0
	Diesel	1000	0	0	0	0	0	0	0	0	0	0	0	0
Natural Gas	Total	1000 MCF	0	0	0	0	0	20,677	23,440	25,018	25,810	29,041	28,317	32,917
	Steam	1000	0	0	0	0	0	0	0	0	0	0	0	0
	сс	1000	0	0	0	0	0	19,567	19,334	19,469	17,538	17,956	18,333	20,103
	СТ	1000	0	0	0	0	0	1,110	4,106	5,549	8,272	11,085	9,984	12,814
Other Purchase	QF	Trillion BTU	1,893	2,214	4,913	3,605	4,295	3,364	838	1,169	1,220	1,192	1,482	1,438
NOTE:	1	purchase re al quantity f					ervices, I	nc., an IPP						



	Schedule 6.1													
	Energy Sources (GWh)													
Energy S	Contres	Units	Ac	tual	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Zinoigy C		1	1997	1998	.,,,	2000	2001	1	1	2001	1	2000	2007	2000
Annual Interch		GWh	1,289	2,184	2,639	2,806	2,915	941	1,027	1,276	1,273	1,187	1,689	1,649
Nucl	ear	GWh	0	111	100	117	100	117	100	117	101	117	100	117
Coa	ıl	GWh	9,274	9,153	8,683	9,104	9,351	8,667	9,044	9,061	9,557	9,773	9,721	9,709
Residual	Total	GWh	0	0	0	0	0	0	0	0	0	0	0	0
	Steam	GWh	0	0	0	0	0	0	0	0	0	0	0	0
	сс	GWh	0	0	0	0	0	0	0	0	0	0	0	0
	СТ	GWh	0	0	0	0	0	0	0	0	0	0	0	0
	Diesel	GWh	0	0	0	0	0	0	0	0	0	0	0	0
Distillate	Total	GWh	0	0	0	0	0	0	0	0	0	0	0	0
	Steam	GWh	0	0	0	0	0	0	0	0	0	0	0	0
	сс	GWh	0	0	0	0	0	0	0	0	0	0	0	0
	СТ	GWh	0	0	0	0	0	0	0	0	0	0	0	0
	Diesel	GWh	0	0	0	0	0	0	0	0	0	0	0	0
Natural Gas	Total	GWh	0	0	0	0	0	3,167	3,412	3,565	3,510	3,837	3,848	4,405
	Steam	GWh	0	0	0	0	0	0	0	0	0	0	0	0
	сс	GWh	0	0	0	0	0	3,064	3,030	3,048	2,738	2,801	2,857	3,133
	CT	GWh	0	0	0	0	0	103	382	517	772	1,036	991	1,272
Other	QF	GWh	435	498	516	372	438	344	92	129	135	132	164	159
Net Energy	for Load	GWh	10,998	11,946	11,938	12,399	12,804	13,236	13,675	14,148	14,576	15,046	15,522	16,039
NOTE:	The QF	purchase re	presents a	purchase f	rom TECO	Power Ser	vices, Inc.	, an IPP.						



	Schedule 6.2													
	Energy Sources (Percent)													
Energy S	Sauraan	Units	Ac	wal	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Ellergy	ources	Units	1997	1998	1,777	2000	2001	2002	2005		2000			
Annual Interch		%	12	18	22	23	23	7	8	9	9	8	11	10
Nuclear		%	0	i	1	1	1	1	1	1	1	1	1	1
Coal		%	84	77	73	73	73	65	66	64	66	65	63	61
Residual	Total	9%	0	0	0	0	0	0	0	0	0	0	0	0
	Steam	%	0	0	0	0	0	0	0	0	0	0	0	0
	cc	%	0	0	0	0	0	0	0	0	0	0	0	0
	ст	%	0	0	0	0	0	0	0	0	0	0	0	0
	Diesel	%	0	0	0	0	o	0	0	0	0	0	0	0
Distillate	Total	. %	0	0	0	0	0	0	0	0	0	0	0	0
	Steam	%	0	0	0	0	0	0	0	0	0	0	0	0
	cc	9%	0	0	0	0	0	0	0	0	0	0	0	0
!	СТ	9%	0	0	0	0	0	0	0	0	0	0	0	0
	Diesel	%	0	0	0	0	0	0	0	0	0	0	0	0
Natural Gas	Total	%	0	0	0	0	0	24	25	26	24	26	24	28
	Steam	%	0	0	0	0	0	0	0	0	0	0	0	0
	cc	%	0	0	0	0	0	23	22	22	19	19	18	20
	СТ	%	0	0	0	0	0	1	3	4	5	7	6	8
Other	QF	%	4	4	4	3	3	3	1	1	1	1	1	1
Net Energy	for Load	%	100	100	100	100	100	100	100	100	100	100	100	100
NOTE:	The QF p	urchase re	epresents a	purchase f	rom TECC	Power Se	rvices, Inc	., an IPP						



2.3 Forecast Assumptions

2.3.1 Economic and Demographic Data. Seminole's economic and demographic data base has three principal sources: (1) population and income data from the Florida Economic Data Base furnished by the Bureau of Economic and Business Research (BEBR) at the University of Florida, (2) electricity price data from Seminole's member cooperatives "Financial and Statistical Reports" (RUS Form 7), and (3) appliance and housing data from the Residential Appliance Surveys conducted by Seminole and its member systems since 1980.

