State of Florida

Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD
TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M-

DATE: April 12, 2012

TO: Ann Cole, Commission Clerk, Office of Commission Clerk

FROM: Phillip O. Ellis, Engineering Specialist II, Division of Regulatory Analysis
Traci L. Matthews, Government Analyst I, Division of Regulatory Analysis
Victor Ma, Engineering Specialist I, Division of Regulatory Analysis

RE: 2012 Ten-Year Site Plan from Seminole Electric Cooperative

Attached is the Seminole Electric Cooperative's 2012 Ten-Year Site Plan, submitted on April 2, 2012, consistent with Rule 25-22.071, Florida Administrative Code (F.A.C.). Please place this item in Docket No. 120000 – Undocketed Filings for 2012, as it relates to the annual undocketed staff Ten-Year Site Plan Review project.

If you have any additional questions, please contact me.

POE

Attachment

Seminole Electric
COOPERATIVE, INC.

IN PARTNERSHIP WITH THOSE WE SERVE

Ten Year Site Plan

2012 - 2021
(Detail as of December 31, 2011)
April 1, 2012

Submitted To:
State of Florida
Public Service Commission

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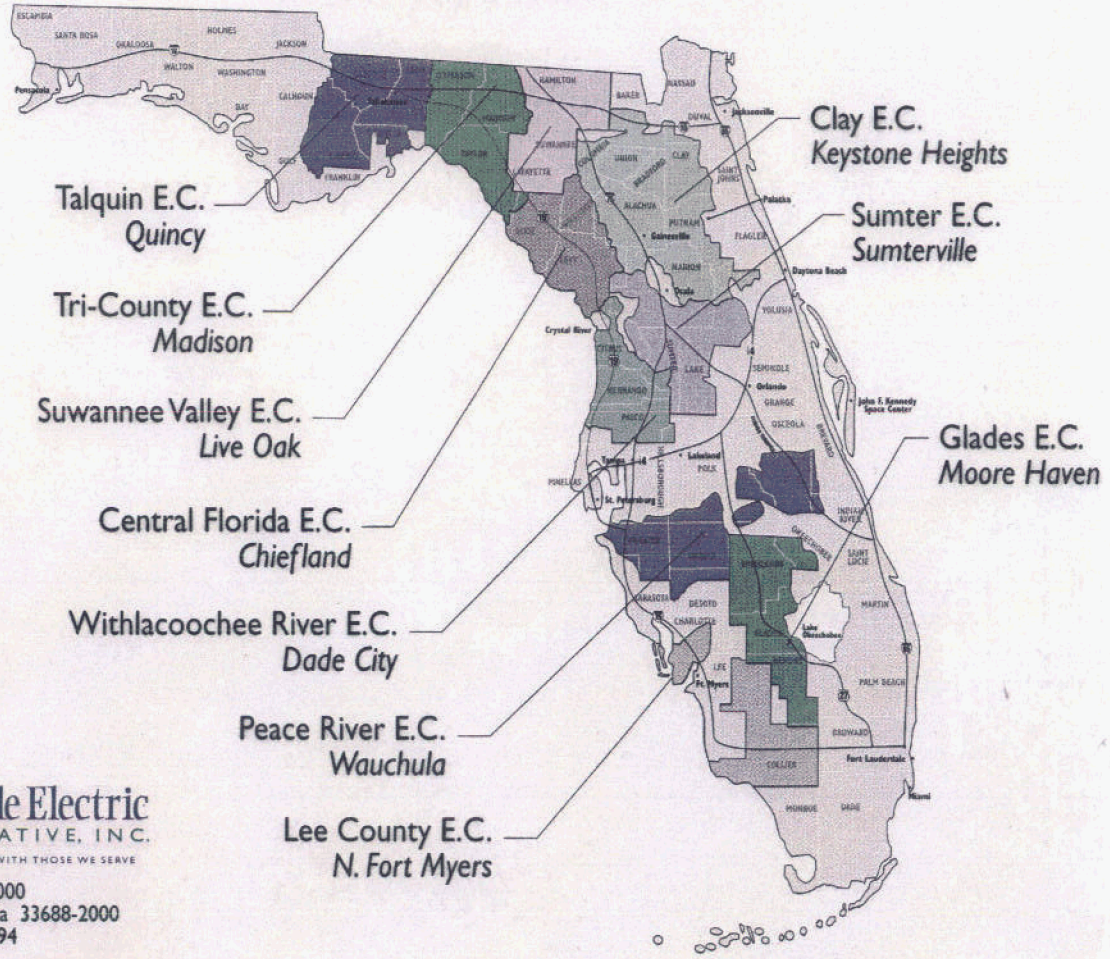
Seminole's Member Distribution Cooperatives

FLORIDA



Seminole Electric
COOPERATIVE, INC.
IN PARTNERSHIP WITH THOSE WE SERVE

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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' systems. Seminole generates, transmits, purchases, and sells electric power and energy to its Member Cooperatives (Members), which are listed below:

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

Each of Seminole's Members is engaged primarily in the distribution of retail electric power. Seminole supplies requirements power to each of its Members under the terms of long-term wholesale power contracts.[1] 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 Owned Generation

Seminole serves its aggregate Member loads with a combination of owned and purchased power resources. Seminole Generating Station (SGS) Units 1 & 2, 650 MW class coal-fired units located in Putnam County, began commercial operation in February 1984 and December 1984, respectively. Midulla Generating Station (MGS) Units 1 – 3 comprise a 500 MW class gas-fired combined cycle plant located in Hardee County, which began commercial operation in January 2002. Also at the MGS site are Units 4 – 8 which comprise a 300 MW class peaking plant which began commercial operation in December 2006. Seminole also owns a 13 MW share of the Progress Energy Florida (PEF) Crystal River 3 nuclear generating unit. Seminole's owned generating facilities are shown in Schedule 1.1.

1.2.2 Transmission

In 2011, Seminole served its Members' load primarily in three transmission areas: 6% directly through its own system (Seminole Direct Serve, or SDS), 64% through the PEF system, and 30% through the Florida Power & Light (FPL) system. Seminole's owned transmission facilities consist of 278 circuit miles of 230 kV and 141 circuit miles of 69 kV lines. Seminole's

1 Seminole provided full requirements service to all of its Members through the end of 2009 with the only exception relating to contracts between four Members with the Southeastern Power Administration (SEPA), which provides 26 MW or 1% of the total energy required by all Members. In 2010, Seminole began serving only a portion (approximately 70%) of the load requirements of Lee County Electric Cooperative, Inc. (LCEC) and beginning January 1, 2014 will no longer serve any of LCEC's load.

owned generating facilities are interconnected to the grid at twenty-one 230 kV transmission interconnections with the following utilities: FPL, JEA, City of Ocala, PEF, Hardee Power Partners, and Tampa Electric Company. Seminole's interconnections, all of which are at 230 kV, are shown in Schedule 1.2. Seminole contracts with FPL and PEF for firm network transmission service for its Member loads which connect to their respective transmission areas. Seminole has also acquired firm point-to-point transmission service from Tampa Electric Company to transmit a total of 58 MW from two waste-to-energy facilities located within Tampa Electric Company's balancing area.

1.3 Purchased Power Resources

1.3.1 Renewable Energy Purchases

Seminole is among the leaders in Florida in regards to the amount of energy purchased from renewable energy facilities. In 2012, Seminole will receive energy output from 142 MW of renewable capacity under contract from the following sources:

- Lee County Resource Recovery - 55 MW of firm waste-to-energy capacity through December 2016. Seminole has an obligation to purchase energy from the facility through 2028.
- Hillsborough County Waste to Energy Facility - 38 MW of firm waste-to-energy capacity through February 2025.
- Telogia Power, LLC – 13 MW of firm capacity, through November 2023, from a biomass (wood and paper waste) facility located in Liberty County.
- Landfill Energy Systems – 15 MW (total) of firm capacity from landfill gas-to-energy facilities in Seminole and Brevard Counties. These contracts extend through

March 2018.

- Timberline Energy LLC – 1.6 MW of firm capacity from a landfill gas-to-energy facility in Hernando County, Florida. The contract extends through March 2020.
- City of Tampa McKay Bay Waste to Energy Facility - 20 MW of firm waste-to-energy capacity through July 2026.

1.3.2 Purchases from Unit or System Generating Resources

In addition to the renewable resources described above, Seminole's capacity portfolio currently includes power acquired under firm purchased power agreements with the following electric utilities and independent power producers (all ratings are for winter unless otherwise noted):

- Progress Energy Florida (PEF)
  - PEF System Intermediate –450 MW of firm system intermediate and/or combined cycle capacity through 2011, up to 625 MW in 2012, 450 MW in 2013, and 150 MW from January 2014 through December 2020.
  - PEF System Base – 150 MW from January 2012 to December 2013, 250 MW from January 2014 through May 2016, and 50 MW from June 2016 through December 2018.
  - PEF Seasonal Peaking – Up to 600 MW of firm summer/winter seasonal system peaking capacity from January 2014 through December 2020.
  - PEF System Average – 150 MW of firm system average capacity from January 2014 through May 2016.
  - PEF System Combined Cycle – Up to 500 MW of firm system intermediate

capacity from June 2016 through December 2024.

- PEF Partial Requirements (PR) – Load following requirements service for Seminole's Member load in the PEF area in excess of Seminole's designated committed capacity. This arrangement provides Seminole some flexibility to modify the amount purchased in future years by modifying its committed capacity. PR service is primarily a peaking-type resource, with quantities varying by month based upon Seminole's committed capacity designations and actual monthly coincident demands. Seminole's actual purchased PR capacity for 2011 was 228 MW in the winter and no capacity in the summer. This agreement has certain notice provisions for termination to be effective beyond 2013.

- City of Gainesville - Full requirements service for a specified delivery point (24 MW peak demand in 2011) with certain notice provisions for termination to be effective beyond 2012.

- GenOn Florida, L.P. (GenOn), (formerly RRI Energy Florida, LLC) – 546 MW of firm peaking capacity through May 2014, from GenOn's Osceola combustion turbine units in Osceola County.

- Oleander Power Project, L.P. (a subsidiary of Southern Power Company) – 546 MW of firm peaking capacity, through May 2021, from three combustion turbine units in Brevard County.

- Calpine Construction Finance Company, L.P. (Calpine) – up to 360 MW of firm intermediate capacity, through May 2014, from Calpine's gas-fired Osprey combined

cycle plant in Polk County.

- Hardee Power Partners, Limited (a subsidiary of Invenergy LLC) – 356 MW first call reserve capacity from the Hardee Power Station (HPS) in Hardee County to cover forced and scheduled outages of Seminole's base load generation. After the current contract ends in December 2012, a new agreement without dispatch restrictions for the full 445 MW capacity output of HPS extends through December 2027.
- Florida Power and Light Company (FPL) System Combined Cycle – 200 MW of firm system intermediate capacity from June 2014 to May 2021.

Schedule 1.1
Existing Generating Facilities as of December 31, 2011

Plant	Unit No.	Location	Unit Type	Fuel		Fuel Transportation		Alt Fuel Days Use	Com In-Svc Date (Mo/Yr)	Expected Retirement (Mo/Yr)	Gen. Max Nameplate (MW)	Net Capability (MW)	
				Pri	Alt	Pri	Alt					Summer	Winter
SGS	1	Putnam County	ST	BIT/ PC	N/A	RR	N/A	N/A	02/84	Unk	715	647	660
SGS	2	Putnam County	ST	BIT/ PC	N/A	RR	N/A	N/A	12/84	Unk	715	663	666
MGS	1-3	Hardee County	CC	NG	DFO	PL	TK	Unk	01/02	Unk	587	454	540
MGS	4-8	Hardee County	CT	NG	DFO	PL	TK	Unk	12/06	Unk	312	270	310
Crystal River	3	Citrus County	ST	NUC	N/A	TK	N/A	N/A	03/77	Unk	890	13	13

Abbreviations:	Unit Type	Fuel Type	Fuel Transportation
	Unk – Unknown N/A – Not applicable ST - Steam Turbine, including nuclear CC - Combined Cycle CT – Combustion Turbine	BIT - Bituminous Coal NG - Natural Gas NUC – Nuclear PC – Petroleum Coke DFO - No. 2 Diesel Fuel Oil	PL – Pipeline RR – Railroad TK – Truck

Note: The nameplate capacity for Crystal River Unit 3 is the total unit capability. The net capability is Seminole's share.

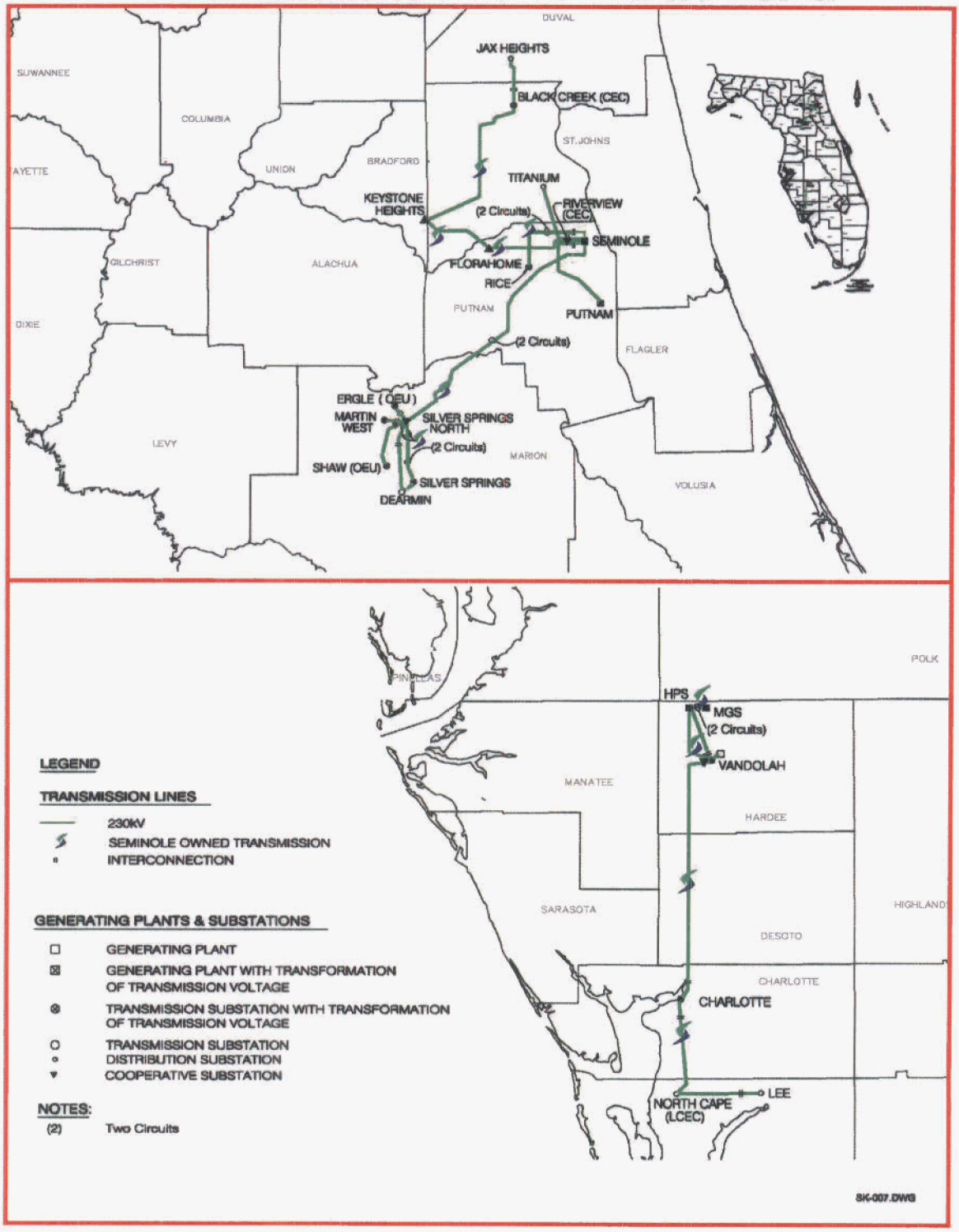
Schedule 1.2

Transmission Grid Interconnections with Other Utilities

Utility	Voltage (kV)	Number of Interconnections
Florida Power & Light	230	6
Progress Energy Florida	230	7
JEA	230	1
City of Ocala	230	2
Tampa Electric Company	230	1
Hardee Power Partners	230	4

Note: This table describes physical facility interconnections, which do not necessarily constitute contractual interconnections for purposes of transmission service or interconnections between control areas.

