



Ten-Year Site Plan
2025 – 2034
(Detail as of December 31, 2024)
April 1, 2025

Submitted To:
State of Florida
Public Service Commission

Table of Contents

DESCRIPTION OF EXISTING FACILITIES	1
1.1 Overview.....	1
1.2 Existing Facilities.....	2
1.2.1 Owned Generation	2
1.2.2 Transmission	5
1.3 Purchased Power Resources	7
FORECAST OF ELECTRIC DEMAND AND ENERGY CONSUMPTION	7
2.1 Energy Consumption and Number of Customers	7
2.2 Annual Peak Demand and Net Energy for Load	10
2.3 Monthly Peak Demand and Net Energy for Load	17
2.4 Fuel Requirements	20
2.5 Energy Sources by Fuel Type.....	21
FORECASTING METHODS AND PROCEDURES	23
3.1 Forecasting Methodology	23
3.1.1 Consumer Model.....	23
3.1.2 Energy Model.....	24
3.1.3 Peak Demand Model.....	24
3.1.4 Alternative-Scenario Model.....	25
3.1.5 Behind-the-Meter Solar	25
3.1.6 Electric Vehicles	26
3.2 Load Forecast Data	27
3.2.1 Materials Reviewed and/or Employed.....	28
3.3 Significant Load Forecast Assumptions	29
3.3.1 Economic Assumptions	29
3.3.2 Weather Assumptions	29
FORECAST OF FACILITIES REQUIREMENTS	31
4.1 Planned and Prospective Generating Facility Additions and Changes.....	34

4.2	Proposed Generating Facilities	35
4.3	Proposed Transmission Lines	36
OTHER PLANNING ASSUMPTIONS AND INFORMATION.....		37
5.1	Transmission Reliability	37
5.2	Plan Economics.....	38
5.3	Fuel Price Forecast.....	38
5.3.1	Coal.....	38
5.3.2	Fuel Oil	39
5.3.3	Natural Gas	39
5.3.4	Modeling of Fuel Sensitivity	40
5.4	Coal/Gas Price Differential.....	40
5.5	Modeling of Generation Unit Performance	40
5.6	Financial Assumptions.....	41
5.7	Resource Planning Process	41
5.8	Reliability Criteria	41
5.9	Demand-Side Management Programs	42
5.10	Strategic Concerns	46
5.11	Procurement of Supply-Side Resources.....	46
5.12	Transmission Construction and Upgrade Plans	47
ENVIRONMENTAL AND LAND USE INFORMATION		47
6.1	Potential Sites.....	47
6.1.1	Gilchrist Site – Gilchrist County, Florida.....	47
6.1.2	Seminole Generating Station Site – Putnam County, Florida.....	48
6.2	Preferred Sites.....	49

INDEX OF REQUIRED SCHEDULES

Schedule 1:	
Existing Generating Facilities.....	4
Schedule 2.1:	
History & Forecast of Energy Consumption & Number of Customers by Customer Class (Residential).....	8
Schedule 2.2:	
History & Forecast of Energy Consumption & Number of Customers by Customer Class (Commercial)	9
Schedule 2.3:	
History & Forecast of Energy Consumption & Number of Customers by Customer Class (Total).....	10
Schedule 3.1:	
History & Forecast of Summer Peak Demand (MW).....	11
Schedule 3.1.1:	
Forecast of Summer Peak Demand (MW): High Case.....	12
Schedule 3.1.2:	
Forecast of Summer Peak Demand (MW): Low Case.....	12
Schedule 3.2:	
History & Forecast of Winter Peak Demand (MW)	13
Schedule 3.2.1:	
Forecast of Winter Peak Demand (MW): High Case	14
Schedule 3.2.2:	
Forecast of Winter Peak Demand (MW): Low Case	14
Schedule 3.3:	
History & Forecast of Annual Net Energy for Load (GWh)	15
Schedule 3.3.1:	
Forecast of Annual Net Energy for Load (GWh): High Case	16
Schedule 3.3.2:	
Forecast of Annual Net Energy for Load (GWh): Low Case	16
Schedule 4:	
Previous Year & 2-Year Forecast of Peak Demand & Net Energy for Load by Month	17
Schedule 4.1:	
2-Year Forecast of Peak Demand & Net Energy for Load by Month: High Case	18
Schedule 4.2:	
2-Year Forecast of Peak Demand & Net Energy for Load by Month: Low Case	19