Population is the main explanatory variable in the residential and commercial/industrial consumer models. Historical data on population and personal income by county is obtained for the 45 counties served by Seminole member systems. Combining the county forecasts yields a population forecast for each member. Three sets of population forecasts for each county are provided by BEBR: medium, low, and high scenarios. Historical population growth trends are analyzed to determine the most appropriate combination of scenarios for each member system. Base, high and low population scenarios are developed for each member.

The commercial/industrial energy usage model uses Real Per Capitals Income (RPCI) as an explanatory variable. The Consumer Price Index for All Urban Consumers (CPI-U) published by the U.S. Bureau of Labor Statistics is used to convert historical nominal income to real levels. Forecasts of RPCI by county are taken from "The Florida Long-Term Economic Forecast 1997."

The real price of electricity is used in the residential and commercial/industrial energy models. The real price is calculated by dividing KWH sales for each consumer class by the



corresponding revenue, and then by deflating the result by the CPI-U. For the forecast, the real price of electricity is assumed to decline in the future at an average annual rate of 0.97%. This rate is based on system wide historical retail rate reductions.

Appliance Survey. The three housing types distinguished in the survey are single-family homes, mobile homes, and multi-family homes. Homes are also segregated into three age groups: less than 5 years old, between 5 and 15 years old, and more than 15 years old. For each category of home type and age combination, the appliance saturations include room airconditioners, central air-conditioners, electric space-heating appliances, and electric water heaters.

The information from the surveys is combined with the residential consumer forecast to produce weighted appliance stock variables for space-conditioning appliances which are used in the residential energy usage model and the peak demand load factor model. In addition, air-conditioning, space-heating, water heater, and pool pump saturation data are used to forecast load management reductions.

2.3.2 Weather Data. Seminole obtains hourly weather data from the National Oceanic and Atmospheric Administration (NOAA) for six weather stations located in or around Seminole's members' service area. The data includes dry and wet bulb temperature, humidity, wind speed, cloud cover, and dew point, etc. In order to better reflect weather conditions in each member's service territory, different weather stations are assigned to individual member systems based on geographic proximity.

Monthly heating and cooling degree hours (HDH, CDH) are used in the energy usage



models, while the peak demand models use HDH and CDH on Seminole's peak days. Seminole uses individual temperature cut-off points for air conditioning and space heating demand. The extent of the members' service territory also requires different winter cut-off values for the northern and southern regions. These weather variables have been proved effective in explaining weather-neutral temperature ranges for space-conditioning appliances and lagging weather effects within a period of time.

2.3.3 Sales and Hourly Load Data. Monthly operating statistics have been furnished by the member systems to Seminole, beginning with 1970. Included in this data are statistics by class on number of consumers, KWH sales, revenue, and others. This data is the basis for consumer and energy usage models.

Hourly loads for each member and the Seminole system, as well as the members' monthly total energy purchases are collected from over 160 delivery points, covering the period from January 1979 to the present. This data is a basis for modeling peak demand and hourly load profile forecasts, and for load management implementation.

2.3.4 Conservation and Load Management. In accordance with the 1995 Florida Public Service Commission (FPSC) order, Seminole members who meet the minimum threshold of the Public Utilities Regulatory Policies Act of 1978 (PURPA) have implemented a variety of energy conservation programs. The monthly load reductions due to load management programs are estimated through a detailed analysis of trends in consumers and appliance saturations, load reduction per switch, and switch installation schedules. This analysis was performed for each member with an existing or planned load management program and for major appliances such as space-heating, air-conditioning, water heaters, and



pool pumps.

2.4 Forecast Methodology

Seminole's Integrated Forecasting System consists of the following sub-models:

- (1) Residential Consumer Model
- (2) Appliance Model
- (3) Commercial/Industrial Consumer Model
- (4) Other Class Consumers Model
- (5) Residential Energy Usage Model
- (6) Commercial/Industrial Energy Usage Model
- (7) Other Class Energy Usage Model
- (8) Peak Demand Load Factor Model
- (9) Hourly Load Profiles and Load Management

Each model consists of ten sub-models, since each member system is modeled and forecast separately. Figure 1shows the Integrated Forecasting System.

2.4.1 Consumer Models. For each member, the historical relationship between annual consumers and the member's service area population is statistically determined using an ordinary least squares technique, with a first-order auto-regressive correction when necessary. The estimated equations are applied to the population forecasts to generate annual forecasts of residential and commercial consumers which are adjusted for 1998 actual data. Seasonally adjusted monthly forecasts are developed from the annual data. Whenever members expect new large commercial consumers in the near future, the information is implemented in the forecasts.



Other consumer classes generally include irrigation, street and highway lighting, public buildings, and sales for resale, which represent less than 2 percent of Seminole's members' total energy sales. Some member systems include some of these classes in the commercial/industrial sector. For the others, annual consumer forecasts are projected using regression analysis against population, or a trending technique.