SEMINOLE'S BULK GENERATION AND TRANSMISSION FACILITIES



1.4 Demand Side Management (DSM) and Energy Conservation

As a generation and transmission rural electric cooperative that serves only wholesale customers, Seminole cannot offer conservation or DSM programs directly to retail consumers. However, Seminole promotes Member involvement in DSM through its wholesale rate signals and via two specific demand management programs: (1) a Coordinated Direct Control Load Management Program; and (2) a Load Management Distributed Generation Program. In 2008, Seminole and its Members took steps to further promote the use and expansion of demand-side resources, energy efficiency and demand-side management through the formation of the Energy Efficiency Working Group. The function of this group is to promote expansion of DSM and conservation programs through sharing of information, consumer education and joint assessment of specific energy efficiency programs to mitigate growth in consumer usage.

Seminole's Members routinely evaluate the economic feasibility of maintaining, or enhancing, their current programs into the future. During each load forecast study Seminole evaluates the Members' DSM and energy conservation programs for anticipated future changes.

1.4.1 Seminole's Member Programs

The demand management programs offered by Seminole's Members include residential load control, load management distributed generation, distribution system voltage reduction, and alternative rate options for interruptible, time of use, and curtailable service. These programs provide an aggregate demand management capability of approximately 236 MW.

All Members promote energy conservation and energy efficiency. Most Members offer in-home energy audits at no cost, and all Members have promoted lighting efficiency by distributing compact fluorescent light bulbs at no cost. Member web sites are focused on educating consumers on the benefits of energy conservation and energy efficiency. Most web

sites offer energy saving tips, offer on-site energy audits, provide tools for consumers to perform on-line energy audits, and provide links to Touchstone Energy's Home Energy Library. One Member offers consumer rebates for energy efficiency improvements including ceiling insulation, HVAC efficiency upgrades, and solar hot water systems. As a part of Seminole's consumer-owned renewable generation program, Seminole's Members have 395 photovoltaic systems and an agricultural waste digester connected to their distribution systems. Seminole's Members provide net metering service to their Member consumers associated with most of the output from these renewable generators. Over the past 15 years, Seminole's Members have significantly reduced their energy purchases from Seminole by lowering their distribution system line losses. These system efficiency improvements have been achieved by upgrading system voltages and distribution systems to reduce energy losses. In aggregate, annual distribution line losses have been reduced approximately 3 percent over the past decade; a reduction in Seminole's total system energy requirements of over 500,000 MWh in the past decade.

1.4.2 Seminole's DSM Programs

Seminole's Load Management Distributed Generation Program allows its Members to install distributed peaking generation resources on their system and/or to partner with their retail customers to install "behind the meter" customer-based distributed generation (DG) to operate as dispatchable load management resources for Seminole's system, while providing load center based generation to improve system and customer reliability.

Under Seminole's Coordinated Direct Control Load Management Program, Seminole coordinates the Members' residential load control and load management generator programs which reduce Seminole's peak demand. Seminole's load and energy forecast takes into account reductions due to the residential load control program and the load management generator

programs.

None of Seminole's Members have finalized plans to expand their load management programs at this time although several are evaluating the feasibility of expansion. As a result, Seminole has not projected any further growth in the load management program over the forecast period. However, Seminole will reassess projected growth in demand management programs each year when updating the load forecast.

1.4.3 Conservation

Seminole's Members have implemented a range of energy efficiency and energy conservation programs which have reduced Seminole's total requirements for electric energy. Except as described specifically below, these reductions have not been specifically quantified or estimated but are reflected in Seminole's load history. As such, Seminole's load forecast effectively extrapolates the growth of past programs into the future.

Additionally, the current load forecast has been adjusted to estimate the impact of two expected influences on consumer energy use: (1) an estimate of the effects of the 2005 Energy Policy Act and (2) the Energy Independence and Security Act of 2007. An evaluation of the 2005 Energy Policy Act and the Energy Independence and Security Act of 2007 revealed that improved efficiency standards for new HVAC systems and improved lighting efficiency would have the most significant impact on future energy sales of Seminole's Members.

2. FORECAST OF ELECTRIC DEMAND AND ENERGY CONSUMPTION

2.1 Consumer Base and Related Trends

2.1.1 Service Area Economy

Seminole's Member systems provide electricity to Member consumers in 45 of Florida's 67 counties. The area served is bounded on the west and north by the Apalachicola River and the Georgia border respectively, extending down to the southwestern and south-central regions of Florida. The service territory encompasses a variety of geographic and weather conditions as well as a diverse mix of economic activity and demographic characteristics.

2.1.2 Population and Consumers

Population growth in Florida (including Seminole Members' service areas) is significantly influenced by migration from northern states. Therefore, national economic factors influencing migration have a large impact on population growth in areas served by Seminole's Members. Historically, Seminole's residential consumer growth rate has exceeded the rate of growth for Florida as a whole. For the 2001-2010 period, Seminole's residential customer growth rate was 2.9 percent, higher than the statewide growth rate of 1.7 percent.

2.1.3 Income

Statistics indicate that almost 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 statistic is reflective of a higher population concentration of retirees.

2.2 Forecast Results

2.2.1 Overview

The forecast projection reflects a weak economic outlook for Florida and the nation as a

whole over the next few years. The national economy started its long decline in the fourth quarter of 2007; the first decline since 2001. The housing market correction was the initial factor. Florida's housing boom and economic growth began to decline in 2006, prior to the start of the national economic decline. By the end of 2007, Florida's economic decline became more severe than the U.S. as a whole and Florida's housing correction became much greater than the national average. Florida's economic recovery continues to lag the national economy's recovery. However, because of the state's strong demographic and economic fundamentals it is expected that Florida will resume long term growth rates in excess of the national growth rate although the residential consumer growth rate is projected to be lower than the historical growth rate. In addition, residential usage per consumer growth rate is projected to be relatively flat reflecting higher real prices, higher appliance efficiency standards and more energy conservation by consumers.

In 2010, Seminole began serving only a portion of the load requirements of Lee County Electric Cooperative (LCEC) and beginning January 1, 2014 will no longer serve any of LCEC's load. This has the effect of lowering Seminole's long-term energy and demand growth rates.

2.2.2 Population and Consumers

Historical and forecasted population for Seminole Members' service area is shown on Schedules 2.1 through 2.3. Seminole's Members serve significant portions of the less urbanized areas of the state which are located adjacent to metropolitan areas. These cooperative-served areas are less saturated and are impacted by suburban growth around these urban centers. It is therefore reasonable to expect continued higher consumer growth rates for Seminole's Members than for Florida as a whole.

2.2.3 Usage per Consumer

After nearly two decades of steady increases, beginning in 2003 residential energy usage per consumer for the Seminole system and Florida began to flatten and moderately decline. This change in energy usage is supported by the Seminole's Residential Appliance Survey results shown in Schedule 1.3. The survey results show the Members reaching maximum saturations of larger homes, electric heating, electric water heating, and air conditioning. Reaching maximum saturations combined with higher energy efficiency of newer electric heating and air conditioning systems have the effect of lowering residential energy usage.

Schedule 1.3
Homes and Electric Appliance Saturations (%)

	2005	2008
Single Family Homes	66	70
Homes > 2000 sq ft	26	27
Homes < 1200 sq ft	22	20
Primary Space Heating	87	89
Air Conditioning	97	98
Water Heater	91	91
Refrigerator	100	100
Home Computers	69	76
Electric Range	86	85
Microwave Oven	97	97
Dishwasher	73	76
Clothes Dryer	87	90
Pool Pump	16	15

SOURCE: "Residential Survey," Seminole Electric Cooperative, Inc., 2005 and 2008

In an effort to further this trend, Seminole and its Members are promoting expansion of demand-side programs and are targeting to mitigate the continued growth in consumer usage. However, further expansion of electro-technology in the home and the introduction of mass

produced electric vehicles will be an important influence on future usage per consumer. In 2010, Seminole's annual average residential usage was 14,920 kWh while Florida as a whole averaged 14,280 kWh.

Commercial annual average usage per consumer is much lower on the Seminole system (57,411 kWh in 2010) than in Florida as a whole (77,774 kWh). This difference is even starker considering that Seminole Members' commercial usage also includes industrial consumers, whereas the Florida average does not. Seminole's Member commercial sector is dominated by small commercial loads. Commercial/industrial usage per consumer is projected to increase at an average annual growth rate of 0.4 percent through 2021. This is consistent with an average annual growth rate of 0.5 percent over the past ten years.

2.2.4 Energy Sales and Purchases

Residential energy sales are projected to grow at 1.2 percent annually between 2012 and 2021. The energy sales forecast reflects energy savings from historical conservation efforts, incremental conservation growth at the same rate of adoption, a conservation estimate based primarily on the 2005 Energy Policy Act, the Energy Independence and Security Act of 2007. Commercial energy sales are projected to grow at an annual average of 1.3 percent over the same period. These statistics for growth include the effect of the departure of LCEC from Seminole's load responsibility in 2014.

2.2.5 Peak Demand

Seminole's winter peak demand is projected to increase at an average annual rate of 1.0 percent over the 10-year planning horizon, while summer peak demand is projected to increase at an average annual rate of 1.2 percent over the same period. These growth statistics are significantly influenced by the departure of LCEC in 2014.

Seminole as a whole, as well as the majority of its Member systems, is expected to continue to be winter peaking. For the Seminole system, winter peaks are expected to minimally increase from approximately 24 percent higher to 25 percent higher than summer peaks. The continued winter-peaking nature of the Seminole system is due primarily to continued prominence of electric space-heating saturation in the foreseeable future.

The peak demand in Seminole's current load forecast reflects no additional load management.

Seminole counts its consumer demand once and only once, on an aggregated and Member system basis, in developing its actual and forecast consumer demand values.

2.2.6 Forecast Scenarios

Seminole creates a high and low population growth scenario in addition to the base forecast. Because Seminole's system is primarily residential load, population is the primary driving force behind Seminole's load growth. Therefore, high and low population growth scenarios are developed for each Member system based on the University of Florida's Bureau of Economic Business Research's (BEBR) alternative scenarios.

Schedules 2.1, 2.2, and 2.3 summarize energy usage and Members' consumers by customer class. Schedules 3.1.1, 3.1.2, and 3.1.3 provide Seminole's total summer peak demand forecasts for base, high and low population scenarios. Schedules 3.2.1, 3.2.2, and 3.2.3 provide similar data for winter peak demand, and schedules 3.3.1, 3.3.2, 3.3.3, and 4 provide similar data for net energy for load.

Schedule 2.1
History and Forecast of Energy Consumption and
Number of Customers by Customer Class

Year	Estimated Population Served by Members	MEMBER RESIDENTIAL			
		Customers Per Household	GWh	Avg. Number of Customers	Average kWh Consumption Per Customer
2002	1,436,778	2.17	9,543	661,332	14,429
2003	1,479,856	2.16	10,019	686,121	14,603
2004	1,533,905	2.15	10,264	713,496	14,386
2005	1,596,624	2.14	10,807	744,617	14,513
2006	1,663,881	2.13	11,153	780,687	14,286
2007	1,712,913	2.13	11,444	803,957	14,235
2008	1,739,730	2.15	11,104	808,926	13,727
2009	1,752,073	2.16	11,293	811,767	13,912
2010	1,690,800	2.22	11,369	761,994	14,920
2011	1,698,674	2.22	10,450	765,279	13,655
2012	1,711,504	2.22	10,770	771,246	13,964
2013	1,744,889	2.22	11,196	786,425	14,237
2014	1,454,039	2.15	9,671	675,741	14,312
2015	1,481,222	2.15	9,974	690,394	14,447
2016	1,513,810	2.14	10,309	707,700	14,567
2017	1,546,394	2.13	10,625	724,692	14,661
2018	1,578,982	2.13	10,926	741,784	14,729
2019	1,611,571	2.12	11,262	758,918	14,840
2020	1,644,153	2.12	11,613	776,068	14,964
2021	1,675,494	2.11	11,964	792,518	15,096

NOTE: Estimated Population Served by Members represents only the area supplied by Seminole.
Schedules 2.1, 2.2 and 2.3 represent retail consumption and consumers of the ten distribution Member cooperatives served by Seminole.

Schedule 2.2 History and Forecast of Energy Consumption and Number of Customers by Customer Class					
Year	MEMBER COMMERCIAL/INDUSTRIAL			Member Other Sales (GWh)	Total Sales To Ultimate Consumers (GWh)
	GWh	Avg. Number of Customers	Average kWh Consumption Per Customer		
2002	3,629	68,785	52,755	161	13,333
2003	3,871	70,264	55,095	152	14,042
2004	4,103	74,247	55,268	165	14,533
2005	4,370	77,548	56,348	140	15,317
2006	4,634	84,358	54,937	158	15,945
2007	4,842	88,312	54,808	163	16,449
2008	4,894	86,119	56,823	163	16,160
2009	4,776	84,351	56,644	167	16,236
2010	4,524	78,793	57,411	159	16,052
2011	4,366	78,826	55,388	159	14,975
2012	4,525	80,320	56,337	153	15,448
2013	4,694	82,333	57,012	156	16,046
2014	4,089	72,440	56,447	146	13,906
2015	4,222	74,109	56,970	148	14,344
2016	4,373	76,215	57,377	152	14,834
2017	4,518	78,317	57,689	156	15,299
2018	4,656	80,417	57,898	160	15,742
2019	4,794	82,519	58,096	164	16,220
2020	4,932	84,617	58,286	169	16,714
2021	5,068	86,674	58,472	173	17,205
NOTE: Commercial class includes industrial customers; 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 (Avg. Number)	Total Number of Customers
2002	0	1,357	14,690	5,123	735,240
2003	0	1,736	15,778	5,239	761,624
2004	0	1,880	16,413	5,307	793,050
2005	0	1,449	16,766	5,544	827,709
2006	0	1,410	17,355	5,101	870,146
2007	0	1,221	17,670	5,118	897,387
2008	0	1,171	17,331	5,075	900,120
2009	0	1,217	17,453	5,002	901,121
2010	0	1,294	17,346	4,951	845,738
2011	157	905	16,037	4,954	849,059
2012	159	1,136	16,743	5,006	856,572
2013	162	1,195	17,403	5,106	873,864
2014	0	1,014	14,920	5,046	753,227
2015	0	1,046	15,390	5,130	769,633
2016	0	1,072	15,906	5,224	789,139
2017	0	1,116	16,415	5,318	808,327
2018	0	1,148	16,890	5,409	827,610
2019	0	1,183	17,403	5,501	846,938
2020	0	1,206	17,920	5,593	866,278
2021	0	1,255	18,460	5,682	884,874

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

Year	Total	Wholesale	Retail	Distributed Generation	Residential		Commercial		Net Firm Demand
					Load Mgmt.	Cons.	Load Mgmt.	Cons.	
2002	3,111	3,111	0	37	99	N/A	N/A	N/A	2,975
2003	3,208	3,208	0	35	158	N/A	N/A	N/A	3,015
2004	3,336	3,336	0	35	74	N/A	N/A	N/A	3,227
2005	3,666	3,666	0	49	78	N/A	N/A	N/A	3,539
2006	3,839	3,839	0	51	130	N/A	N/A	N/A	3,658
2007	4,006	4,006	0	62	105	N/A	N/A	N/A	3,839
2008	3,778	3,778	0	48	100	N/A	N/A	N/A	3,630
2009	3,987	3,987	0	62	101	N/A	N/A	N/A	3,824
2010	3,714	3,714	0	67	99	N/A	N/A	N/A	3,548
2011	3,820	3,820	0	70	97	N/A	N/A	N/A	3,653
2012	3,814	3,814	0	107	89	N/A	N/A	N/A	3,618
2013	3,936	3,936	0	107	89	N/A	N/A	N/A	3,740
2014	3,398	3,398	0	93	53	N/A	N/A	N/A	3,252
2015	3,496	3,496	0	93	53	N/A	N/A	N/A	3,350
2016	3,607	3,607	0	93	53	N/A	N/A	N/A	3,461
2017	3,712	3,712	0	93	53	N/A	N/A	N/A	3,566
2018	3,812	3,812	0	93	53	N/A	N/A	N/A	3,666
2019	3,922	3,922	0	93	53	N/A	N/A	N/A	3,776
2020	4,032	4,032	0	93	53	N/A	N/A	N/A	3,886
2021	4,142	4,142	0	93	53	N/A	N/A	N/A	3,996

Historical load management data is actual amount exercised at the time of the seasonal peak demand.
Forecast data is the maximum amount available and includes SEPA allocations.