Schedule 5:
 Fuel Requirements for Seminole Generating Resources 20

Schedule 6.1:
 Energy Sources (GWh) 21

Schedule 6.2:
 Energy Sources (Percent)..... 22

Schedule 7.1:
 Forecast of Capacity, Demand & Scheduled Maintenance at Time of Summer Peak 32

Schedule 7.2:
 Forecast of Capacity, Demand & Scheduled Maintenance at Time of Winter Peak 33

Schedule 8:
 Planned & Prospective Generating Facility Additions and Changes 34

Schedule 9:
 Status Report & Specifications of Proposed Generating Facilities 35

Schedule 10:
 Status Report & Specifications of Proposed Associated Transmission Lines 36

INDEX OF REQUIRED MAPS

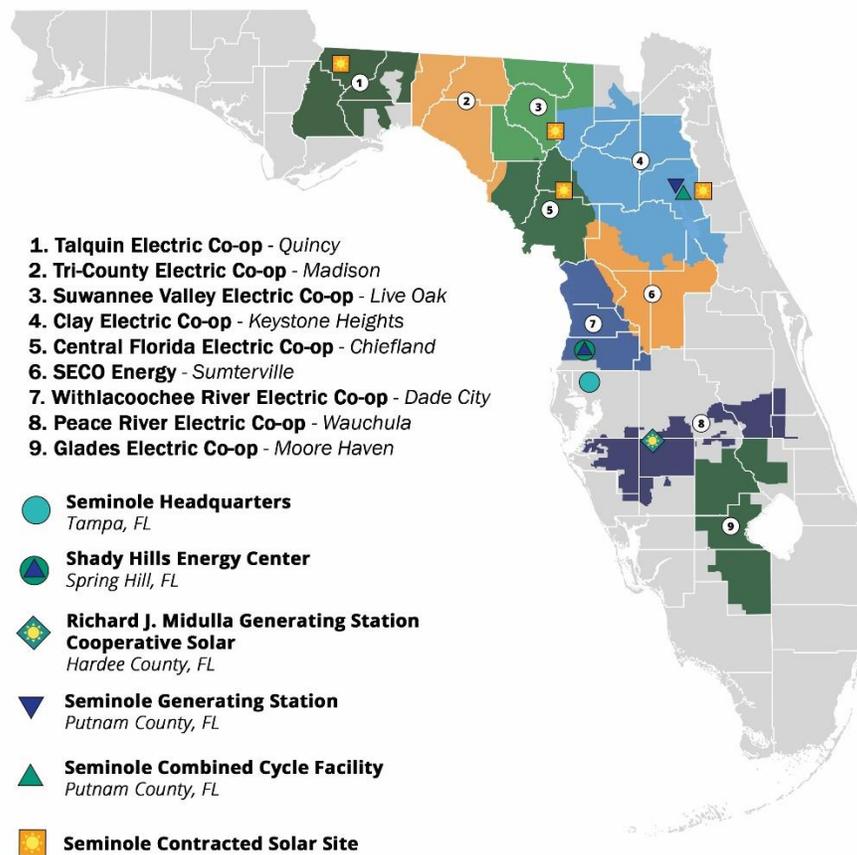
Map 1:	
Service Area.....	1
Map 2:	
Transmission Lines	6
Map 3:	
Gilchrist Generating Station Site - U.S. Geological Survey Location Map	50
Map 4:	
Seminole Generating Station – U.S. Geological Survey Location Map.....	51

DESCRIPTION OF EXISTING FACILITIES

1.1 Overview

Seminole Electric Cooperative, Inc. (Seminole) is a generation and transmission cooperative responsible for meeting the electric power and energy needs of nine distribution electric cooperative Members (Members). Member service areas are indicated on Map 1 below:

Map 1
Seminole and Member Cooperatives



Seminole provides full requirements service (with limited exceptions) under wholesale power contracts with all of the Members. One exception relates to the ability of four of the Members to purchase small amounts of hydroelectric power allocated to them from the Southeastern Power Administration (SEPA). SEPA provides up to 31 MW to these Members. Seminole serves the aggregate loads of the Members with a combination of owned and purchased/contracted power resources. As of December 31, 2024, Seminole had total winter capacity resources of 5,150 MW consisting of owned winter-rated capacity of 3,162 MW and the remaining capacity in firm purchased power. Additional information on Seminole's existing resources is located in Schedule 1 and Table 1.2 below.