- 2.4.2 Appliance Model. The Appliance model combines the results of the Residential Consumer Model with data from the Residential Appliance Survey to yield forecasts of space-heating and air-conditioning stock variables which are used in the Residential Energy Usage Model and the Peak Demand Load Factor Model. Annual forecasts of the shares of each home type are produced: single-family homes, mobile homes, and multi-family homes. Next, annual forecasts of space-conditioning saturations are created. Finally, the air-conditioning saturations and the space-heating saturations are combined with housing type share information, resulting in weather-sensitive stock variables for heating and cooling.
- 2.4.3 Energy Usage Models. The Residential Energy Usage Model is a combination of econometric and end-use methods. For each member system, monthly residential usage is modeled using ordinary least squares as a function of explanatory variables including heating and cooling degree variables weighted with space-conditioning appliances, real price of electricity and real per capita income. Monthly forecasts are benchmarked against weathernormalized energy in the last year of the analysis period. Then the monthly usage per consumer forecasts are multiplied by the monthly residential consumer forecasts to produce monthly residential energy sales forecasts. The model results for PURPA members are adjusted for the conservation goals approved by FPSC and forecasts are adjusted for energy



losses which occur during the load management.

For each member system, monthly commercial/industrial usage per consumer is modeled as a function of several explanatory variables, which include monthly heating and cooling degree variables, real price of electricity, real per capita income, and dummy variables for some member systems to explain abrupt or external changes. Some members' models use monthly precipitation variables because irrigation consumers are included in this classification. Ordinary least squares methodology with a first order auto-regressive correction is used to produce the monthly energy usage per consumer forecasts which are adjusted for the last year of the historical period. Then the forecasts are combined with the consumer forecasts to produce monthly commercial/industrial KWH sales forecasts. Whenever members expect new large commercial consumers in the near future, the information is implemented in the forecasts.

Historical patterns of energy usage for other classes have been quite stable for most members and usage is held constant for the forecast period. Trending methodology is used for the members with growth in this sector.

2.4.4 Total Sales and Purchases. The sales forecasts for Residential, Commercial/Industrial and Other classes are summed up for a total sales forecast by month for each member system. The sales forecast is converted to member purchases at delivery point levels using historical averages of the ratio of calendar month purchases to billing cycle sales for each member. Therefore, these adjustment factors represent both energy losses and the difference between the billing cycle sales and calendar month purchases; the latter, as a function primarily of weather and billing days, often changes erratically.



2.4.5 Peak Demand Load Factor Model. The Peak Demand Load Factor Model relates monthly peak load factors to a set of explanatory variables including heating and cooling degree variables, precipitation, air-conditioning and space-heating saturations, and heating and cooling degree hours at the time of the member's peak demand. Two seasonal equations for each member system are developed: one for the winter months of November through March and the other for the summer months April through October. The forecast monthly load factors are combined with the purchases forecasts to produce forecasts of monthly peaks by member. As explained earlier adjustments are also made for new large commercial consumers expected in the near future.

2.4.6 Hourly Load Profiles and Load Management. Hourly demand forecasts are created through a calibration procedure which transforms the normal profiles in such a way that maximum peak, monthly minimum, and monthly energy match the monthly forecasts generated from the above-explained forecasting process. This calibration procedure produces hourly profile forecasts by month and by member, an aggregation of which then constitutes hourly profiles for Seminole system.

In the final step, load management reductions are applied to the calibrated hourly forecasts. Each member's forecast is are disaggregated by supplier area and the supplier profiles are constructed by summing. Then load management is implemented under the following two assumptions: 100 percent of the load management reduction is applied at the time of supplier billing peak, and 50 percent of the displaced energy is recovered during the payback hours.

2.4.7 Scenarios. Two sets of scenarios are developed in addition to the base case:



one for economic scenarios and the other for weather. In lieu of economic scenarios, population which is the main driving force behind Seminole's load growth, is tested, and high and low population growth scenarios are developed for each member system based on BEBR's alternative scenarios.

Severe and mild weather scenarios are developed for the energy usage and load factor models using the severe and mild data which is obtained by averaging the three highest or lowest weather in each month during the past 20 years.



3. FORECAST OF FACILITIES REQUIREMENTS

Seminole's load is located within three control areas, Florida Power Corporation (FPC), Florida Power & Light Company (FPL), and Seminole's Direct Service Area (SDS). Seminole is obligated to serve all load in the FPL and SDS areas, and load up to a specified capacity commitment level in the FPC area. Seminole must also supply appropriate reserves for the load it is responsible to serve. Seminole meets its total committed load obligation using a combination of owned generation and purchased capacity resources. Demand in excess of the specified FPC capacity commitment level is served through partial requirement (PR) purchases from FPC. As load grows, Seminole's PR supplier is responsible for providing capacity to meet load growth above the capacity commitment levels.

Under the previously described contract with TECO Power Services, Inc. (TPS), Hardee Power Partners (a subsidiary of TPS) provides nominally 440 MW of capacity by combining 145 MW from Tampa Electric's Big Bend Unit No. 4 (BB4) with 295 MW of capacity located at the Hardee Power Station site. On January 1, 2003, the BB4 capacity will revert fully to Tampa Electric.