Schedule 3.1.2
Forecast of Summer Peak Demand (MW) - *High Case*

Year	Total	Wholesale	Retail	Distributed Generation	Residential		Commercial		Net Firm Demand
					Load Mgmt.	Cons.	Load Mgmt.	Cons.	
2012	4,096	4,096	0	107	89	N/A	N/A	N/A	3,900
2013	4,263	4,263	0	107	89	N/A	N/A	N/A	4,067
2014	3,729	3,729	0	93	53	N/A	N/A	N/A	3,583
2015	3,877	3,877	0	93	53	N/A	N/A	N/A	3,731
2016	4,036	4,036	0	93	53	N/A	N/A	N/A	3,890
2017	4,185	4,185	0	93	53	N/A	N/A	N/A	4,039
2018	4,331	4,331	0	93	53	N/A	N/A	N/A	4,185
2019	4,488	4,488	0	93	53	N/A	N/A	N/A	4,342
2020	4,646	4,646	0	93	53	N/A	N/A	N/A	4,500
2021	4,814	4,814	0	93	53	N/A	N/A	N/A	4,668

Schedule 3.1.3
Forecast of Summer Peak Demand (MW) - *Low Case*

Year	Total	Wholesale	Retail	Distributed Generation	Residential		Commercial		Net Firm Demand
					Load Mgmt.	Cons.	Load Mgmt.	Cons.	
2012	3,670	3,670	0	107	89	N/A	N/A	N/A	3,474
2013	3,757	3,757	0	107	89	N/A	N/A	N/A	3,561
2014	3,223	3,223	0	93	53	N/A	N/A	N/A	3,077
2015	3,291	3,291	0	93	53	N/A	N/A	N/A	3,145
2016	3,360	3,360	0	93	53	N/A	N/A	N/A	3,214
2017	3,424	3,424	0	93	53	N/A	N/A	N/A	3,278
2018	3,484	3,484	0	93	53	N/A	N/A	N/A	3,338
2019	3,553	3,553	0	93	53	N/A	N/A	N/A	3,407
2020	3,622	3,622	0	93	53	N/A	N/A	N/A	3,476
2021	3,684	3,684	0	93	53	N/A	N/A	N/A	3,538

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

Year	Total	Wholesale	Retail	Distributed Generation	Residential		Commercial		Net Firm Demand
					Load Mgmt.	Cons.	Load Mgmt.	Cons.	
2001-02	3,729	3,729	0	38	125	N/A	N/A	N/A	3,566
2002-03	4,288	4,288	0	38	95	N/A	N/A	N/A	4,155
2003-04	3,655	3,655	0	39	85	N/A	N/A	N/A	3,531
2004-05	4,082	4,082	0	40	91	N/A	N/A	N/A	3,951
2005-06	4,349	4,349	0	47	77	N/A	N/A	N/A	4,225
2006-07	4,178	4,178	0	43	109	N/A	N/A	N/A	4,026
2007-08	4,410	4,410	0	56	133	N/A	N/A	N/A	4,221
2008-09	4,946	4,946	0	58	150	N/A	N/A	N/A	4,738
2009-10	5,263	5,263	0	64	152	N/A	N/A	N/A	5,047
2010-11	4,476	4,476	0	55	106	N/A	N/A	N/A	4,315
2011-12	4,095	4,095	0	60	133	N/A	N/A	N/A	3,902
2012-13	4,823	4,823	0	106	133	N/A	N/A	N/A	4,584
2013-14	4,172	4,172	0	106	133	N/A	N/A	N/A	3,933
2014-15	4,227	4,227	0	92	81	N/A	N/A	N/A	4,054
2015-16	4,365	4,365	0	92	81	N/A	N/A	N/A	4,192
2016-17	4,499	4,499	0	92	81	N/A	N/A	N/A	4,326
2017-18	4,628	4,628	0	92	81	N/A	N/A	N/A	4,455
2018-19	4,760	4,760	0	92	81	N/A	N/A	N/A	4,587
2019-20	4,899	4,899	0	92	81	N/A	N/A	N/A	4,726
2020-21	5,037	5,037	0	92	81	N/A	N/A	N/A	4,864
2021-22	5,179	5,179	0	92	81	N/A	N/A	N/A	5,006

Historical load management data is actual amount exercised at the time of the seasonal peak demand.
Forecast data is the maximum amount available and includes SEPA allocations.

Schedule 3.2.2
Forecast of Winter Peak Demand (MW) - *High Case*

Year	Total	Wholesale	Retail	Distributed Generation	Residential		Commercial		Net Firm Demand
					Load Mgmt.	Cons.	Load Mgmt.	Cons.	
2012-13	5,647	5,647	0	106	133	N/A	N/A	N/A	5,408
2013-14	4,538	4,538	0	106	133	N/A	N/A	N/A	4,299
2014-15	4,657	4,657	0	92	81	N/A	N/A	N/A	4,484
2015-16	4,857	4,857	0	92	81	N/A	N/A	N/A	4,684
2016-17	5,049	5,049	0	92	81	N/A	N/A	N/A	4,876
2017-18	5,234	5,234	0	92	81	N/A	N/A	N/A	5,061
2018-19	5,424	5,424	0	92	81	N/A	N/A	N/A	5,251
2019-20	5,621	5,621	0	92	81	N/A	N/A	N/A	5,448
2020-21	5,826	5,826	0	92	81	N/A	N/A	N/A	5,653
2021-22	6,040	6,040	0	92	81	N/A	N/A	N/A	5,867

Schedule 3.2.3
Forecast of Winter Peak Demand (MW) - *Low Case*

Year	Total	Wholesale	Retail	Distributed Generation	Residential		Commercial		Net Firm Demand
					Load Mgmt.	Cons.	Load Mgmt.	Cons.	
2012-13	4,774	4,774	0	106	133	N/A	N/A	N/A	4,535
2013-14	3,907	3,907	0	106	133	N/A	N/A	N/A	3,668
2014-15	3,924	3,924	0	92	81	N/A	N/A	N/A	3,751
2015-16	4,015	4,015	0	92	81	N/A	N/A	N/A	3,842
2016-17	4,098	4,098	0	92	81	N/A	N/A	N/A	3,925
2017-18	4,175	4,175	0	92	81	N/A	N/A	N/A	4,002
2018-19	4,256	4,256	0	92	81	N/A	N/A	N/A	4,083
2019-20	4,342	4,342	0	92	81	N/A	N/A	N/A	4,169
2020-21	4,423	4,423	0	92	81	N/A	N/A	N/A	4,250
2021-22	4,505	4,505	0	92	81	N/A	N/A	N/A	4,332

Schedule 3.3.1
History and Forecast of Annual Net Energy for Load (GWh) - *Base Case*

Year	Total	Conservation		Retail	Total Sales	Utility Use & Losses	Net Energy for Load	Load Factor %
		Residential	Commercial					
2002	14,690	N/A	N/A	0	13,333	1,357	14,690	40.4
2003	15,778	N/A	N/A	0	14,042	1,736	15,778	51.0
2004	16,413	N/A	N/A	0	14,533	1,880	16,413	47.4
2005	16,766	N/A	N/A	0	15,317	1,449	16,766	45.3
2006	17,355	N/A	N/A	0	15,945	1,410	17,355	49.2
2007	17,671	1	N/A	0	16,449	1,221	17,670	47.8
2008	17,332	1	N/A	0	16,160	1,171	17,331	41.8
2009	17,454	1	N/A	0	16,236	1,217	17,453	39.5
2010	17,347	1	N/A	0	16,052	1,294	17,346	45.9
2011	16,038	1	N/A	0	15,132	905	16,037	46.9
2012	16,804	61	N/A	0	15,607	1,136	16,743	43.7
2013	17,507	104	N/A	0	16,208	1,195	17,403	43.3
2014	15,014	94	N/A	0	13,906	1,014	14,920	43.3
2015	15,525	135	N/A	0	14,344	1,046	15,390	43.3
2016	16,084	178	N/A	0	14,834	1,072	15,906	43.3
2017	16,639	224	N/A	0	15,299	1,116	16,415	43.3
2018	17,161	271	N/A	0	15,742	1,148	16,890	43.3
2019	17,695	292	N/A	0	16,220	1,183	17,403	43.3
2020	18,234	314	N/A	0	16,714	1,206	17,920	43.3
2021	18,795	335	N/A	0	17,205	1,255	18,460	43.3

Schedule 3.3.2
Forecast of Annual Net Energy for Load (GWh) - *High Case*

Year	Total	Conservation		Retail	Wholesale	Utility Use & Losses	Net Energy for Load	Load Factor %
		Residential	Commercial					
2012	19,170	61	N/A	0	16,419	2,690	19,109	43.2
2013	20,661	104	N/A	0	17,333	3,224	20,557	43.4
2014	16,309	94	N/A	0	15,111	1,104	16,215	43.1
2015	17,047	135	N/A	0	15,762	1,151	16,913	43.1
2016	17,826	178	N/A	0	16,458	1,190	17,648	43.0
2017	18,587	224	N/A	0	17,113	1,250	18,363	43.0
2018	19,320	271	N/A	0	17,752	1,296	19,048	43.0
2019	20,068	292	N/A	0	18,430	1,346	19,776	43.0
2020	20,825	314	N/A	0	19,128	1,383	20,511	43.0
2021	21,651	335	N/A	0	19,865	1,451	21,316	43.0

Schedule 3.3.3
Forecast of Annual Net Energy for Load (GWh) - *Low Case*

Year	Total	Conservation		Retail	Wholesale	Utility Use & Losses	Net Energy for Load	Load Factor %
		Residential	Commercial					
2012	16,632	61	N/A	0	15,440	1,130	16,571	42.3
2013	17,315	104	N/A	0	15,946	1,265	17,211	43.3
2014	13,868	94	N/A	0	13,655	118	13,774	42.9
2015	14,235	135	N/A	0	13,979	121	14,100	42.9
2016	14,601	178	N/A	0	14,309	114	14,423	42.9
2017	14,964	224	N/A	0	14,613	126	14,740	42.9
2018	15,294	271	N/A	0	14,894	129	15,023	42.9
2019	15,631	292	N/A	0	15,209	131	15,340	42.9
2020	15,973	314	N/A	0	15,536	123	15,659	42.9
2021	16,305	335	N/A	0	15,834	137	15,971	42.9

Schedule 4 Previous Year and 2-Year Forecast of Peak Demand and Net Energy for Load by Month						
Month	2011 Actual		2012 Forecast		2013 Forecast	
	Peak Demand MW	NEL GWh	Peak Demand MW	NEL GWh	Peak Demand MW	NEL GWh
January	4,118	1,387	3,902	1,446	4,584	1,498
February	3,347	1,094	3,505	1,184	3,641	1,239
March	2,427	1,107	2,874	1,182	2,989	1,233
April	3,201	1,260	2,646	1,178	2,768	1,234
May	3,376	1,444	3,242	1,455	3,399	1,528
June	3,653	1,591	3,457	1,580	3,602	1,650
July	3,582	1,635	3,513	1,690	3,686	1,776
August	3,519	1,718	3,617	1,751	3,740	1,812
September	3,333	1,472	3,331	1,540	3,424	1,584
October	2,642	1,141	2,934	1,297	3,018	1,334
November	2,238	1,042	2,583	1,131	2,663	1,164
December	2,494	1,146	3,225	1,309	3,331	1,351
ANNUAL		16,037		16,743		17,403

* Note: January 2012 is estimated actual Demand

2.3 Forecast Assumptions

2.3.1 Economic and Demographic Data

Seminole's economic and demographic data base has four principal sources: (1) population from the "Florida Population Studies" furnished by the BEBR, (2) housing permits, income, and employment data furnished by Moody's Economy.com (3) electricity price data from Seminole's Member cooperatives "Financial and Operating Report- Electronic Distributions" (Previously referred to as the RUS Form 7), and (4) 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 population data 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 the BEBR: low, medium, and high scenarios. Historical population growth trends are analyzed to determine the most appropriate combination of scenarios for each Member system. Low and high population scenarios are also developed for each Member.

Real Per Capita Income (RPCI) is an explanatory variable in the residential and commercial/industrial usage per consumer models. 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 values. Total non-farm employment (EMPL) is also used in the commercial/industrial energy usage model. County forecasts of RPCI and EMPL are taken from Moody's Economy.com long-term economic forecast.

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 into the corresponding revenue, and then by deflating the result by the CPI-U. For the forecast, the real price of electricity is assumed to increase in the future based on system-wide historical retail rates.

Appliance saturations and housing data are obtained from Seminole's Residential Appliance Survey. 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.

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 Member service area. 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 degree hours (HDH) and cooling degree hours (CDH) are used in the energy usage models, while the peak demand models use HDH and CDH on Seminole's peak days. Seminole uses different temperature cut-off points for air conditioning and space heating demand. In addition, there are different winter cut-off values for Members in the northern versus the southern regions.

2.3.3 Sales and Hourly Load Data

Monthly operating statistics dating back to 1970 have been furnished by the Member systems. Included in this data are statistics by class on number of consumers, kWh sales, and revenue. 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 from Seminole, are collected from 191 delivery points. Such data, taken from January 1979 to the present, is a basis for hourly load profile forecasts and modeling peak demand.

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

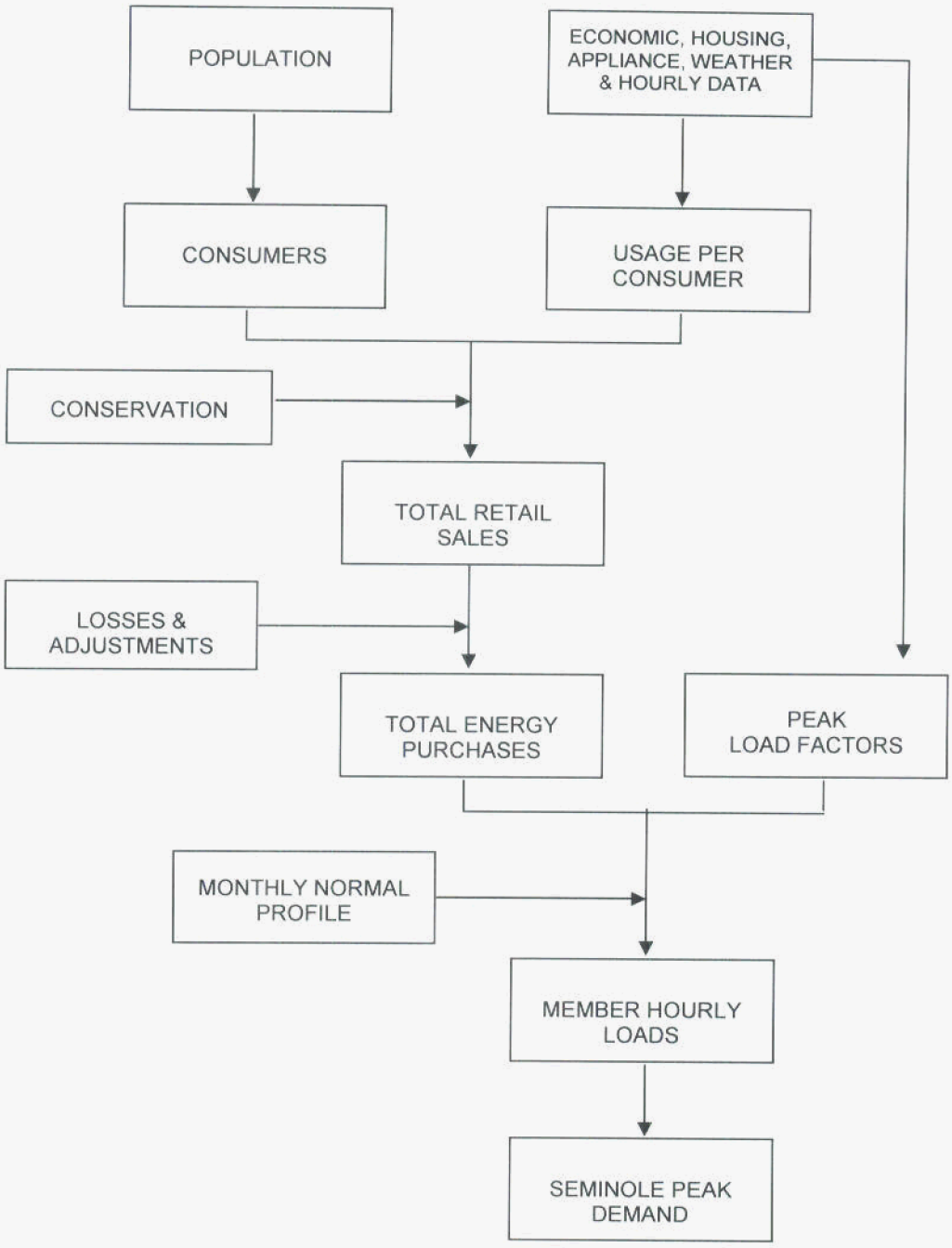
(8) Peak Demand Load Factor Model

(9) Hourly Load Profiles and Load Management

Each model consists of ten sub-models because each Member system is modeled and forecast separately. Individual Member model results are aggregated to derive the Seminole forecast. Figure 1 on the following page shows the Integrated Forecasting System.