1.2 Existing Facilities

1.2.1 Owned Generation

Seminole's existing generating facilities (with winter-rated capacity listed, except where noted) include:

- 1) Seminole Generating Station (SGS) Unit 2, a 640 MW coal-fired unit located in Putnam County near Palatka, Florida;
- 2) Seminole Combined Cycle Facility (SCCF) Units 1-3, a 1,118 MW gas-fired, two-on-one combined cycle plant located adjacent to SGS;
- 3) Midulla Generating Station (MGS) Units 1–3, a 600 MW gas-fired, two-on-one combined cycle plant located in Hardee County, Florida;
- 4) MGS Units 4–8, a 279 MW peaking plant consisting of five twin-pack gas turbines located adjacent to MGS;
- 5) Shady Hills Power Company, LLC (SHPC) Units 1-3, a 525 MW peaking plant consisting of three gas-fired combustion turbines located in Pasco County, Florida. Seminole acquired SHPC in December 2024; and

- 6) Cooperative Solar, a 2.2 MW_{AC} photovoltaic solar system located adjacent to MGS.

Schedule 1

Existing Generating Facilities as of December 31, 2024

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
MGS	1-3	Hardee County	CC	NG	N/A	PL	N/A	N/A	01/02	Unk	624.8	524.0	600.0
MGS	4-8	Hardee County	CT	NG	DFO	PL	TK	4	12/06	Unk	314.6	243.0	279.0
MGS	1	Hardee County	PV	Sun	N/A	N/A	N/A	N/A	08/17	Unk	2.2	0.9	0.0
SHPC	1-3	Pasco County	CT	NG	DFO	PL	TK	3	01/02	Unk	541.2	489.0	525.0
SCCF	1-3	Putnam County	CC	NG	N/A	PL	N/A	N/A	04/23	Unk	1183.2	1100.7	1117.9
SGS	2	Putnam County	ST	BIT	N/A	RR	N/A	N/A	12/84	Unk	714.6	634.0	640.0
Schedule Abbreviations:		General		Unk – Unknown N/A – Not applicable									
		<u>Unit Type</u>		<u>Fuel Type</u>					<u>Fuel Transportation</u>				
		ST – Steam Turbine		BIT – Bituminous Coal					PL – Pipeline				
		CC – Combined Cycle		NG – Natural Gas					RR – Railroad				
		CT – Combustion Turbine		DFO – Ultra low sulfur diesel					TK – Truck				
		PV – Photovoltaic		Sun – Solar Energy									

1.2.2 Transmission

Seminole serves the Members' load primarily in three transmission areas: Seminole Direct Serve (SDS) system, Duke Energy Florida (DEF) system, and Florida Power & Light (FPL) system. Seminole's existing transmission facilities consist of 227 circuit miles of 230 kV and 40 circuit miles of 69 kV lines. Seminole's facilities are interconnected to the grid at twenty-two (22) 230 kV and four (4) 69 kV transmission interconnections with the entities shown in Table 1.1.