Seminole's plans include the installation of a 488 MW gas-fired combined cycle unit called Payne Creek Generating Station (PCGS). This unit will contribute to meeting Seminole's reserve requirements as well as displacing purchased capacity. Seminole has no plans to build any additional transmission facilities in conjunction with the PCGS generating facility.

Seminole submitted its Petition for Certification of Need for PCGS to the Florida Public Service Commission December 17, 1993 and the hearing was held March 30, 1994.



The Florida Public Service Commission issued its order approving this need June 21, 1994. On August 15, 1995 Seminole received certification pursuant to the Florida Electrical Power Plant Siting Act for a 440 MW combined cycle electric generating unit to be in service on January 1, 1999. Seminole received a conditional loan commitment from the Rural Utilities Service (RUS) on September 19, 1995, to provide partial financing for the project. Seminole expects to receive similar loan commitments for the balance of the cost for this facility in subsequent fiscal years.

During 1995, Seminole received a proposal from FPC to supply Seminole with approximately 450 MW of firm capacity for three years and 150 MW of system intermediate capacity for the period 1999 through 2013. Through subsequent negotiations, Seminole found that this arrangement would result in significant savings to its Member Systems when compared to the PCGS, and thus decided to delay the PCGS project until January 1, 2002. Seminole entered into agreement with FPC and notified the contractor, Black & Veatch/Westinghouse, and the Florida Public Service Commission of the project delay.

As part of the request for proposal in 1997, Seminole entered an agreement with Florida Power Corporation for 150 MW of firm capacity for the period 2000 through 2002 and 150 MW of firm capacity for the period 2001 through 2002. In addition, Seminole evaluated alternatives for capacity and energy to replace various existing contracts. None of the proposed alternatives was superior to the Black & Veatch/Westinghouse PCGS project, and in December, 1998, the Seminole Board of Trustees authorized the reactivation of the project with an in-service date of 1/1/2002.

Seminole participates in the University of South Florida's Electric Vehicle Solar



Recharging project, and monitors other solar energy research projects and the advances in fuel cell technology for possible inclusion in Seminole's future resource options.

Seminole has a FERC-filed qualifying facility program which complies with the requirements of the Public Utility Regulatory Policies Act (PURPA). Seminole does not currently have any qualifying facilities or small power producers on its system, but continues to solicit proposals from them when competitively bidding for power supplies. Also, Seminole evaluates all unsolicited QF proposals for applicability to the company's needs.

Schedules 7.1, 7.2 and 8 include the addition of a total of 1350 MW of CTs in 2001 through 2007 at unknown sites. Such capacity is needed to replace expiring purchased power contracts and/or to maintain Seminole's reliability criteria. The units are included for planning purposes only. Future studies will optimize the amount, type, and timing of such capacity. The exact type of capacity (CT, purchased power, phased combined cycle, etc.) and source or location will be determined later. Because these CTs are for planning purposes only, no Schedule 9 is included for these units. The addition of this 1350 MW of CT capacity, at sites to be determined by Seminole, is Seminole's "Backstop" expansion plan.



Schedule 7.1 Forecast of Capacity, Demand and Scheduled Maintenance at Time of Summer Peak

	Total Installed Capacity	Firm Capacity Import (Less PR/FR) ₁	Firm Capacity Import (PR/FR)	Firm Capacity Export	QF ₂	Total Capacity Available	Total Capacity Available Less PR/FR	System Firm Summer Peak Demand	System Firm Summer Obligation ₃	B Main	ve Margin efore tenance ₄	Scheduled Main- tenance	Mair	ve Margin After atenance ₄
	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(% of Pk)	(MW)	(MW)	(% of Pk)
1999	1,291	986	346	0	298	2,921	2,575	2,458	2,112	463	21.9%	0	463	21.9%
2000	1,291	1,170	262	0	298	3,021	2,759	2,548	2,286	473	20.7%	0	473	20.7%
2001	1,291	1,289	207	0	298	3,085	2,878	2,633	2,426	452	18.6%	0	452	18.6%
2002	1,929	684	260	0	298	3,171	2,911	2,719	2,459	452	18.4%	0	452	18.4%
2003	2,379	424	158	0	298	3,259	3,101	2,807	2,649	452	17.1%	0	452	17.1%
2004	2,679	292	78	0	298	3,347	3,269	2,895	2,817	452	16.0%	0	452	16.0%
2005	2,829	226	84	0	298	3,437	3,353	2,985	2,901	452	15.6%	0	452	15.6%
2006	2,979	174	79	0	298	3,530	3,451	3,078	2,999	452	15.1%	0	452	15.1%
2007	2,979	268	78	0	298	3,623	3,545	3,171	3,093	452	14.6%	0	452	14.6%
2008	3,129 217 75 0 298 3,719 3,644 3,267 3,192 452 14.2% 0 452 14.2%													
1	Firm cap	acity includ	ies partial r	equirement	s (PR) an	d full requi	rements (FI	R) purchases	and purchas	es from o	ther supplier			
2	The capacity shown under QF represents a contract with TECO Power Services for first-call capacity from the Hardee Power Station to backup 1240 MW of generation from Seminole Units 1 and 2 and CR#3.													
3	Seminole	's firm obli	gation dem	and does n	ot include	PR and FI	₹ purchases	,						



Percent reserves are calculated on Seminole's obligation since Seminole is not responsible for supplying reserves for FR and PR purchases.