Figure 1

Integrated Forecasting System



2.4.1 Consumer Models

For each Member, annual consumers are a function of the Member's service area population, with a first-order auto-regressive correction used when necessary. The amount of new residential housing permits was found to be a significant variable in six of the Members' residential consumer models. Forecasts are benchmarked using 2010 actual data. Seasonally adjusted monthly forecasts are developed from annual data. Expected new large commercial consumers are included.

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. A few 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 for the following home types are produced: single-family, mobiles, and multi-family homes. Each home type is segregated into four age groups. 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 Model

The Residential Energy Usage Model is a combination of econometric and end-use methods. For each Member system, monthly residential usage per consumer is a function of heating and cooling degree variables weighted with space-conditioning appliances, real price of electricity, and real per capita income. Forecasts are benchmarked against weather-normalized estimated energy in 2010, the last year of the analysis period. The usage per consumer forecast is multiplied by the consumer forecast to produce monthly residential energy sales forecasts.

For each Member system, monthly commercial/industrial usage per consumer is a function of heating and cooling degree variables, real price of electricity, real per capita income, total non-farm employment, and dummy variables to explain abrupt or external changes. A first order auto-regressive correction is used when necessary. Forecasts of energy usage per consumer are benchmarked to 2010 estimates, the last year of the historical period. Energy usage per consumer forecasts are combined with the consumer forecasts to produce monthly commercial/industrial energy sales forecasts. Expected new large commercial loads are included in the forecast.

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 Energy Sales and Energy Purchases

Residential, Commercial/Industrial, and Other class energy sales forecasts are summed to create total retail energy sales forecasts for each Member system. Retail energy sales forecasts are converted to Member energy purchases from Seminole at the delivery point using historical averages of the ratio of calendar month purchases to retail billing cycle sales for each Member.

Therefore, these adjustment factors represent both energy losses and billing cycle sales and calendar month purchases differences. The latter, as a function of weather and billing days, often changes erratically.

2.4.5 Peak Demand Load Factor Model

The Seminole peak demand forecast is derived after the Member monthly peak demands and hourly load forecasts have been created. Member peak demands are derived by combining the forecasts of monthly load factors with energy purchases from Seminole. Monthly peak demand load factors are a function of 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 (November through March) and the other for the summer months (April through October). The forecasted monthly load factors are combined with the energy purchases from Seminole forecasts to produce forecasts of monthly peaks by Member.

2.4.6 Hourly Load Profiles

Hourly demand forecasts are created using an algorithm that contains the following inputs: normal monthly hourly profiles, maximum and minimum monthly demands, and energy. This algorithm produces monthly hourly load forecasts by Member. Seminole peak demands are derived by summing the Members' hourly loads and identifying the monthly coincident maximum demands.

2.4.7 Scenarios

In lieu of economic scenarios, Seminole creates a high and low population growth scenario in addition to the base population forecast. Because Seminole's system is primarily residential load, population is the primary driving force behind Seminole's load growth.

Therefore, high and low population growth scenarios are developed for each Member system based on the BEBR's alternative scenarios.

3. FUEL REQUIREMENTS AND ENERGY SOURCES

Seminole's nuclear, coal, oil, and natural gas requirements for owned and future generating units are shown on Schedule 5 on the next page. Seminole's total system energy sources in GWh and percent for each fuel type are shown on Schedules 6.1 and 6.2, respectively, on the following pages.

Seminole has additional requirements for capacity in the 2018 and beyond time frame. Seminole has reflected capacity additions which are assumed to be from a portfolio of resources such as gas/oil, nuclear, and renewable resources.

Schedule 5
Fuel Requirements For Seminole Generating Resources

Fuel Requirements		Units	Actual 2010	Actual 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Nuclear		Trillion BTU	1	1	0	0	0	1	1	1	1	1	1	1
Coal		1000 Tons	3498	3474	3286	3411	3583	3641	3687	3694	3793	3893	3927	3897
Residual	Total	1000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
	Steam	1000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
	CC	1000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
	CT	1000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
Distillate	Total	1000 BBL	84	85	45	45	40	40	41	43	43	46	48	49
	Steam	1000 BBL	53	54	37	38	40	40	41	41	42	43	43	43
	CC	1000 BBL	15	15	8	7	0	0	0	2	1	3	5	6
	CT	1000 BBL	16	16	0	0	0	0	0	0	0	0	0	0
Natural Gas	Total	1000 MCF	23094	20138	30265	28980	19661	20406	20865	23199	23358	25731	27405	40805
	Steam	1000 MCF	0	0	0	0	0	0	0	0	0	0	0	0
	CC	1000 MCF	19481	17547	24622	23594	15946	17409	17799	20206	20265	21054	20814	34908
	CT	1000 MCF	3613	2591	5643	5386	3715	2997	3066	2993	3093	4677	6591	5897

NOTE: Above fuel is for existing and future-owned generating resources (excluding purchased power contracts).
Totals may not add due to rounding.

Schedule 6.1
Energy Sources (GWh)

Energy Sources		Units	Actual 2010	Actual 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Inter-Regional Interchange		GWh	0	0	0	0	0	0	0	0	0	0	0	0
Nuclear		GWh	158	128	0	0	25	167	159	131	144	131	144	132
Coal		GWh	9142	8663	7900	8262	8855	9178	9157	8978	9275	9434	9526	9449
Residual	Total	GWh	43	0	2	4	0	2	1	1	1	1	3	0
	Steam	GWh	43	0	2	4	0	2	0	0	0	0	0	0
	CC	GWh	0	0	0	0	0	0	1	1	1	1	3	0
	CT	GWh	0	0	0	0	0	0	0	0	0	0	0	0
Distillate	Total	GWh	267	86	127	113	93	93	97	102	106	111	116	103
	Steam	GWh	64	60	21	22	23	23	24	24	24	25	25	25
	CC	GWh	11	6	6	6	0	0	1	2	1	3	5	6
	CT	GWh	192	20	100	85	70	70	72	76	81	83	86	72
Natural Gas	Total	GWh	6980	6310	7444	7847	4772	4698	5239	6359	6616	7008	7426	8073
	Steam	GWh	1173	1137	67	92	256	661	384	149	198	0	0	0
	CC	GWh	4958	4475	6594	7133	4201	3723	4527	5896	6062	6490	6732	7591
	CT	GWh	849	697	783	622	315	314	328	314	356	518	694	482
NUG		GWh	0	0	0	0	0	0	0	0	0	0	0	0
Renewables		GWh	756	850	1026	1024	1023	1100	1101	689	592	561	553	548
Other		GWh	0	0	244	153	152	153	153	155	156	157	152	155
Net Energy for Load		GWh	17346	16037	16743	17403	14920	15390	15906	16415	16890	17403	17920	18460

NOTE: Net interchange, unit power purchases and PEF and FPL system purchases are included under source fuel categories.
Totals may not add due to rounding.

Schedule 6.2
Energy Sources (Percent)

Energy Sources		Units	Actual 2010	Actual 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Inter-Regional Interchange		%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Nuclear		%	0.91%	0.80%	0.00%	0.00%	0.17%	1.09%	1.00%	0.80%	0.85%	0.75%	0.80%	0.72%
Coal		%	52.70%	54.02%	47.18%	47.47%	59.35%	59.64%	57.57%	54.69%	54.91%	54.21%	53.16%	51.19%
Residual	Total	%	0.25%	0.00%	0.01%	0.02%	0.00%	0.01%	0.01%	0.01%	0.01%	0.01%	0.02%	0.00%
	Steam	%	0.25%	0.00%	0.01%	0.02%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	CC	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.01%	0.01%	0.01%	0.02%	0.00%
	CT	%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Distillate	Total	%	1.54%	0.54%	0.76%	0.65%	0.62%	0.60%	0.61%	0.62%	0.63%	0.64%	0.65%	0.56%
	Steam	%	0.37%	0.38%	0.13%	0.13%	0.15%	0.15%	0.15%	0.15%	0.14%	0.14%	0.14%	0.14%
	CC	%	0.06%	0.04%	0.04%	0.03%	0.00%	0.00%	0.01%	0.01%	0.01%	0.02%	0.03%	0.03%
	CT	%	1.11%	0.13%	0.60%	0.49%	0.47%	0.45%	0.45%	0.46%	0.48%	0.48%	0.48%	0.39%
Natural Gas	Total	%	40.24%	39.34%	44.46%	45.09%	31.98%	30.53%	32.94%	38.74%	39.17%	40.27%	41.44%	43.73%
	Steam	%	6.76%	7.09%	0.40%	0.53%	1.72%	4.29%	2.41%	0.91%	1.17%	0.00%	0.00%	0.00%
	CC	%	28.58%	27.91%	39.38%	40.99%	28.16%	24.19%	28.46%	35.92%	35.89%	37.29%	37.57%	41.12%
	CT	%	4.89%	4.35%	4.68%	3.57%	2.11%	2.04%	2.06%	1.91%	2.11%	2.98%	3.87%	2.61%
NUG		%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Renewables		%	4.36%	5.30%	6.13%	5.88%	6.86%	7.15%	6.92%	4.20%	3.51%	3.22%	3.09%	2.97%
Other		%	0.00%	0.00%	1.46%	0.88%	1.02%	0.99%	0.96%	0.94%	0.92%	0.90%	0.85%	0.84%
Net Energy for Load		%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

NOTE: Net interchange, unit power purchases and PEF and FPL system purchases are included under source fuel categories.
Totals may not add due to rounding.

4. FORECAST OF FACILITIES REQUIREMENTS

Seminole's load is located primarily within three control areas: PEF, FPL, and SDS. Seminole is obligated to serve all loads in the FPL and SDS areas, and load up to a specified capacity commitment level in the PEF area during the term of the PEF PR contract. Seminole must also supply appropriate reserves for the load it is responsible for serving. Seminole meets its total committed load obligation using a combination of owned generation and purchased capacity resources. Member loads in the PEF control area in excess of the specified PEF capacity commitment level are served through PR purchases from PEF. PEF has the contractual obligation to plan to meet these requirements.

Schedules 7.1, 7.2, and 8 include the addition of approximately 2,300 MW of capacity by 2022. Such capacity is needed to replace expiring purchased power contracts and/or to maintain Seminole's reliability criteria. These needs are specified for planning purposes and represent the most economical mix of resource types for Seminole's needs.

Seminole's capacity expansion plan includes the need for nine 180 MW class combustion turbine units which are currently assumed to be installed at Seminole's site in Gilchrist County. The first of these units is scheduled to enter service in December, 2018, the second unit by December 2019, followed by three units in 2020 and four additional units in 2021. In addition, by December 2021, Seminole also has a need for 680 MW of combined cycle. A final decision as to whether Seminole will construct and own these additional facilities will be based upon future economic studies. These studies will analyze purchased power alternatives acquired through Seminole's competitive bidding process and/or bilateral discussions with power suppliers and will allow Seminole to further optimize the amount, type, and timing of such capacity. The inclusion of these units in Seminole's capacity expansion plan does not represent

at this time a commitment for construction by Seminole.

Seminole also has a FERC-filed qualifying facility (QF) program which complies with the requirements of the Public Utility Regulatory Policies Act (PURPA). When competitively bidding for power supplies, Seminole continues to solicit proposals from QF and renewable energy facilities. Seminole also evaluates all unsolicited QF and renewable energy proposals for applicability to the cooperative's needs. As a result of its market interactions, Seminole has signed several purchased power contracts for renewable energy (see Section 1.3.1). These renewable resources are projected to serve approximately 6% of Seminole's total energy requirements in 2012.

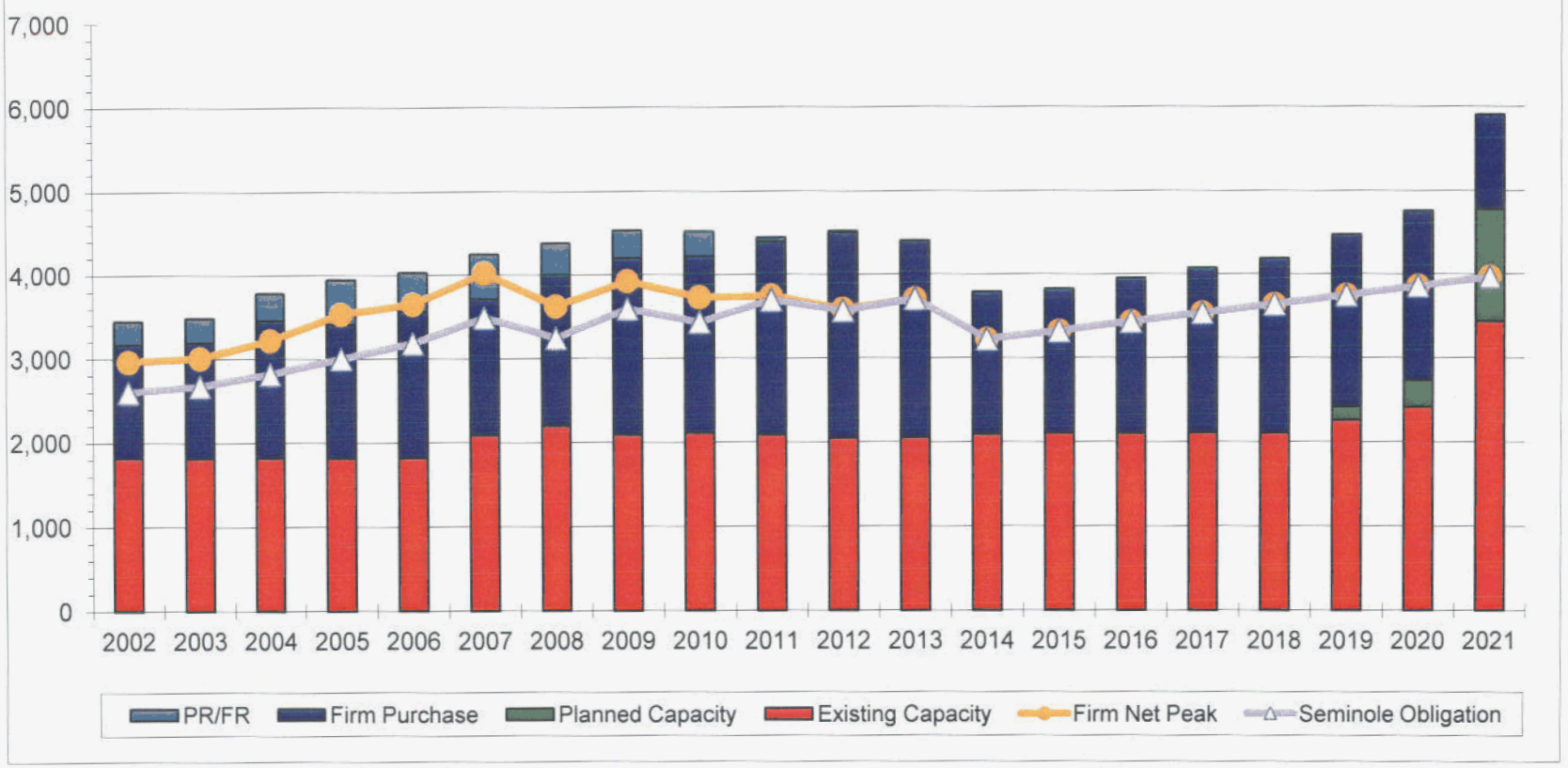
Schedule 7.1
Forecast of Capacity, Demand and Scheduled Maintenance at Time of Summer Peak