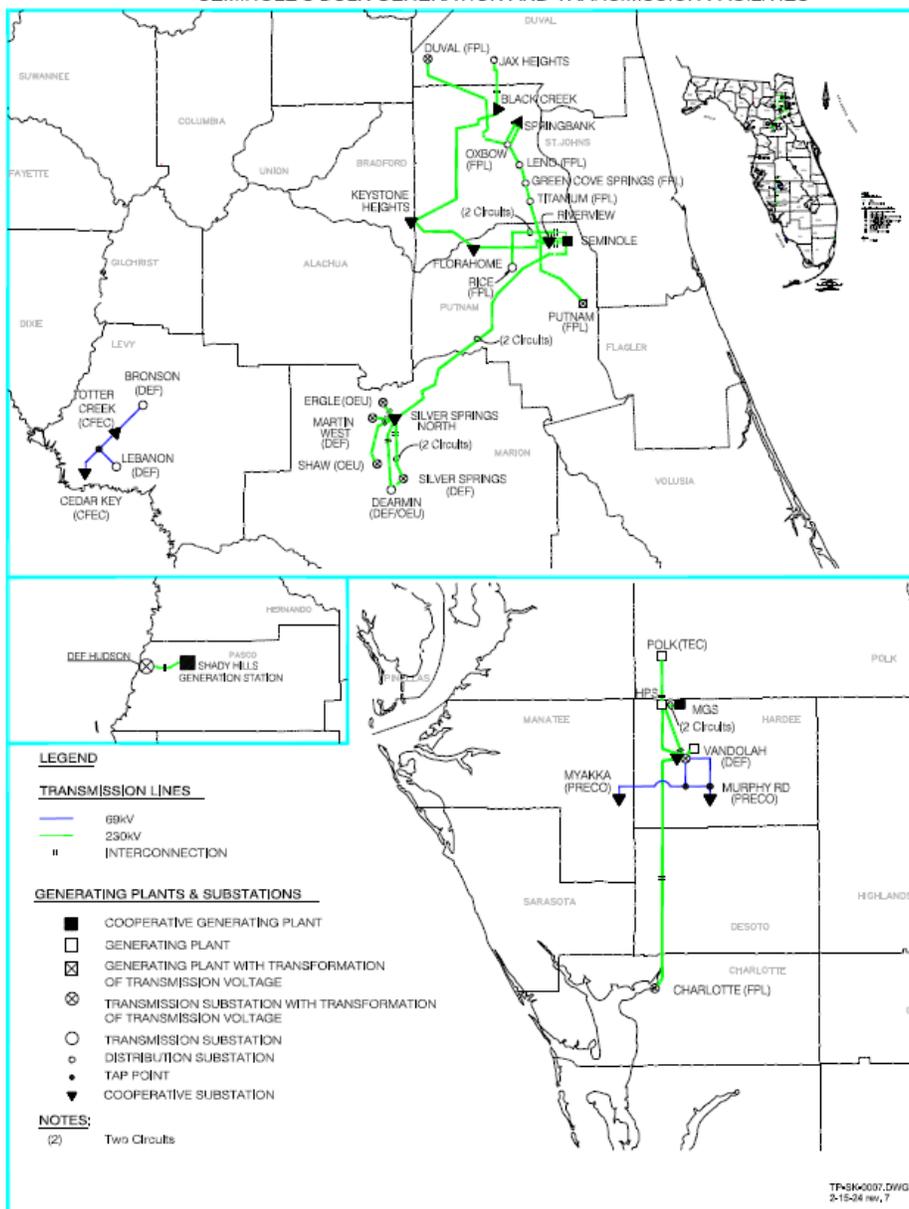
Table 1.1		
Transmission Grid Interconnections with Other Entities		
Entity	Voltage (kV)	Number of Interconnections
Florida Power & Light	230	7
Duke Energy Florida	230	8
Duke Energy Florida	69	4
JEA	230	1
City of Ocala (OEU)	230	2
Tampa Electric Company	230	1
Invenergy, LLC	230	3

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

Seminole contracts with other utilities for firm transmission service to serve Member loads that are embedded in the balancing authority areas of other utilities. Map 2 below depicts Seminole's 230 kV and 69 kV transmission lines, including its interconnections with those entities identified in Table 1.1 above.

Map 2

SEMINOLE'S BULK GENERATION AND TRANSMISSION FACILITIES



1.3 Purchased Power Resources

Table 1.2 reflects the purchased power resources included in Seminole’s portfolio. In November 2024, Seminole began to procure 298 MW (nameplate) of solar generation from four utility-scale sites through purchased power agreements with Florida Renewable Partners (FRP).