Schedule 7.2 Forecast of Capacity, Demand and Scheduled Maintenance at Time of Winter Peak

	Total Installed Capacity	Firm Capacity Import (Less PR/FR),	Firm Capacity Import (PR/FR)	Firm Capacity Export	QF ₂	Total Capacity Available	Total Capacity Available Less PR/FR	System Firm Winter Peak Demand	System Firm Winter Obligation ₃	В	ve Margin efore itenance ₄	Scheduled Main- tenance] .	ve Margin After ntenance ₄
	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(% of Pk)	(MW)	(MW)	(% of Pk)
1999	1,345	1,142	733	0	362	3,582	2,849	3,085	2,352	497	21.1%	0	497	21.1%
2000	1,345	1,327	668	0	362	3,702	3,034	3,198	2,530	504	19.9%	0	504	19.9%
2001	1,345	1,499	625	0	362	3,831	3,206	3,306	2,681	525	19.6%	0	525	19.6%
2002	2,067	879	687	0	362	3,995	3,308	3,414	2,727	581	21.3%	0	581	21.3%
2003	2,517	574	582	0	362	4,035	3,453	3,525	2,943	510	17.3%	0	510	17.3%
2004	2,817	461	523	0	362	4,163	3,640	3,639	3,116	524	16.8%	0	524	16.8%
2005	2,967	420	534	0	362	4,283	3,749	3,751	3,217	532	16.5%	0	532	16.5%
2006	3,117	390	540	0	362	4,409	3,869	3,868	3,328	541	16.3%	0	541	16.3%
2007	3,117	506	551	0	362	4,536	3,985	3,986	3,435	550	16.0%	0	550	16.0%
2008	3,267	479	559	0	362	4,667	4,108	4,108	3,549	559	15.8%	0	559	15.8%
1	Firm cap	acity includ	les partial r	equirement	s (PR) an	d full requi	rements (Fl	R) purchases	and purchase	es from o	ther supplier			



The capacity shown under QF represents a contract with TECO Power Services for first-call capacity from the Hardee Power Station to backup 1240 MW of generation from Seminole Units 1 and 2 and CR#3.

³ Seminole's firm obligation demand does not include PR and FR purchases.

Percent reserves are calculated on Seminole's obligation since Seminole is not responsible for supplying reserves for FR and PR purchases.

	Schedule 8													
	Planned and Prospective Generating Facility Additions and Changes													
				F	uel	Fuel T	ransport							
Plant Name	Unit No.	Location	Unit Type	Pri	Alt	Pri	Alt	Construction Start Mo/Yr	Comm'l In-Service Mo/Yr	Expected Retirement Mo/Yr	Maximum Nameplate (kW)	Summer (MW)	Winter (MW)	Status
Payne Creek Gen. Station	3	Hardee County S1,T33S, R24E	сс	NG	FO2	Pi	Tk	01/2000	1/2002	Unk	587,000	488	572	Т
Unk	1 2 3 4 5 6 7 8 9	Unk Unk Unk Unk Unk Unk Unk Unk	GT GT GT GT GT GT GT	NG NG NG NG NG NG NG	FO2 FO2 FO2 FO2 FO2 FO2 FO2 FO2	P1 P1 P1 P1 P1 P1 P1 P1	Tk	01/2000 01/2001 01/2001 01/2001 01/2002 01/2002 01/2003 01/2004 01/2006	11/2001 11/2002 11/2002 11/2002 11/2003 11/2003 11/2004 11/2005 11/2007	Unk Unk Unk Unk Unk Unk Unk Unk	180 180 180 180 180 180 180 180	150 150 150 150 150 150 150 150 150	150 150 150 150 150 150 150 150	P P P P P P
Total					E							1,838	1,922	
Notes:	Payne (reek Genera	ting St	ation cap	acity wi	l Il replace	purchase	ed capacity beg	inning 1/1/20	02 and is bei	ng counted fo	or reserve p	urposes in	2002.
	Unk:	Unknown												
	T:	Regulatory	approv	al recei	ved. No	t under c	onstructio	on.						
	P:	Planned, b	ut not a	uthorize	d by utili	ity.								



4. OTHER PLANNING ASSUMPTIONS AND INFORMATION

4.1 Transmission Constraints

Seminole analyzes the transmission system impact on expansion plans using the FRCC load flow databank transmission model. In Seminole's current Ten Year Plan the only firm new unit is Payne Creek Generating Station to be constructed on the existing Hardee Power Station site. The transmission system analysis indicated no new transmission is required to accommodate this unit at this site.

4.2 Plan Economics

Power supply alternatives are compared against a base case scenario which is developed using the most recent load forecast, fuel forecast, PR rate projections and financial assumptions. Various power supply options are evaluated to determine the overall effect on Present Worth of Revenue Requirements (PWRR). The option with the lowest PWRR is normally selected, all other things being equal. Since the peaks of a large portion of Seminole's load are served with PR purchases, the load forecast sensitivities generally do not significantly change the final results of the analysis or Seminole's decision on power supply options.