Year	Total Installed Capacity (MW)	Firm Capacity Import (MW)			Firm Capacity Export (MW)	QFs (MW)	Capacity Available (MW)		System Firm Summer Peak Demand (MW)		Reserve Margin Before Maintenance		Scheduled Maintenance (MW)	Reserve Margin After Maintenance	
		PR and FR	Other Purchases	Total			Total	Less PR and FR	Total	Obligation	MW	% of Pk		MW	% of Pk
2012	2,034	18	2,469	2,487	0	0	4,521	4,503	3,591	3,573	930	26.0%	0	930	26.0%
2013	2,040	0	2,364	2,364	0	0	4,404	4,404	3,714	3,714	690	18.6%	0	690	18.6%
2014	2,038	0	1,754	1,754	0	0	3,792	3,792	3,228	3,228	564	17.5%	0	564	17.5%
2015	2,054	0	1,770	1,770	0	0	3,824	3,824	3,325	3,325	499	15.0%	0	499	15.0%
2016	2,052	0	1,901	1,901	0	0	3,953	3,953	3,437	3,437	516	15.0%	0	516	15.0%
2017	2,054	0	2,018	2,018	0	0	4,072	4,072	3,541	3,541	531	15.0%	0	531	15.0%
2018	2,052	0	2,138	2,138	0	0	4,190	4,190	3,643	3,643	546	15.0%	0	546	15.0%
2019	2,208	0	2,108	2,108	0	0	4,316	4,316	3,753	3,753	563	15.0%	0	563	15.0%
2020	2,364	0	2,078	2,078	0	0	4,442	4,442	3,863	3,863	579	15.0%	0	579	15.0%
2021	3,386	0	1,181	1,181	0	0	4,567	4,567	3,971	3,971	596	15.0%	0	596	15.0%

NOTES:
1. Total installed capacity and the associated reserve margins are based on Seminole's current base case plan and are based on a 15% reserve margin criterion.
2. Firm Capacity Import/Other Purchases include a firm purchase power contract from Hardee Power Partners, through December 31, 2012, for 287 MW of first-call capacity from the Hardee Power Station to back up 1,240 MW of Seminole Generating Station and Crystal River Unit 3.
3. Firm Capacity Import/PR and FR includes partial requirements and full requirements purchases.
4. Total Installed Capacity does not include SEPA.
5. Seminole's firm obligation demand does not include PR and FR purchases.
6. Seminole is not responsible for supplying reserves for FR and PR purchases. Percent reserves are calculated at 15% of Seminole's obligation and include any surplus capacity.
7. Excludes Seminole's ownership share of CR3 through November 2014 due to extended forced outage.

See Figure 2 for graphical representation.

Figure 2: History and Forecast Of Total Resources And Peak Demand Summer



Seminole Electric COOPERATIVE, INC.

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

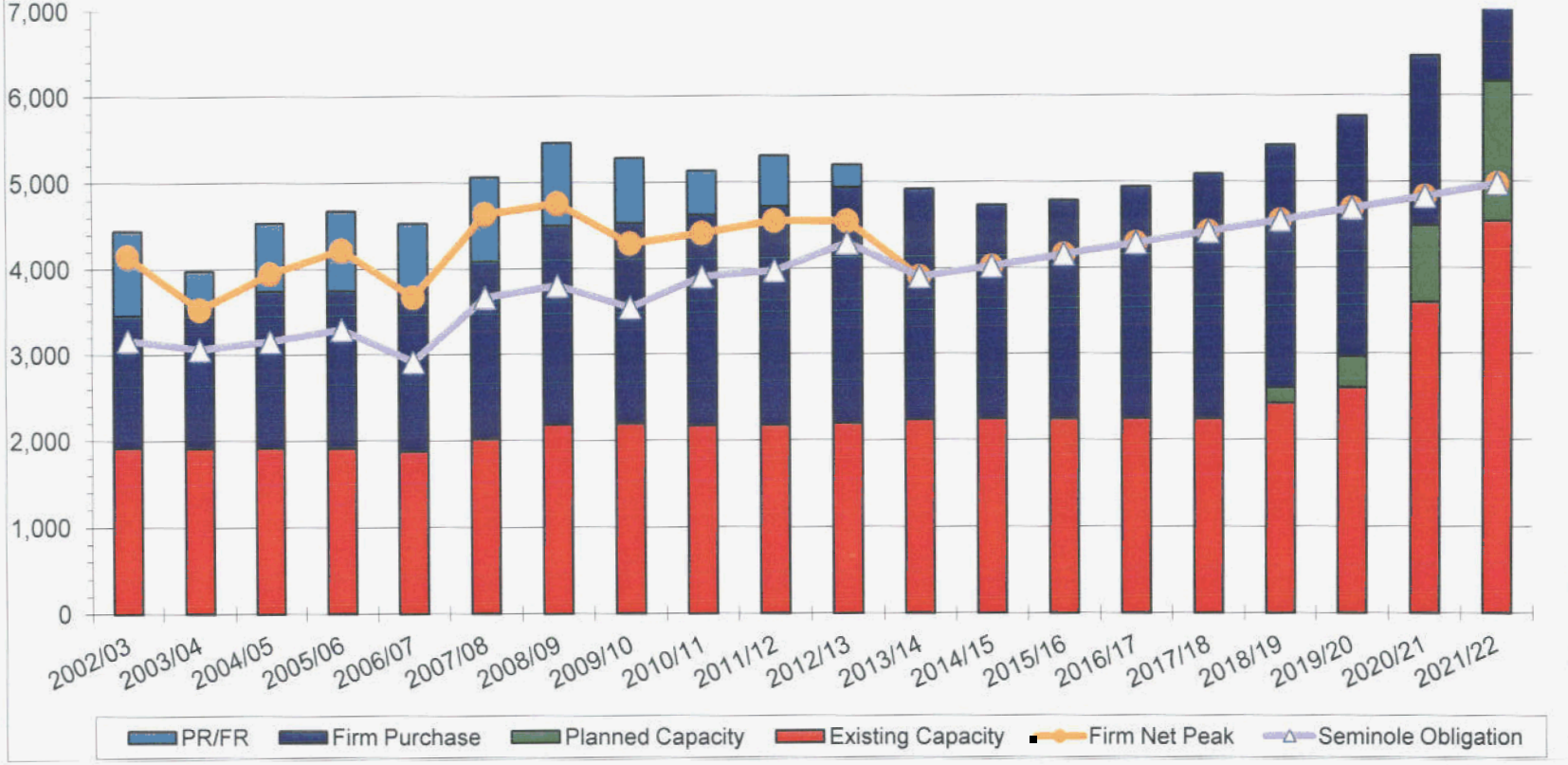
Year	Total Installed Capacity (MW)	Firm Capacity Import (MW)			Firm Capacity Export (MW)	QFs (MW)	Capacity Available (MW)		System Firm Winter Peak Demand (MW)		Reserve Margin Before Maintenance		Scheduled Maintenance (MW)	Reserve Margin After Maintenance	
		PR and FR	Other Purchases	Total			Total	Less PR and FR	Total	Obligation	MW	% of Pk		MW	% of Pk
2012/13	2,184	256	2,761	3,017	0	0	5,201	4,945	4,556	4,300	645	15.0%	0	645	15.0%
2013/14	2,182	0	2,737	2,737	0	0	4,919	4,919	3,905	3,905	1,014	26.0%	0	1,014	26.0%
2014/15	2,198	0	2,536	2,536	0	0	4,734	4,734	4,027	4,027	707	17.6%	0	707	17.6%
2015/16	2,196	0	2,592	2,592	0	0	4,788	4,788	4,163	4,163	625	15.0%	0	625	15.0%
2016/17	2,198	0	2,746	2,746	0	0	4,944	4,944	4,299	4,299	645	15.0%	0	645	15.0%
2017/18	2,196	0	2,895	2,895	0	0	5,091	5,091	4,427	4,427	664	15.0%	0	664	15.0%
2018/19	2,374	0	2,869	2,869	0	0	5,243	5,243	4,559	4,559	684	15.0%	0	684	15.0%
2019/20	2,552	0	2,850	2,850	0	0	5,402	5,402	4,698	4,698	705	15.0%	0	705	15.0%
2020/21	3,544	0	2,017	2,017	0	0	5,561	5,561	4,835	4,835	725	15.0%	0	725	15.0%
2021/22	4,492	0	1,232	1,232	0	0	5,724	5,724	4,978	4,978	747	15.0%	0	747	15.0%

NOTES:

1. Total installed capacity and the associated reserve margins are based on Seminole's current base case plan and are based on a 15% reserve margin criterion.
2. Firm Capacity Import/Other Purchases include a firm purchase power contract from Hardee Power Partners, through December 31, 2012, for 356 MW of first-call capacity from the Hardee Power Station to back up 1,240 MW of Seminole Generating Station and Crystal River Unit 3.
3. Firm Capacity Import/PR and FR includes partial requirements and full requirements purchases.
4. Total Installed Capacity does not include SEPA.
5. Seminole's firm obligation demand does not include PR and FR purchases.
6. Seminole is not responsible for supplying reserves for FR and PR purchases. Percent reserves are calculated at 15% of Seminole's obligation and include any surplus capacity.
7. Excludes Seminole's ownership share of CR3 through November 2014 due to extended forced outage.

See Figure 3 for graphical representation.

Figure 3: History and Forecast Of Total Resources And Peak Demand Winter



Seminole Electric COOPERATIVE, INC.

Schedule 8
Planned and Prospective Generating Facility Additions and Changes

Plant Name	Unit No	Location	Unit Type	Fuel		Transportation		Const. Start Date	Comm. In-Service Date	Expected Retirement Date	Max Nameplate	Summer MW	Winter MW	Status
				Pri	Alt	Pri	Alt							
Crystal River *	3	Citrus	ST	NUC	---	TK	---	(1)	11/2014	Unk		2.2	4.5	A
Midulla	ST	Hardee	ST	WH	DFO	NA	TK	(1)	6/2013	Unk		6	8	A
Unnamed CT	1	Gilchrist	CT	NG	DFO	PL	TK	(2)	12/2018	Unk	180	158	180	P
Unnamed CT	2	Gilchrist	CT	NG	DFO	PL	TK	(2)	12/2019	Unk	180	158	180	P
Unnamed CT	3	Gilchrist	CT	NG	DFO	PL	TK	(2)	12/2020	Unk	180	158	180	P
Unnamed CT	4	Gilchrist	CT	NG	DFO	PL	TK	(2)	12/2020	Unk	180	158	180	P
Unnamed CT	5	Gilchrist	CT	NG	DFO	PL	TK	(2)	12/2020	Unk	180	158	180	P
Unnamed CT	6	Gilchrist	CT	NG	DFO	PL	TK	(2)	5/2021	Unk	180	158	180	P
Unnamed CT	7	Gilchrist	CT	NG	DFO	PL	TK	(2)	12/2021	Unk	180	158	180	P
Unnamed CT	8	Gilchrist	CT	NG	DFO	PL	TK	(2)	12/2021	Unk	180	158	180	P
Unnamed CT	9	Gilchrist	CT	NG	DFO	PL	TK	(2)	12/2021	Unk	180	158	180	P
Unnamed CC	1	Gilchrist	CC	NG	DFO	PL	TK	(2)	12/2020	Unk	227	196	227	P
Unnamed CC	2	Gilchrist	CC	NG	DFO	PL	TK	(2)	12/2020	Unk	227	196	227	P
Unnamed CC	3	Gilchrist	CC	NG	DFO	PL	TK	(2)	12/2021	Unk	227	196	227	P

Abbreviations:
Unk Unknown
A Generating unit capability increased (re-rated or re-licensed)
P Planned, but not under construction

NOTES:
(1) Existing resources whose capacity rating is expected to increase.
(2) Future resource which may be existing or new as determined by future Request for Proposal results.
(*) Crystal River 3 does not reflect current extended outage.

5. OTHER PLANNING ASSUMPTIONS AND INFORMATION

5.1 Plan Economics

Power supply alternatives are compared against a base case scenario which is developed using the most recent load forecast, fuel forecast, operational cost assumptions, and financial assumptions. Various power supply options are evaluated to determine the overall effect on the present worth of revenue requirements (PWRR). All other things being equal, the option with the lowest long-term PWRR is normally selected. Sensitivity analyses are done to test how robust the selected generation option is when various parameters change from the base study assumptions (e.g., load forecast, fuel price, and capital costs of new generation).

5.2 Fuel Price Forecast

5.2.1 Coal

Spot and long term market commodity prices for coal (at the mine) and transportation rates have shown increased volatility in recent years. This condition is expected to continue into the future, as environmental standards affect supply/demand, and transportation and world energy markets affect US coal prices. The underlying value of coal at the mine will continue to be driven by changing domestic demand, export opportunities for U.S. coal into the world market and federal or state mine safety rules/legislation affecting the direct mining costs. Additional coal delivered price increases and volatility will come from the cost of transportation equipment (railcars), handling service contracts and freight transportation impacts. Railroads are also affected by federal rules and legislative changes that are impacting the cost of rail service in the U.S. As long-term rail transportation contracts come up for renewals, the railroads have placed upward pressure on delivered coal costs to increase revenues. CSX Transportation, Inc. is Seminole's sole coal transport provider and the parties are operating under a confidential multi-

year rail transportation contract.

5.2.2 Fuel Oil

Due to price volatility in the world energy market for crude oil and refined products, the price for fuel oils will continue to reflect such volatility. Additional upward pressure to market pricing will result from any new governmental rules and laws for improved fuel qualities. Federal mandate required refiners to convert their production by 2013 so that all diesel fuel oil would be ultra-low sulfur oil. Seminole is only purchasing ultra low sulfur fuel oil for its generating stations.

5.2.3 Natural Gas

Current natural gas prices are at historically low levels due to strong shale-gas production in the United States combined with limited demand growth resulting from a slower than expected economic recovery. While most price forecasts reflect increasing gas prices over the next ten years, there are differing opinions on how fast prices accelerate and when that begins to occur. For Seminole's base case, nominal Henry Hub prices are projected to remain below $6.50 per mmBtu through the ten-year study period based upon the NYMEX forward curve on January 4, 2012.

5.2.4 Coal/Gas Price Differential

The current natural gas and coal markets reflect a significant narrowing of the price spread that existed over the prior ten years primarily due to the decline in gas prices that began in 2011. This spread is expected to remain tight for the initial few years of the study period but is projected to begin to widen thereafter.

Seminole's base fuel price forecast for this Ten-Year Site Plan does not take into account potential federal carbon emission initiatives, such as taxation or emission credits, that if

approved would impact the market prices for all fuels. If legislation that penalizes carbon emissions is enacted in future years, Seminole's costs to use all fossil fuels will rise since all fossil fuels emit carbon dioxide when burned. Further, the price of natural gas and fuel oil relative to coal may rise because of the associated carbon emissions penalty imposed on coal, the competing fuel.

5.3 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 manufacturers' design performance data.

5.4 Financial Assumptions

Expansion plans are evaluated based on Seminole's forecast of market-based loan fund rates.

5.5 Generation 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 neutral. 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 in Figure 4.

The impact of DSM and conservation in Seminole's planning process is included in the

load forecast. Given Seminole's PR agreement with PEF which has an initial term through 2013, reduction in Seminole's peak demand in the PEF area does not usually affect the operation of Seminole's generating resources to serve the Member load in the PEF area, but instead reduces the amount of PR purchases required from PEF. However, in Seminole's direct serve area and the FPL area, DSM reduces peak demand and Seminole resource needs to meet the demands in those areas. After the term of the PEF PR agreement, Seminole's member demands in the PEF area will also be directly impacted by Member DSM.

Seminole considers cost effective energy efficiency and conservation resources as a priority resource option in meeting future expansion needs. Seminole has committed to work jointly with its Members to assess the feasibility and effectiveness of demand-side resources.