Seller	Contract Term		Contract Capacity (MW)		Primary Fuel (if Any)	Firm Capacity	Description
	Begins	Ends	Summer	Winter			
Hardee Power Partners	1/1/2013	12/31/2032	360	445	NG	YES ¹	Hardee CC1, CT 2A & CT2B
NextEra Energy	1/1/2025	12/31/2027	306	364	NG	YES	Oleander CTs 2-3
Duke Energy Florida	1/1/2021	3/31/2027	0	50-600	System ²	YES	System Peaking
Duke Energy Florida	1/1/2021	12/31/2030	100-450		System ²	YES	System Intermediate
Duke Energy Florida	1/1/2021	12/31/2035			System ²	YES	System Peaking
Southern Company Services	6/1/2021	5/31/2026	100	100	System ²	YES	System Intermediate
FRP Tupelo Solar	12/1/2024	12/1/2049	74.5	74.5	SUN	YES ³	Solar Facility
FRP Gadsden County Solar	12/1/2024	12/1/2049	74.5	74.5	SUN	YES ³	Solar Facility
FRP Gilchrist County Solar	12/1/2024	12/1/2049	74.5	74.5	SUN	YES ³	Solar Facility
FRP Columbia County Solar	12/1/2024	12/1/2049	74.5	74.5	SUN	YES ³	Solar Facility
Hillsborough County, Florida	3/1/2010	2/28/2025	38	38	MSW	YES	Hillsborough WTE
City of Tampa, Florida	8/1/2011	7/31/2026	20	20	MSW	YES	McKay Bay WTE
Individual SECI Member Cooperatives	1/1/2000	Evergreen	126	126	DFO	YES	Member Distributed Generation
Notes: <ul style="list-style-type: none"> • Seminole receives renewable energy certificates associated with its renewable generation procured from third parties. 1) Reflects plant firm capacity; however, current transmission limitations reduce available winter capacity by 54 MW. 2) System PPAs are not tied to one specific resource or fuel type although they are primarily natural gas. 3) Seminole assumes 40% capacity towards summer reserve margin and 0% capacity towards winter reserve margin. 							

FORECAST OF ELECTRIC DEMAND AND ENERGY CONSUMPTION

2.1 Energy Consumption and Number of Customers

Residential meter growth is projected to increase at an average annual rate of 2.5 percent from 2025 through 2034. Similarly, commercial meter growth is projected to increase at

an average annual rate of 2.6 percent during the same period. Residential energy sales are projected to grow at an average annual rate of 1.5 percent, and commercial energy sales are projected to grow at an average annual rate of 6.3 percent from 2025 through 2034. Schedules 2.1, 2.2, and 2.3 below show the aggregate number of customers and energy consumption by customer classification of the nine Members, including other sales and purchases.

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

Year	Estimated Population Served by Members	People per Household	Residential		
			GWh	Average Number of Customers	Average Consumption Per Customer (kWh)
2015	1,673,835	2.49	9,068	673,215	13,470
2016	1,706,720	2.50	9,310	683,672	13,618
2017	1,736,394	2.51	9,097	692,699	13,133
2018	1,766,421	2.51	9,644	703,331	13,712
2019	1,791,518	2.50	9,754	716,864	13,606
2020	1,842,460	2.51	10,262	733,901	13,983
2021	1,858,863	2.47	10,115	751,351	13,462
2022	1,866,964	2.42	10,471	770,526	13,589
2023	1,925,027	2.42	10,774	796,949	13,519
2024	1,967,164	2.39	11,361	822,962	13,805
2025	2,008,006	2.38	11,142	844,693	13,191
2026	2,048,392	2.36	11,321	868,126	13,041
2027	2,090,544	2.35	11,449	891,487	12,843
2028	2,133,920	2.33	11,509	914,884	12,580
2029	2,178,265	2.32	11,642	938,378	12,407
2030	2,223,488	2.31	11,867	962,014	12,336
2031	2,269,667	2.30	12,097	985,855	12,271
2032	2,316,319	2.29	12,325	1,009,939	12,204
2033	2,363,838	2.29	12,560	1,034,303	12,143
2034	2,413,142	2.28	12,788	1,058,978	12,076

Notes:

- Includes Sales from SEPA.

Schedule 2.2

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

Year	Commercial ¹				Total Member Sales to Total Consumers (GWh) ³
	GWh	Average Number of Customers	Average Consumption Per Customer (kWh)	Other Sales (GWh) ²	
2015	4,155	73,290	56,688	151	13,374
2016	4,311	74,411	57,935	152	13,773
2017	4,322	76,118	56,780	144	13,563
2018	4,447	78,044	56,981	145	14,236
2019	4,515	80,257	56,257	156	14,425
2020	4,515	82,015	55,051	157	14,934
2021	4,662	84,037	55,476	153	14,930
2022	4,936	88,776	55,601	159	15,566
2023	4,960	90,823	54,612	161	15,895
2024	5,264	96,236	54,699	167	16,792
2025	5,494	99,498	55,217	126	16,762
2026	5,803	102,998	56,341	126	17,250
2027	6,017	106,269	56,620	127	17,593
2028	6,212	109,352	56,807	127	17,848
2029	7,076	112,273	63,025	127	18,845
2030	7,685	115,054	66,795	127	19,679
2031	8,471	117,730	71,953	128	20,696
2032	8,775	120,338	72,920	128	21,228
2033	9,132	122,904	74,302	128	21,820
2034	9,499	125,428	75,733	129	22,416

Notes:

- Includes Sales from SEPA.
- 1) Includes Industrial and Interruptible Customers.
- 2) Includes Lighting Customers.
- 3) Excludes Sales for Resale.