Sensitivity analyses were done using both the high population growth scenario and the low population growth scenario from the current load forecast. Results of the studies indicated that Seminole's base plan for the PCGS unit was still the best alternative. However, as expected, the amount of reliability peaking capacity required during the 1999-2008 study period would change. The high population growth study indicated a need for an additional 300 MW while the low population growth study showed that 450 MW less would be required.



4.3 Fuel Price Forecast

4.3.1 Coal. The base forecast anticipates that price increases will be less than IPD because of continued improvements in productivity enabling industry wide production to outpace growth in demand. Thus, the moderate over-supply and competitive pricing which has typified the industry in recent years is expected to continue, resulting in the forecast for only moderate price increases.

The high case projects that prices will grow in the ball park of IPD because of a cessation of historic improvements in productivity leading to a tighter supply-demand relationship. The low case projects a decrease in prices as a result of technological advances which reduce the impact of labor cost and increase production causing an over-supply of coal with such vigorous price competition that prices actually decrease.

4.3.2 Oil. The base case forecasts oil price growth in the range of IPD because of stability in OPEC, no armed conflicts which disrupt oil production or transportation, and continued world-wide improvements in the energy efficiency of national economies.

The high case assumes that OPEC becomes very aggressive in restricting production, that members adhere to production quotas, that armed conflict causes moderate disruptions in world-wide distribution of oil, and that developing economies and growth of world-wide transportation spur growth in consumption, all of which leads to rapid price increases. Conversely, the low oil case presumes that OPEC in unable to enforce production quotas, that non-OPEC countries increase production as a result of new discoveries and improved recovery from existing fields, all of which combines to continue the trend of recent years with declining prices.



4.3.3 Natural Gas. The base case presumes only moderate price increases as a result of continuing the trends of recent years. Technological improvements continue to lower production cost, improve recovery from existing fields, and increase find rates from wildcat drilling. Production capacity continues to exceed demand leading to market price competition which constrains the rate of price increase.

The high case assumes a more rapid increase in price because technology ceases to improve, there is a gradual exhaustion of reserves with attendant declines in production coupled with continued growth in market demand. The low case forecasts a decrease in prices as a result of rapid exploitation of new technological innovations which dramatically increase recovery from existing well fields at reduced cost, discovery of major new reserve fields, and reduction in the cost of bringing new well into production. Under this scenario supply would exceed demand leading to actual decreases in price

The fuel price sensitivity studies were compared to Seminole's base generation addition plan - PCGS (488MW) in 1/2002, reliability capacity - 150MW in 11/2001,450MW in 11/2002, 300MW in 11/2003, 150MW in 11/2004, 150MW in 11/2005, and 150MW in 11/2007. In all cases, there was no change required to this base plan.

4.4 Modeling of Generation Unit Performance

Existing units are modeled with forced outage rates and heat rates for the near term based on recent historical data. The long term rates are based on a weighting of industry average data and expected or designed performance data.

4.5 Financial Assumptions

Expansion plans are evaluated based on Seminole's forecast of RUS guaranteed



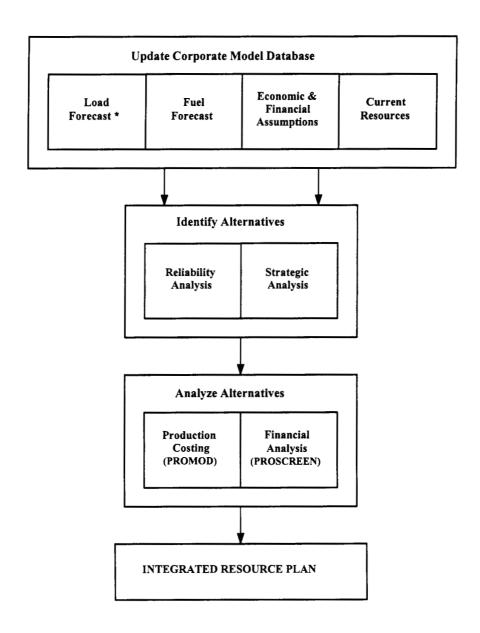
loan fund rates. The plans are tested with a sensitivity using financing rates forecast for funds other than RUS guaranteed funds in the event that the RUS funds are not available.

4.6 Integrated Resource Planning Process

Seminole's primary long-range planning goal is to develop the most cost-effective way to meet its members load requirements while maintaining high system reliability. Seminole's optimization process for resource selection is based primarily on total revenue requirements. For a not-for-profit cooperative, revenue requirements translate directly into rates to our member distribution cooperatives. The plan with the lowest revenue requirements is generally selected, assuming that other factors such as reliability impact, initial rate impact, and strategic considerations are equal. Seminole also recognizes that planning assumptions change over time so planning decisions must be robust and are, therefore, tested over a variety of sensitivities. A flow chart of Seminole's planning process is shown on the next page.



Figure 2
Resource Planning Process



* The Load Forecasting process is detailed in Section 2.4, "Forecasting Methodology"

The impact of demand-side management (DSM) and conservation is accounted for in Seminole's planning process by incorporating demand and energy reductions from conservation and DSM efforts into the load forecast. Additional impacts from Seminole's Coordinated Load Management Program are incorporated during the preparation of Power Requirements Study. Given the nature of Seminole's power supply arrangement, reduction in peak demand does not affect the operation of Seminole's generating resources in the FPC area, but instead reduces the amount of PR purchases required from FPC. Demand-side resources are evaluated against the effect of reducing PR purchases from the top down, and supply-side resources are evaluated reducing PR purchases from the bottom up.