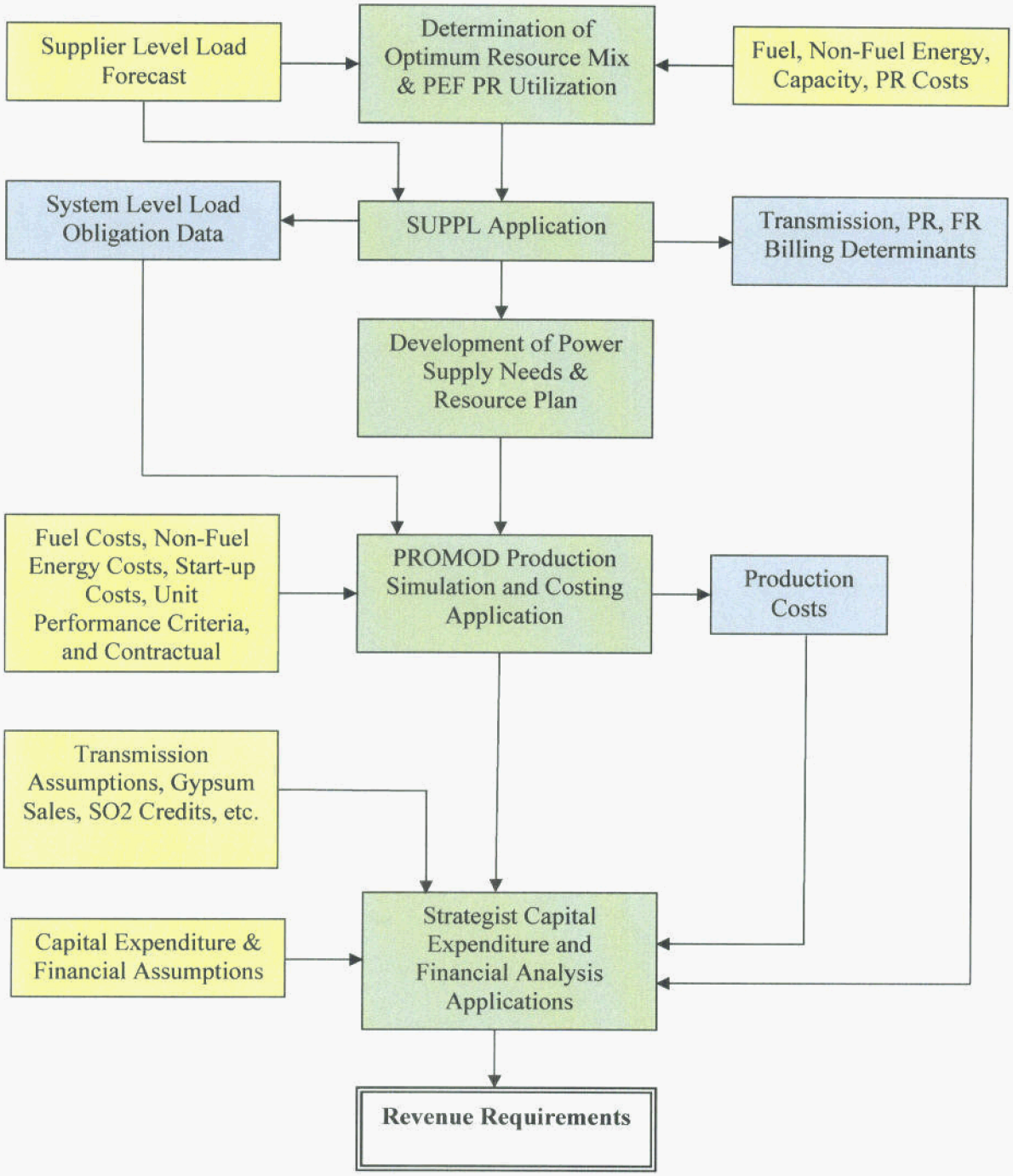
5.6 Reliability Criteria

The total amount of generating capacity and reserves required by Seminole is affected by Seminole's load forecast and its reliability criteria. Reserves serve two primary purposes: to provide replacement power during generator outages and to account for load forecast uncertainty. Seminole has two principal reliability criteria: (1) a minimum reserve margin of 15% during the peak season, and (2) a 1% expected unserved energy (EUE) limitation. Both the minimum reserve margin and EUE criteria serve to ensure that Seminole has adequate generating capacity to provide reliable service to its Members and to limit Seminole's reliance on interconnected neighboring systems for emergency purchases.

In addition to these two primary reserve criteria, Seminole also adheres to an additional criterion to ensure that it maintains winter reserve capacity to cover weather sensitivity during the winter season. This additional criterion was implemented due to the amount of Seminole's weather-sensitive load in conjunction with the restrictions on the use of Hardee Power Station

capacity through December 2012.

Figure 4
Resource Planning Process



5.7 Strategic Concerns

In the current rapidly changing utility industry, strategic and risk related issues are becoming increasingly important and will continue to play a companion role to economics in Seminole's power supply planning decision process.

Seminole values resource flexibility as a hedge against a variety of risks, as evidenced by a generation portfolio which includes as much purchased capacity as owned capacity. Owned and long-term purchased resources contribute stability to a power supply plan while shorter term purchase arrangements add flexibility. For purchased power agreements, system-type capacity versus unit-specific power is also a consideration. System capacity, which is sourced from many generating units, is more reliable, and agreements can be structured to reduce Seminole's reserve requirements. Flexibility in fuel supply is another significant strategic concern. A portfolio that contains diverse fuel requirements is better protected against extreme price fluctuations, supply interruptions, and transportation instability. Seminole believes that the existing and future diversity in its power supply plan has significant strategic value, leaving Seminole in a good position to respond to market and industry changes while remaining competitive.

The ongoing debate over the further need to regulate carbon emissions, mercury emissions and/or whether to establish renewable resource mandates has introduced new risks for electric utilities – among them is the risk that the most cost-effective fuels and associated technologies under current environmental regulations could change via new federal or state emissions rules. Using the best available information, Seminole is addressing these risks through its evaluation of a range of scenarios to assess what constitutes the best generation plan to ensure adequate and competitively priced electric service to its Members.

5.8 Procurement of Supply-Side Resources

In making decisions on future procurement of power supply, Seminole compares its self-build alternatives with purchased power alternatives. Seminole solicits purchased power proposals from utilities, independent power producers, QFs, renewable energy providers, and power marketers. Seminole's evaluation of its options includes an assessment of life cycle cost, reliability, strategic concerns and risk elements.

5.9 Transmission Plans

The following table lists all 69 kV and above projects for new, upgraded, or reconfigured transmission facilities planned by Seminole over the ten-year planning horizon that are required for new generation facilities.

Status	Line Terminals		Circuits	Line Miles	Commercial In-Service Date	Nominal Voltage (kV)	Capacity (MVA)
	From	To					
New	Gilchrist Plant	Gilchrist East Switching Station	2	10	2017	230	1195

5.9.1 Transmission Facilities for Gilchrist Generating Station

The following transmission system additions would tentatively be required for the addition of the Gilchrist units:[2]

- Construction of a new Gilchrist East switching station along the existing PEF Ft. White – Newberry 230 kV transmission line.
- Construction of two new 230 kV circuits (rated at 3000 Amps), ten miles in length a piece, to connect the Gilchrist generating station to the new Gilchrist East switching station.

2 Note, at the time of this filing Seminole had not submitted a network service request to designate these new units as designated network resources to serve Member load in the PEF area.

Schedule 9 Status Report and Specifications of Proposed Generating Facilities		
1	Plant Name & Unit Number	Gilchrist Generating Station Unit 1
2	Capacity a. Summer (MW): b. Winter (MW):	 158 180
3	Technology Type:	GE 7FA Combustion Turbine
4	Anticipated Construction Timing a. Field construction start-date: b. Commercial in-service date:	 December 2016 December 2018
5	Fuel a. Primary fuel: b. Alternate fuel:	 Natural Gas #2 Oil
6	Air Pollution Control Strategy	Dry Low NOx Burner
7	Cooling Method:	Air
8	Total Site Area:	Approximately 530 acres
9	Construction Status:	Planned
10	Certification Status:	Planned
11	Status With Federal Agencies	N/A
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):	 0.5 5.0 95 85% 8,986 Btu/kWh (HHV) - ISO Rating
13	Projected Unit Financial Data ($2017) Book Life (Years): Total Installed Cost (In-Service Year $/kW): Direct Construction Cost ($/kW): AFUDC Amount ($/kW): Escalation ($/kW): Fixed O&M ($/kW-Yr): Variable O&M ($/MWH): K Factor:	 30 699 672 27 Included in values above 4.17 1.67* N/A *Variable O&M does not include start up charge of $17,853 per start

Schedule 9 Status Report and Specifications of Proposed Generating Facilities		
1	Plant Name & Unit Number	Gilchrist Generating Station Unit 2
2	Capacity a. Summer (MW): b. Winter (MW):	 158 180
3	Technology Type:	GE 7FA Combustion Turbine
4	Anticipated Construction Timing a. Field construction start-date: b. Commercial in-service date:	 December 2017 December 2019
5	Fuel a. Primary fuel: b. Alternate fuel:	 Natural Gas #2 Oil
6	Air Pollution Control Strategy	Dry Low NOx Burner
7	Cooling Method:	Air
8	Total Site Area:	Approximately 530 acres
9	Construction Status:	Planned
10	Certification Status:	Planned
11	Status With Federal Agencies	N/A
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):	 0.5 5.0 95 85% 8,986 Btu/kWh (HHV) - ISO Rating
13	Projected Unit Financial Data ($2018) Book Life (Years): Total Installed Cost (In-Service Year $/kW): Direct Construction Cost ($/kW): AFUDC Amount ($/kW): Escalation ($/kW): Fixed O&M ($/kW-Yr): Variable O&M ($/MWH): K Factor:	 30 709 681 28 Included in values above 4.23 1.69* N/A *Variable O&M does not include start up charge of $18.119 per start

Schedule 9 Status Report and Specifications of Proposed Generating Facilities		
1	Plant Name & Unit Number	Gilchrist Generating Station Units 3-5
2	Capacity a. Summer (MW): b. Winter (MW):	 158 (each) 180 (each)
3	Technology Type:	GE 7FA Combustion Turbine
4	Anticipated Construction Timing a. Field construction start-date: b. Commercial in-service date:	 December 2018 December 2020
5	Fuel a. Primary fuel: b. Alternate fuel:	 Natural Gas #2 Oil
6	Air Pollution Control Strategy	Dry Low NOx Burner
7	Cooling Method:	Air
8	Total Site Area:	Approximately 530 acres
9	Construction Status:	Planned
10	Certification Status:	Planned
11	Status With Federal Agencies	N/A
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):	 0.5 5.0 95 85% 8,986 Btu/kWh (HHV) - ISO Rating
13	Projected Unit Financial Data ($2019) Book Life (Years): Total Installed Cost (In-Service Year $/kW): Direct Construction Cost ($/kW): AFUDC Amount ($/kW): Escalation ($/kW): Fixed O&M ($/kW-Yr): Variable O&M ($/MWH): K Factor:	 30 720 692 28 Included in values above 4.29 1.72* N/A *Variable O&M does not include start up charge of $18,391 per start

Schedule 9 Status Report and Specifications of Proposed Generating Facilities		
1	Plant Name & Unit Number	Gilchrist Generating Station CC Units 1-2
2	Capacity a. Summer (MW): b. Winter (MW):	 196 (each) 227 (each)
3	Technology Type:	GE 7FA Combined Cycle
4	Anticipated Construction Timing a. Field construction start-date: b. Commercial in-service date:	 December 2017 December 2020
5	Fuel a. Primary fuel: b. Alternate fuel:	 Natural Gas #2 Oil
6	Air Pollution Control Strategy	SCR, DLN Burner, CO Catalyst
7	Cooling Method:	Wet Cooling Tower with Forced Air Draft Fans
8	Total Site Area:	Approximately 530 acres
9	Construction Status:	Planned
10	Certification Status:	Planned
11	Status With Federal Agencies	N/A
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):	 8.26 1.61 90.13 55% 6,573 Btu/kWh (HHV) - ISO Rating
13	Projected Unit Financial Data ($2019) Book Life (Years): Total Installed Cost (In-Service Year $/kW): Direct Construction Cost ($/kW): AFUDC Amount ($/kW): Escalation ($/kW): Fixed O&M ($/kW-Yr): Variable O&M ($/MWH): K Factor:	 30 1,107 1,020 87 Included in values above 8.60 1.58* N/A *Variable O&M does not include start up charge of $1.94 $/MWh

Schedule 9 Status Report and Specifications of Proposed Generating Facilities		
1	Plant Name & Unit Number	Gilchrist Generating Station Unit 6
2	Capacity a. Summer (MW): b. Winter (MW):	 158 180
3	Technology Type:	GE 7FA Combustion Turbine
4	Anticipated Construction Timing a. Field construction start-date: b. Commercial in-service date:	 May 2019 May 2021
5	Fuel a. Primary fuel: b. Alternate fuel:	 Natural Gas #2 Oil
6	Air Pollution Control Strategy	Dry Low NOx Burner
7	Cooling Method:	Air
8	Total Site Area:	Approximately 530 acres
9	Construction Status:	Planned
10	Certification Status:	Planned
11	Status With Federal Agencies	N/A
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):	 0.5 5.0 95 85% 8,986 Btu/kWh (HHV) - ISO Rating
13	Projected Unit Financial Data ($2019) Book Life (Years): Total Installed Cost (In-Service Year $/kW): Direct Construction Cost ($/kW): AFUDC Amount ($/kW): Escalation ($/kW): Fixed O&M ($/kW-Yr): Variable O&M ($/MWH): K Factor:	 30 731 702 29 Included in values above 4.36 1.74* N/A *Variable O&M does not include start up charge of $18,673 per start

Schedule 9 Status Report and Specifications of Proposed Generating Facilities		
1	Plant Name & Unit Number	Gilchrist Generating Station CC Unit 3
2	Capacity a. Summer (MW): b. Winter (MW):	 196 227
3	Technology Type:	GE 7FA Combined Cycle
4	Anticipated Construction Timing a. Field construction start-date: b. Commercial in-service date:	 December 2018 December 2021
5	Fuel a. Primary fuel: b. Alternate fuel:	 Natural Gas #2 Oil
6	Air Pollution Control Strategy	SCR, DLN Burner, CO Catalyst
7	Cooling Method:	Wet Cooling Tower with Forced Air Draft Fans
8	Total Site Area:	Approximately 530 acres
9	Construction Status:	Planned
10	Certification Status:	Planned
11	Status With Federal Agencies	N/A
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):	 8.26 1.61 90.13 55% 6,573 Btu/kWh (HHV) - ISO Rating
13	Projected Unit Financial Data ($2019) Book Life (Years): Total Installed Cost (In-Service Year $/kW): Direct Construction Cost ($/kW): AFUDC Amount ($/kW): Escalation ($/kW): Fixed O&M ($/kW-Yr): Variable O&M ($/MWH): K Factor:	 30 1,124 1,036 88 Included in values above 8.73 1.60* N/A *Variable O&M does not include start up charge of $1.97 $/MWh

Schedule 9 Status Report and Specifications of Proposed Generating Facilities		
1	Plant Name & Unit Number	Gilchrist Generating Station Units 7-9
2	Capacity a. Summer (MW): b. Winter (MW):	 158 (each) 180 (each)
3	Technology Type:	GE 7FA Combustion Turbine
4	Anticipated Construction Timing a. Field construction start-date: b. Commercial in-service date:	 December 2019 December 2021
5	Fuel a. Primary fuel: b. Alternate fuel:	 Natural Gas #2 Oil
6	Air Pollution Control Strategy	Dry Low NOx Burner
7	Cooling Method:	Air
8	Total Site Area:	Approximately 530 acres
9	Construction Status:	Planned
10	Certification Status:	Planned
11	Status With Federal Agencies	N/A
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):	 0.5 5.0 95 85% 8,986 Btu/kWh (HHV) - ISO Rating
13	Projected Unit Financial Data ($2019) Book Life (Years): Total Installed Cost (In-Service Year $/kW): Direct Construction Cost ($/kW): AFUDC Amount ($/kW): Escalation ($/kW): Fixed O&M ($/kW-Yr): Variable O&M ($/MWH): K Factor:	 30 731 702 29 Included in values above 4.36 1.74* N/A *Variable O&M does not include start up charge of $18,673 per start

Schedule 10 Status Report and Specifications of Proposed Associated Transmission Lines		
1	Point of Origin and Termination:	Originating at SECI's Gilchrist plant site; terminating at SECI's Gilchrist East Switching Station
2	Number of Lines:	Two
3	Right-of-Way	To be determined
4	Line Length:	10 miles each
5	Voltage:	230 kV
6	Anticipated Construction Timing:	May 2017
7	Anticipated Capital Investment:	$24 million (total)
8	Substation:	The Gilchrist Interconnection will require a new Seminole Gilchrist East switching station on the PEF Ft. White - Newberry 230 kV transmission line
9	Participation with Other Utilities:	N/A

6. ENVIRONMENTAL AND LAND USE INFORMATION

6.1 Seminole Generating Station (SGS) - Putnam County, Florida

SGS is located in a rural unincorporated area of Putnam County approximately 5 miles north of the City of Palatka. The site is 1,978 acres bordered by U.S. 17 on the west, and is primarily undeveloped land on the other sides. The site was certified in 1979 (PA78-10) for two 650 MW class coal fired electric generating units, SGS Units 1 & 2.