Schedule 2.3

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

Year	Sales for Resale (GWh)	Utility Use & Losses Less SEPA (GWh)	Net Energy for Load (GWh)	Other Customers	Total Number of Consumers
2015	16	714	14,104	5,343	751,848
2016	56	642	14,471	5,384	763,468
2017	64	698	14,325	5,539	774,356
2018	40	636	14,912	5,680	787,055
2019	42	628	15,095	5,756	802,877
2020	8	720	15,662	5,822	821,738
2021	2	607	15,539	5,888	841,276
2022	0	764	16,330	5,979	865,281
2023	0	607	16,502	6,054	893,826
2024	13	554	17,359	6,131	925,329
2025	45	617	17,424	6,188	950,379
2026	0	658	17,908	6,236	977,360
2027	0	704	18,297	6,282	1,004,038
2028	0	767	18,615	6,326	1,030,562
2029	0	798	19,643	6,368	1,057,019
2030	0	836	20,515	6,410	1,083,478
2031	0	874	21,570	6,451	1,110,036
2032	0	888	22,116	6,492	1,136,769
2033	0	918	22,738	6,533	1,163,740
2034	0	952	23,368	6,573	1,190,979

Notes:

- Includes Sales from SEPA.

2.2 Annual Peak Demand and Net Energy for Load

Winter net firm demand is projected to increase at an average annual rate of 2.0 percent from the 2024/2025 season through the 2033/2034 season. Summer net firm demand is estimated to increase by 2.1 percent from 2025 through 2034. Net Energy for Load is projected to grow at an average annual rate of 3.3 percent from 2025 through 2034. Schedules 3.1, 3.2, and 3.3 provide Seminole’s summer peak demand, winter peak demand, and net energy for load, respectively.

Schedule 3.1

History and Forecast of Summer Peak Demand (MW)

Year	Total	Wholesale	Retail	Interruptible Load	Distributed Generation ¹	Residential		Commercial		Net Firm Demand
						Load Mgmt.	Cons.	Load Mgmt.	Cons.	
2015	3,072	3,072	0	0	0	51	N/A	N/A	N/A	3,021
2016	3,299	3,299	0	0	0	56	N/A	N/A	N/A	3,243
2017	3,187	3,187	0	0	0	54	N/A	19	N/A	3,114
2018	3,196	3,196	0	0	0	54	N/A	20	N/A	3,122
2019	3,477	3,477	0	0	0	58	N/A	20	N/A	3,399
2020	3,505	3,505	0	0	0	49	N/A	10	N/A	3,446
2021	3,496	3,496	0	0	0	50	N/A	11	N/A	3,435
2022	3,723	3,723	0	0	0	52	N/A	23	N/A	3,648
2023	4,023	4,023	0	0	0	67	N/A	11	N/A	3,945
2024	3,873	3,873	0	0	0	63	N/A	23	N/A	3,787
2025	3,941	3,941	0	66	60	67	N/A	11	N/A	3,737
2026	4,021	4,021	0	66	60	69	N/A	11	N/A	3,815
2027	4,059	4,059	0	66	60	70	N/A	11	N/A	3,852
2028	4,100	4,100	0	66	60	73	N/A	11	N/A	3,890
2029	4,221	4,221	0	66	60	73	N/A	11	N/A	4,011
2030	4,340	4,340	0	66	60	74	N/A	11	N/A	4,129
2031	4,465	4,465	0	66	60	76	N/A	11	N/A	4,252
2032	4,552	4,552	0	66	60	77	N/A	11	N/A	4,338
2033	4,635	4,635	0	66	60	79	N/A	11	N/A	4,419
2034	4,727	4,727	0	66	60	80	N/A	11	N/A	4,510

Notes:

- Reduced demands associated with Member Cooperative coincident demand billing are not reflected, although reductions are reflected in net firm demand.

1) Distributed generation reflects customer-owned self-service generation.