4.7 Reliability Criteria

Seminole presently uses a minimum15% system peak reserve margin as its primary reliability criteria. To meet this criteria, supply plans include adequate firm resources whose total capacity is 15% greater than Seminole's annual maximum demands. Since the mid-80's, Seminole planned to a 1% Expected Unserved Energy (EUE) criteria which resulted in a reserves percent higher than the 15% minimum requirement. As Seminole's system and resources have grown and diversified, the two criteria have approached each other.

4.8 DSM Program Durability

Seminole's Energy Management System (EMS) has the capability to forecast the amount of load Seminole would have served absent the active load management. This data is used by Seminole's load forecasters to adjust future savings. Conservation savings are not as easy to quantify and industry information along with appliance saturation data is used.



4.9 Strategic Concerns

In the current, rapidly changing utility industry, strategic concerns are becoming increasingly important. Seminole presently, as in the past, has not quantified the financial impact of strategic concerns such as length of contracts, own vs purchase etc. However, Seminole continues, as explained below under "Procurement of Supply-Side Resources", to evaluate a wide variety of options to meet future power requirements.

4.10 Procurement of Supply-side Resources

Seminole will continue to use the all-source RFP process to fill its power supply needs.

Seminole solicits proposals from turnkey contractors, utilities, independent power producers, qualifying facilities and power marketers. For each type of purchase short, medium and long term options are requested. Proposals are accepted for all of part of any requirement.

4.11 Transmission Plans

Seminole currently has no plans for transmission construction or upgrades subject to the Transmission Line Siting Act (TLSA).



5. ENVIRONMENTAL AND LAND USE INFORMATION

The site for the PCGS is located in Hardee and Polk counties about nine miles northwest of Wauchula, 16 miles south-southwest of Bartow, and 40 miles east of Tampa Bay (Figures 3 and 4). The project site is bordered on the east by County Road (CR) 663, CSX Transportation (CSX) railroad line, and CF Industries, Inc. (CFI) Hardee Phosphate Complex. IMC-Agrico Company properties surround the remaining portions of the site. Payne Creek flows along the site's western and southern borders. Mining was the primary land use of the project site and adjoining areas. A more detailed description of environmental and land use data is available in the application for site certification which is on file with the Florida Department of Environmental Protection.

The site was certified (PA-89-25) in 1990 for an ultimate capacity of 660 MW. Hardee Power Partners constructed the first phase of the project by erecting a 220 MW combined cycle unit and a 75 MW stand-alone combustion turbine (CT). At that time, future planned expansions included the addition of a second 75 MW CT to the stand-alone CT and a 70 MW steam turbine to form a second 220 MW combined cycle unit by 2003, and a third 220 MW combined cycle facility at an unspecified date.

On August 15, 1995 Seminole received certification (PA-89-25SA) pursuant to the Florida Electrical Power Plant Siting Act for a 440 MW combined cycle electric generating unit to be in service in lieu of the unspecified 220 MW combined cycle facility. Under this certification, the 440 MW unit would have increased the present site capacity to 735 MW with an ultimate site capacity of 880 MW.



Seminole temporarily delayed the construction of Hardee Power Station Unit 3 until 1998, at which time the originally selected Westinghouse 501F(B) combustion turbine had evolved into the Siemens Westinghouse 501F(D) combustion turbine. Due to the efficiency changes in the CT and the heat recovery steam generator (HRSG), there was a 48 MW increase in the output of the unit, above the originally permitted 440 MW. The new site capacity will be 488 MW which will increase the ultimate site capacity to 928 MW.

On February 11, 1999 Seminole submitted a modification request to the Florida Department of Environmental Protection (FDEP) in order to incorporate the minor changes to the Power Plant Siting Act Certification (No. 89-25SA) and the corresponding PSD permit. These proposed minor changes to the Payne Creek Generating Station (formerly Hardee Power Station Unit 3) will not increase environmental impacts to the project. Positive benefits will result from better CT design and NOx emissions will be reduced from the original permit limits. The plant will achieve better efficiency (i.e., more electrical output without increased air impacts).

Environmental and Land Use Information regarding the Payne Creek Generating Station facility can be found in the Site Certification application, volumes 1 and 2, on file with the Florida Department of Environmental Protection, office of Siting Coordination.