Units 1 and 2 went into commercial operation in February and December of 1984, respectively. The area around the SGS site includes mowed and maintained grass fields and upland pine flatwoods. Areas further away from the existing units include live oak hammocks, wetland conifer forest, wetland hardwood/conifer forest, and freshwater marsh. A small land parcel located on the St. Johns River is the site for the water intake structure, wastewater discharge structure, and pumping station to supply the facility with cooling and service water.

The primary water uses for SGS Units 1 and 2 are for cooling water, wet flue gas desulfurization makeup, steam cycle makeup, and process service water. Cooling and service water is pumped from the St. Johns River and groundwater supplied from on-site wells is for steam cycle makeup and potable use. The site is not located in an area designated as a Priority Water Resource Caution Area by the St. Johns River Water Management District.

State-listed species that are likely to occur on the site include the bald eagle, the indigo snake, and the gopher tortoise. No known listed plants occur on the site. The site has not been listed as a natural resource of regional significance by the regional planning council.

The local government future land use for the area where the existing units are located is designated as industrial use.

Water conservation measures that are incorporated into the operation of SGS include the

collection, treatment and recycling of plant process wastewater streams. This wastewater reuse minimizes groundwater and service water uses. A portion of recirculated condenser cooling water (cooling tower blowdown) is withdrawn from the closed cycle cooling tower and discharged to the St. Johns River. Site stormwater is reused to the maximum extent possible and any not reused is treated in wet detention ponds and released to onsite wetlands.

The primary fuel for SGS is bituminous coal. No. 2 (distillate) fuel oil is used for startups and flame stabilization. Coal is delivered to the site by unit trains and fuel oil is delivered by truck. Coal for SGS is stored at the site. Coal pile stormwater is collected and treated. The plant maintains sufficient secondary containment for all storage tanks.

SGS is designed so that solid waste from the Flue Gas Desulfurization (FGD) system will be treated to produce wallboard grade synthetic gypsum and sold for use in producing wallboard. Most bottom ash is currently sold to recyclers with flyash currently being disposed of in the onsite lined landfill.

SGS Units 1 and 2 recently completed a major air pollution control upgrade project costing approximately $282 million. These upgrades included low NOx burners, overfired air ports and selective catalytic reduction (SCR) systems for NOx control, FGD improvements to increase SO2 removal efficiency from 88% to 92%, and an alkali(lime) injection system for sulfuric acid control. The existing electrostatic precipitator (ESP) is fully operational and removes 99.7% of the flue gas particulate matter. The combination of these technologies removes approximately 90% of the mercury contained in the flue gas.

Noise generated during operation of SGS does not result in sound levels in excess of the Putnam County Noise Control Ordinance.

6.2 Midulla Generating Station (MGS) – Hardee County, Florida

MGS 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. The site is bordered by County Road 663 on the east, CF Industries on the south, and Mosaic, Inc. on the north and west. Payne Creek flows along the sites south and southwestern borders. The site was originally strip-mined for phosphate and was reclaimed as pine flatwoods, improved pasture, and a cooling reservoir with a marsh littoral zone. A more detailed description of environmental and land use is available in the site certification application PA-89-25SA.

6.3 Gilchrist Generating Station Site – Gilchrist County, Florida

The Gilchrist Generating Station site is approximately 530 acres in size. The site is located in the central portion of Gilchrist County, approximately 8 miles north of the City of Trenton and is a suitable site for advanced natural gas facilities, peaking units, and renewable energy resources. Much of the site has been used for silviculture (pine plantation) and consists of large tracts of planted longleaf and slash pine communities. Few natural upland communities remain. Most of these large tracts that have been recently harvested, leaving xeric oak and pine remnants. A few wetland communities remain on the east side of the site with relatively minor disturbances due to adjacent silvicultural activities.

The initial site evaluation included wetland occurrence information documented on National Wetland Inventory (NWI) map(s) from the U.S. Fish and Wildlife Service (USFWS), soils maps and information from the National Resource Conservation Service (NRCS), records of any listed plants or animals known from Gilchrist County that are available from online data and records maintained by the Florida Natural Areas Inventory (FNAI) and the Atlas of Florida Vascular Plants maintained by the University of South Florida Herbarium, lists of federally listed

plants and animals maintained by USFWS, and records of eagle nest locations and wading bird rookeries that might occur within the Site available on the Florida Fish and Wildlife Conservation Commission (FWC) Web site. The following discussion summarizes the results of the ecological survey.

6.3.1 Vegetation/Land Use

There are eight vegetation or land use types on the Site. These were classified using the Florida Land Use Cover and Forms Classification system (FLUCFCS) published by the Florida Department of Transportation in 1999. The following are brief descriptions of each of the vegetation/land use types identified. For convenience, the descriptions are broadly classified as uplands and wetlands.

6.3.2 Upland Vegetation

Coniferous Plantations (FLUCFCS 441) - Approximately 337.5-acres or 63.7 percent of the Site are classified as upland pine plantation. These areas are periodically harvested on a 20- to 30-year cycle. Planted pine stands ranged in age from mature stands on the eastern portion of the Site, 3- to 4-year-old stands in the southern portion to recently cleared and replanted lands on the far east side, and 8- to 10-year-old pine near the focus area in the western portion of the Site. Typical species are longleaf pine and some slash pine in the canopy, scattered saw palmetto, blackberry, gallberry, Chapman's oak, myrtle oak, and shiny blueberry in the shrub layer and wiregrass, earleaf greenbrier, fennel, broomsedges, and yankeeweed in the understory.

Longleaf Pine – Xeric Oak (FLUCFCS 412) - Within the Site boundary, there are approximately 131.5 acres, or 24.8 percent, that are classified as Longleaf Pine – Xeric Oak. This community predominantly exists in the north-central portion of the Site on well-drained sandhill. These areas have been used for pine cultivation in the past; remnant scrub oaks and a few

remnant pines have resulted in a community that is similar to a relatively undisturbed sandhill community. The remaining vegetative community after logging is mostly intact and diverse in some areas of the Site. The canopy consists of longleaf and slash pines with xeric oaks including sand live oak and turkey oak, Myrtle oak, saw palmetto staggerbush, winged sumac, pawpaw, sand blackberry, fetterbush, and less commonly Chapman's oak and Florida rosemary occur in the shrub layer. Common species in the herb stratum include yankeeweed, wiregrass, little bluestem, reindeer moss, prickly-pear cactus, gopher apple, goldenasters, witchgrasses, bracken fern, blackroot, chaffhead, blazing stars, and whitetassels.

Xeric Oak (FLUCFCS 421) - Approximately 40 acres or 7.6 percent of the Site is classified as xeric oak. This community consists predominantly of clusters of turkey oak and/or sand live oak. This community is similar to the Longleaf Pine – Xeric oak community except pine trees are absent from the community and the oak canopy is dense. Shrub and herb species are similar to those occurring in the Longleaf Pine – Xeric oak community.

Roads – Unpaved Logging Roads (FLUCFCS 814) - This designation is used for logging roads found throughout the site that are clearly visible in aerial photography. All these roads are unpaved, and one of the roads used for access is an abandoned railway line. They are unvegetated and periodically maintained and passable. Roads cover approximately 10.7 acres or 2 percent of the Site area.

6.3.3 Wetland Vegetation

All wetlands and/or surface waters in Florida are regulated by the Florida Department of Environmental Protection (FDEP), and Waters of the United States (streams, rivers, etc., and wetlands connected or exhibiting a significant nexus thereto) are regulated by the U.S. Army Corps of Engineers (USACE). Any disturbance to any wetland on the Site will require a permit

from FDEP; disturbance to wetlands connected to Waters of the United States will also require a permit or approval from USACE for any proposed impacts. Impacts usually require mitigation of some sort.

Approximately 10.1 acres of the Site (1.9 percent) consist of various categories of vegetation types classified as wetlands. When the property was surveyed, many of the wetland communities were dry, likely as a result of the recent significant drought in Florida. The Site predominantly consists of well-drained soils supporting no wetlands, except in the far eastern portion of the Site where soil and geological differences support a higher frequency of wetlands. No wetlands are found near the focus area in the northwestern portion of the Site. The following is a classification and brief description of each wetland type on the Site.

Cypress (FLUCFCS 621) - Within the Site boundary there was one 2.6-acre cypress wetland. Besides pond cypress, the canopy consists of red maple, sweet bay, and tupelo with a dense shrub layer of titi, dahoon holly, highbush blueberry, and fetterbush and a minimal understory due to shading. Scattered individuals of maidencane, Virginia chain fern, laurel greenbrier, and yellow-eyed grasses comprise the herb stratum. Although, the wetland had been logged in the past and the area surrounding the wetland had recently been clear-cut, the quality of this particular wetland was high. Minimal disturbance was evident, cypress recruitment as evidenced by the presence of several age classes was observed, and there were lots of titi seedlings. The wetland was dry when observed, and no indicators of ponding were evident.

Wet Prairie (FLUCFCS 643) - There were four wetlands comprising 6.7 acres that are classified as wet prairies. These marshes tended to be low diversity and were usually dominated by maidencane and redroot and fringed by a few red maple, buttonbush, and titi. Due to the dry conditions, many of these wetlands were becoming dominated by yankeeweed (*Eupatorium*

compositifolium) in all but the center of the wetland. Few hydrologic indicators were observed in these dessicated wetlands, and many of the soils consisted of a thin veneer of dried peat over sandy soils. These wetlands were all impacted by minor hydrologic alterations due to a variety of factors including spoil mounds on the perimeter and furrowing associated with pine plantation bedding, which disrupts inflow from surrounding uplands. The two wet prairies that are adjacent to or within clear-cut stands were of the lowest quality with regard to hydrology, vegetation, and water resources. Only one wet prairie was of relatively good quality.

Freshwater Marshes with Shrubs, Brush, and Vines (FLUCFCS 6417) - One wetland comprising 0.8 acre is classified as a freshwater shrub marsh. This small, isolated wetland is dominated by a thick shrub layer of predominantly titi, with red maples, dahoon holly, swamp bay, and gallberry also present. The quality is low.

6.3.4 Soils

There are seven soil types on the Site according to the 2006 Soil Survey of Gilchrist County published by the U.S. Department of Agriculture (USDA)-NRCS. These include the excessively drained Entisols, Penney, and Kershaw Fine Sand; the moderately well-drained Entisol, Ortega Fine Sand; the somewhat poorly drained Spodosol, Hurricane Fine Sand; and the poorly drained Lynnhaven and Allenton mucky fine sands, depressional (a hydric soil type). Most of the soils, even within pine plantations, have not been thoroughly disturbed by bedding or other large-scale land moving activities.

6.3.5 Wildlife (Overview)

Species assemblages were determined from the site visit in November, 2010 and using information on typical species found in these habitats from literature. Pedestrian and vehicular surveys were conducted over the entire Site. A more thorough wildlife analysis was conducted in

the focus area in the western portion of the Site, mostly to ascertain the density of gopher tortoises. All species or signs observed (such as tracks, scats, nests, burrows, etc.) were recorded and are discussed in the following sections.

Due in large part to the dry conditions of the Site, there were few wildlife sitings or signs. Wildlife that were observed or signs thereof include the white-tailed deer, red-shouldered hawk, American kestrel, fence lizard, gopher tortoise, turkey vulture, black vulture, ground dove, and wild turkey.

6.3.6 Listed Species (Overview)

A list of all rare, threatened, endangered or commercially exploited plants known to occur in Gilchrist County was compiled from records available online on the Web sites of FNAI (www.fnai.org) and the *Atlas of Florida Vascular Plants* developed by the Institute of Systematic Botany at the University of South Florida (www.plantatlas.usf.edu). The plants included as threatened or endangered for *Gilchrist County in the Atlas of Florida Vascular Plants* are derived from the Regulated Plant Index contained within Chapter 5B-40, Florida Administrative Code (F.A.C.), amended February 17, 2003, and administered by the Florida Department of Agriculture and Consumer Affairs Division of Plant Industry. Information on listed wildlife species that could occur in Gilchrist County in habitats that occur on the Site is available online from FNAI and the FWC. Remnant sandhill and xeric oak communities are found on the Site. This natural community has a state listing of S3, indicating that it is rare or uncommon in the state. Due to the presence of remnant xeric habitats, the Site provides habitat that has a moderate to high potential for the occurrence of listed species, particularly animals adapted to sandhill communities.

6.3.7 Listed Plants

Based on available records from FNAI, no federally listed plants are known in Gilchrist County. Several state-listed endangered and threatened plants are known in Gilchrist County. The only state-listed plants that have the potential to occur onsite are the state-endangered incised agrimony and sandhill spiny pod. These plants are distinctive in their morphology and were not seen during the field survey. Therefore, the potential for their occurrence on the Site is considered low.

6.3.8 Listed Wildlife

Listed wildlife species are those formally classified as endangered, threatened, or of special concern by FWC or as endangered or threatened by USFWS. One listed species, the gopher tortoise, was observed onsite and found within the focus area. Gopher tortoise burrows provide suitable habitat for many commensal animals, many of which are listed species including the Florida mouse, eastern indigo snake, gopher frog, short-tailed snake, and the Florida pine snake. In addition, a kestrel was observed near the focus area. Due to the time of year, it is unknown if the bird was the resident kestrel that is a state-listed species.

This initial survey indicates that gopher tortoise burrows are present throughout the Site and in moderate to high densities in portions of the Site. The focus area had a sufficiently high population of gopher tortoise burrows to indicate that a full survey would be necessary before construction activities. Due to current management guidelines for gopher tortoises, the impacts would likely require relocation onsite as a preference of FWC. There is abundant habitat on the Site for relocation.

Other animal species recorded for Gilchrist County that have the potential to occur in the Site vicinity, according to FNAI, include gopher frog (*Rana capito*), eastern indigo snake

(*Drymarchon couperi*), Florida pine snake (*Pituophis melanoleucus mugitus*), Florida mouse (*Podomys floridamus*), short-tailed snake (*Stilosoma extenuatum*), Florida burrowing owl (*Athene cunicularia floridana*), and Sherman's fox squirrel (*Sciurus niger shermani*).

While only the kestrel and gopher tortoise were observed on the Site, Figure 5 discusses the likelihood of occurrence for other listed animal species on the Site. It should be noted that while a kestrel was observed at this time of the year, it is possible it is the migratory subspecies and not listed. However, the habitat preference of the listed resident subspecies is identical, so it could be present onsite.

In summary, there appear to be no fatal flaws to the development of the Site from an ecological perspective. Gopher tortoises were observed in moderate to high densities in every upland habitat found on the Site, including the focus area. Any activities planned that could impact their habitat will require thorough gopher tortoise surveys and tortoise relocation. Since wetlands onsite can easily be avoided by careful planning and layout of facilities, onsite wetland impacts are not expected to be an issue.