Schedule 9

Status Report and Specifications of Proposed Generating Facilities

(1)	Plant Name & Unit Number:	Payne Creek Generating Station
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(2) Capacity

a. Summer: 488 MW b. Winter: 572MW

(3) Technology Type: Advanced Combined Cycle

(4) Anticipated Construction Timing

a. Field construction start-date: January 2000b. Commercial in-service date: January 2002

(5) Fuel

a. Primary fuel: Natural Gas

b. Alternate fuel: Distillate Oil (Jet A)

(6) Air Pollution Control Strategy: Selective Catalytic Reduction (SCR) for

NOx Natural Gas, Low Sulfur Oil (Jet A)

(7) Cooling Method: Cooling Reservoir

(8) Total Site Area: 1,280 Acres

(9) Construction Status: N/A

(10) Certification Status: Certification received 08/15/1995

Certification Modification Request 02/11/1999

(11) Status With Federal Agencies EPA: Approval received 9/11/1995

RUS: Record of Decision received 9/14/1995

(12) Projected Unit Performance Data

Planned Outage Factor (POF):

Forced Outage Factor (FOF):

Equivalent Availability Factor (EAF):

Resulting Capacity Factor (%):

Average Net Operating Heat Rate (ANOHR)

2.10%

5.00%

60.70%

60-70%

6170 (59°F)

(13) Projected Unit Financial Data

30 Book Life (Years): 411.50 Total Installed Cost (In-Service Year \$/kW) Direct Construction Cost (In-Service Year \$/kW) 378.30 33.20 AFUDC Amount (In-Service Year \$/kW) Escalation (\$/kW): 0.0 Fixed O&M (\$/kW-Yr): 12.00 0.26 Variable O&M (\$/MWH): K Factor: N/A



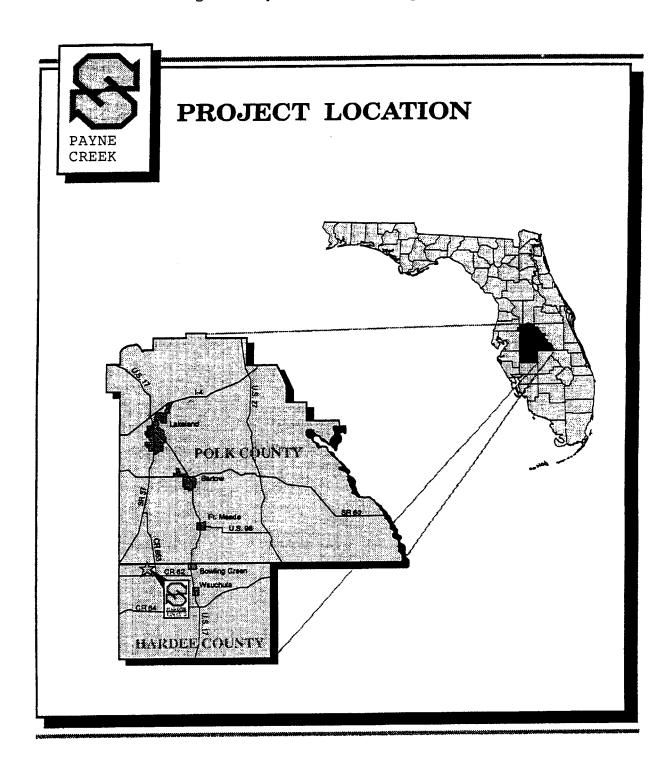
Schedule 10

Status Report and Specifications of Proposed Associated Transmission Lines

(1)	Point of Origin and Termination:	SEE NOTE
(2)	Number of Lines:	
(3)	Right-of-Way:	
(4)	Line Length:	
(5)	Voltage:	
(6)	Anticipated Construction Timing	
(7)	Anticipated Capital Investment:	
(8)	Substations:	
(9)	Participation with other Utilities:	
* No	ote: Seminole is not planning to built any ac	lditional transmission lines in conjunction
	with the Payne Creek Generating Station	on.



Figure 3: Payne Creek Generating Station



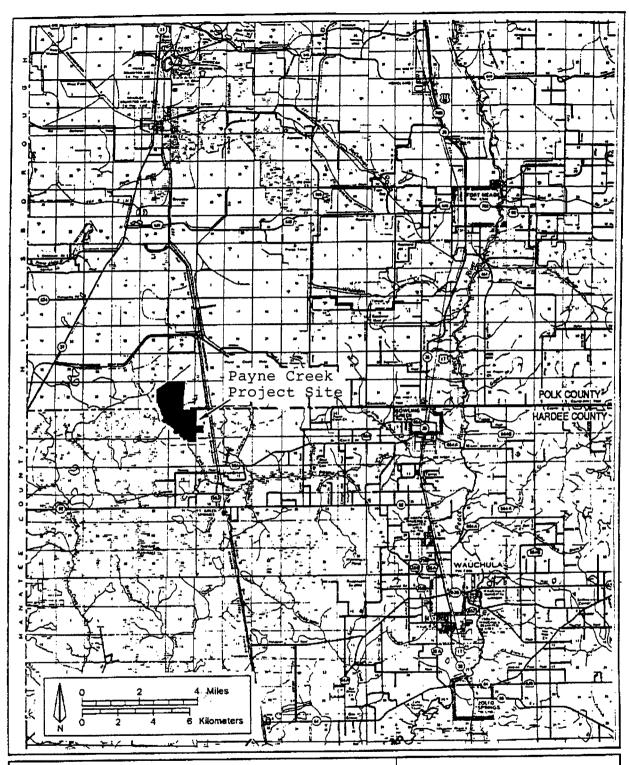


Figure 4
Location of Payne Creek Generating
Station Project Site

Sources: FDOT, 1990; 1992; KBN, 1994.