Figure 5. Potential for Occurrence for Listed Wildlife Species on the SECI Gilchrist Site

Common Name	Scientific Name	Status		Preferred Habitat	Likelihood of Occurrence
		FWC	USFWS		
Amphibians					
Gopher frog	*Rana capito*	SSC	None	Longleaf pine-turkey oak communities, usually in gopher tortoise burrows, near wetlands for breeding	Moderate—Habitats are available onsite; minimal presence of wetlands near suitable habitat
Reptiles					
Eastern indigo snake	*Drymarchon corais couperi*	T	T	Wide range of habitats in Florida, usually found near gopher tortoise burrows	High—Presence of gopher tortoise burrows
Gopher tortoise	*Gopherus polyphemus*	T	None	Xeric habitats with sandy soils	Present—Observed
Florida pine snake	*Pituophis melanoleucus mugitus*	SSC	None	Xeric habitats, usually sandhill communities, also found in association with gopher tortoises	High—Sandhill and xeric habitats found and gopher tortoise burrows; found in Gilchrist County
Short-tailed snake	*Stilosoma extenuatum*	T	None	Dry upland habitats, principally sandhill, xeric hammock, and sand pine scrub	High—Suitable habitats present

Figure 5. Potential for Occurrence for Listed Wildlife Species on the SECI Gilchrist Site (Continued, Page 2 of 3)

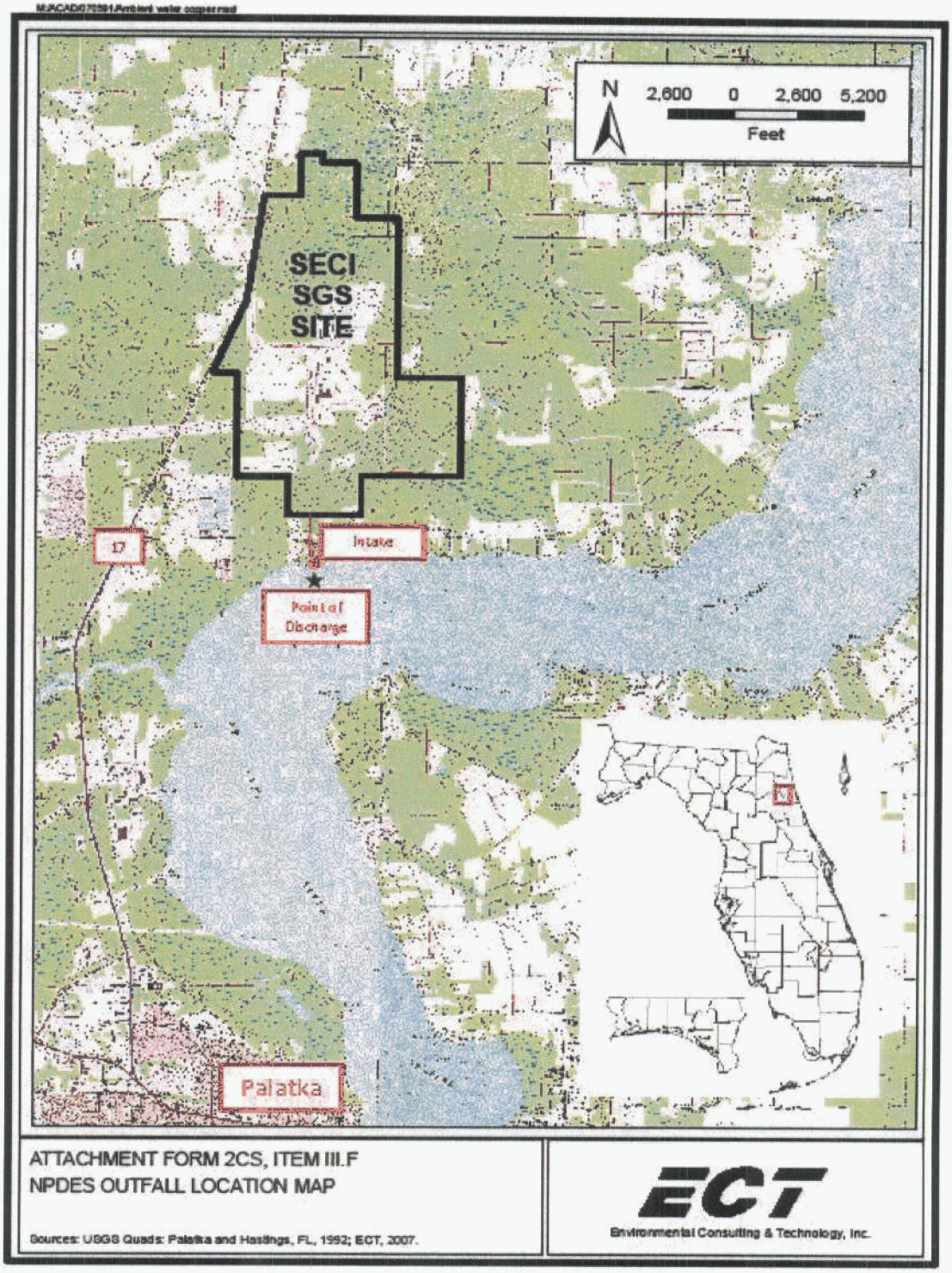
Common Name	Scientific Name	Status		Preferred Habitat	Likelihood of Occurrence
		FWC	USFWS		
Birds					
Limpkin	*Aramus guarauna*	SSC	None	Freshwater marshes, swamps, springs and spring runs. Also lake margins in peninsular Florida	Low—Minimal presence of wetland habitat
Florida burrowing owl	*Athene cunicularia floridana*	SSC	None	High, sparsely vegetated, sandy ground; dry prairies and sandhill	High—Suitable habitat and presence in county
Little blue heron	*Egretta caerulea*	SSC	None	Forested wetlands for nesting; shallow wetlands for foraging	Low—Minimal presence of wetland habitat
Snowy egret	*Egretta thula*	SSC	None	Many kinds of seasonal and permanently inundated wetlands	Low—Minimal presence of wetland habitat
Tricolored heron	*Egretta tricolor*	SSC	None	Many kinds of seasonal and permanently inundated wetlands	Low—Minimal presence of wetland habitat
White ibis	*Eudocimus albus*	SSC	None	Forested wetlands, wet prairies and swales	Low—Minimal presence of wetland habitat
Southeastern American kestrel	*Falco sparverius paulus*	T	None	Dry open pine habitats, utilize cavities excavated by woodpeckers	High—Possibly observed on property; sable habitat present
Florida sandhill crane	*Grus Canadensis pratensis*	T	None	Wet prairies, emergent wetlands	Low—Minimal presence of wetland habitat

Figure 5. Potential for Occurrence for Listed Wildlife Species on the SECI Gilchrist Site (Continued, Page 3 of 3)

Common Name	Scientific Name	Status FWC	Status USFWS	Preferred Habitat	Likelihood of Occurrence
Bald eagle	*Haliaeetus leucocephalus*	***	***	Tall trees (usually pines) near open water for foraging	Low—No significant open water areas for foraging
Wood stork	*Mycteria americana*	E	E	Nesting habitat is forested wetlands with standing water, foraging habitat is shallow wetlands, ditches	Low—Minimal presence of wetland habitat
Mammals					
Florida mouse	*Podomys floridamus*	SSC	None	Prefers fire-maintained xeric habitats and is a commensal with gopher tortoises	High—Gopher tortoise burrows found. Suitable habitat
Sherman's fox squirrel	*Sciurus niger shermani*	SSC	None	Mature flatwoods, sandhill communities	High—Sandhill community habitat present
Florida black bear	*Ursus americanus floridanus*	T	None	Flatwoods with hardwood swamps, usually prefers thick habitats	Low—Minimal amount of thick habitat or swamps. Not found in county

***While the bald eagle has been both state and federally delisted, it is still governed by the state bald eagle rule and the federal Bald and Golden Eagle Protection Act (see http://myfwc.com/docs/WildlifeHabitats/Eagle_Plan_April_2008.pdf#page=35)

Sources: FWC, 2008,2010
ECT, 2007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2,600 0 2,600 5,200
Feet
SECI
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SITE
17
Intake
Point of
Discharge
Palatka
ATTACHMENT FORM 2CS, ITEM III.F
NPDES OUTFALL LOCATION MAP
Sources: USGS Quads: Palatka and Hastings, FL, 1992; ECT, 2007.
ECT
Environmental Consulting & Technology, Inc.

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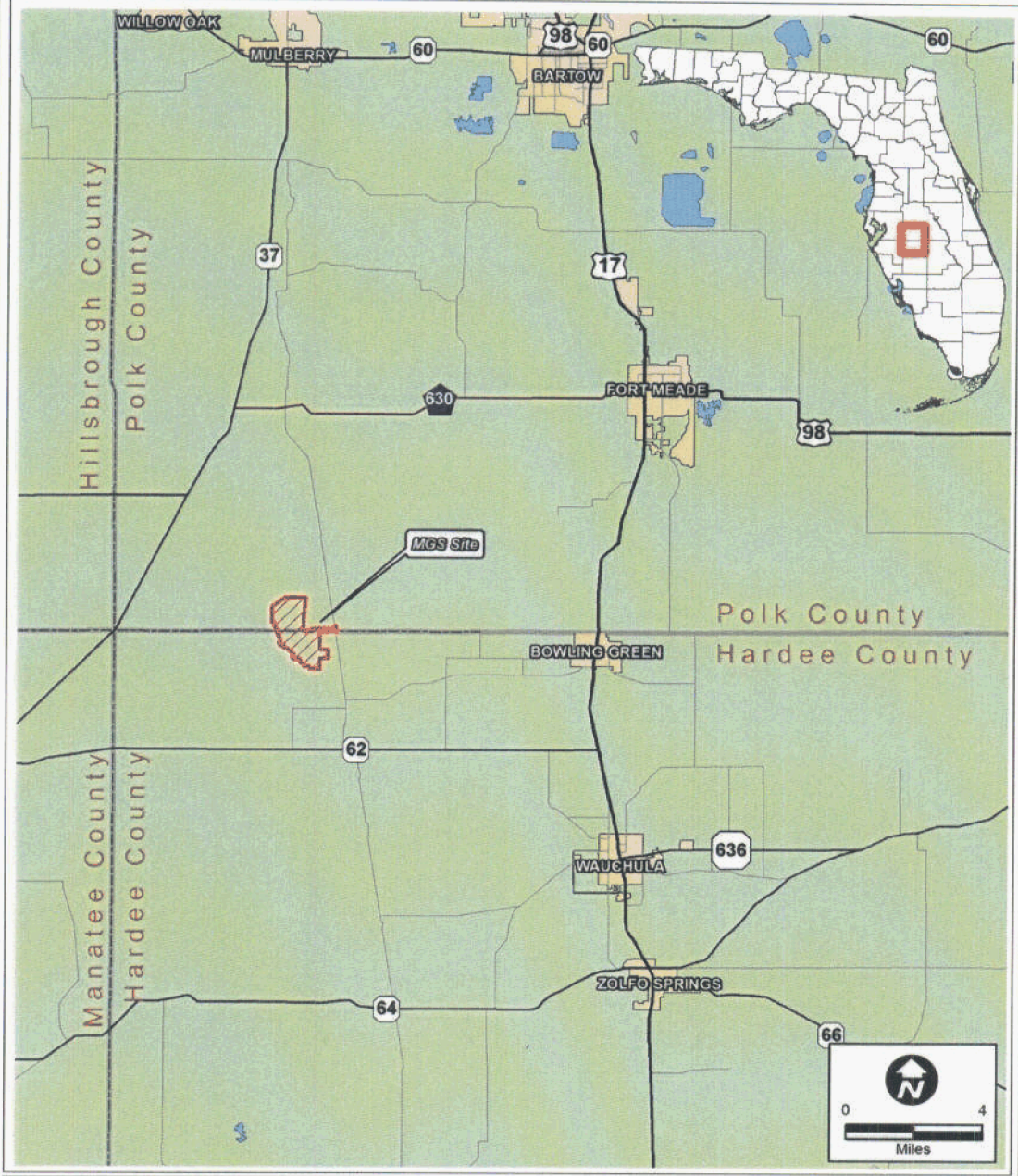

LOCATION OF MIDULLA GENERATING STATION

Source: ESRI, 2009; US Census, 2000; ECT, 2009.

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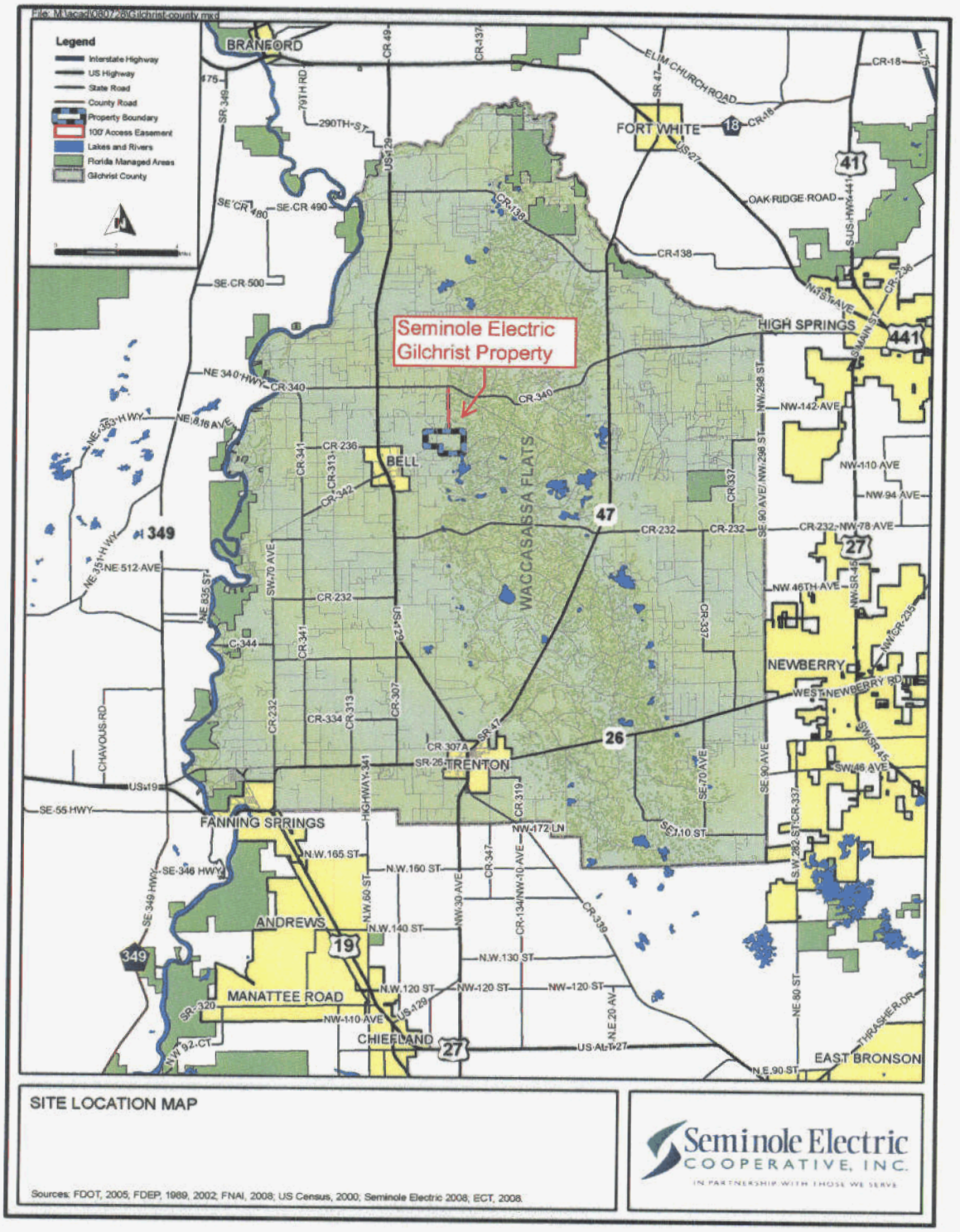
Legend
Interstate Highway
US Highway
State Road
County Road
Property Boundary
100' Access Easement
Lakes and Rivers
Florida Managed Areas
Gilchrist County
Seminole Electric
Gilchrist Property
BRANFORD
FORT WHITE
HIGH SPRINGS
BELL
WACCASASSA FLATS
NEWBERRY
TRENTON
FANNING SRRINGS
ANDREWS
MANATTEE ROAD
CHIEFLAND
EAST BRONSON
SITE LOCATION MAP
Sources: FDOT, 2005; FDEP, 1989, 2002; FNAI, 2008; US Census, 2000; Seminole Electric 2008; ECT, 2008.
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