Schedule 3.1.1

High Case Forecast of Summer Peak Demand (MW)

Year	Total	Wholesale	Retail	Interruptible Load	Distributed Generation ¹	Residential		Commercial		Net Firm Demand
						Load Mgmt.	Cons.	Load Mgmt.	Cons.	
2025	4,028	4,028	0	66	60	67	N/A	11	N/A	3,824
2026	4,109	4,109	0	66	60	69	N/A	11	N/A	3,903
2027	4,146	4,146	0	66	60	70	N/A	11	N/A	3,939
2028	4,185	4,185	0	66	60	73	N/A	11	N/A	3,975
2029	4,306	4,306	0	66	60	73	N/A	11	N/A	4,096
2030	4,423	4,423	0	66	60	74	N/A	11	N/A	4,212
2031	4,554	4,554	0	66	60	76	N/A	11	N/A	4,341
2032	4,636	4,636	0	66	60	77	N/A	11	N/A	4,422
2033	4,722	4,722	0	66	60	79	N/A	11	N/A	4,506
2034	4,808	4,808	0	66	60	80	N/A	11	N/A	4,591

Notes:

- 1) Distributed generation reflects customer-owned self-service generation.

Schedule 3.1.2

Low Case Forecast of Summer Peak Demand (MW)

Year	Total	Wholesale	Retail	Interruptible Load	Distributed Generation ¹	Residential		Commercial		Net Firm Demand
						Load Mgmt.	Cons.	Load Mgmt.	Cons.	
2025	3,546	3,546	0	66	60	67	N/A	11	N/A	3,342
2026	3,626	3,626	0	66	60	69	N/A	11	N/A	3,420
2027	3,676	3,676	0	66	60	70	N/A	11	N/A	3,469
2028	3,710	3,710	0	66	60	73	N/A	11	N/A	3,500
2029	3,842	3,842	0	66	60	73	N/A	11	N/A	3,632
2030	3,960	3,960	0	66	60	74	N/A	11	N/A	3,749
2031	4,103	4,103	0	66	60	76	N/A	11	N/A	3,890
2032	4,183	4,183	0	66	60	77	N/A	11	N/A	3,969
2033	4,272	4,272	0	66	60	79	N/A	11	N/A	4,056
2034	4,357	4,357	0	66	60	80	N/A	11	N/A	4,140

Notes:

- 1) Distributed generation reflects customer-owned self-service generation.

Schedule 3.2

History and Forecast of Winter Peak Demand (MW)

Year	Total	Wholesale	Retail	Interruptible Load ¹	Distributed Generation ²	Residential		Commercial		Net Firm Demand
						Load Mgmt	Cons.	Load Mgmt.	Cons.	
2014-15	3,672	3,672	0	0	0	61	N/A	18	N/A	3,593
2015-16	3,377	3,377	0	0	0	56	N/A	14	N/A	3,307
2016-17	3,083	3,083	0	0	0	51	N/A	14	N/A	3,018
2017-18	4,024	4,024	0	0	0	68	N/A	17	N/A	3,939
2018-19	3,068	3,068	0	0	0	53	N/A	22	N/A	2,993
2019-20	3,305	3,305	0	0	0	58	N/A	22	N/A	3,225
2020-21	3,620	3,620	0	0	0	50	N/A	24	N/A	3,546
2021-22	3,982	3,982	0	0	0	55	N/A	12	N/A	3,915
2022-23	3,967	3,967	0	0	0	65	N/A	16	N/A	3,886
2023-24	3,486	3,486	0	0	0	57	N/A	14	N/A	3,415
2024-25	4,282	4,282	0	167	60	66	N/A	14	N/A	3,975
2025-26	4,083	4,083	0	67	60	69	N/A	14	N/A	3,873
2026-27	4,170	4,170	0	67	60	72	N/A	14	N/A	3,957
2027-28	4,248	4,248	0	67	60	74	N/A	14	N/A	4,033
2028-29	4,407	4,407	0	67	60	75	N/A	14	N/A	4,191
2029-30	4,533	4,533	0	67	60	77	N/A	14	N/A	4,315
2030-31	4,680	4,680	0	67	60	80	N/A	14	N/A	4,459
2031-32	4,768	4,768	0	67	60	81	N/A	14	N/A	4,546
2032-33	4,862	4,862	0	67	60	83	N/A	14	N/A	4,638
2033-34	4,956	4,956	0	67	60	83	N/A	14	N/A	4,732

Notes:

- Reduced demands associated with Member Cooperative coincident demand billing are not reflected, although reductions are reflected in net firm demand.
- 1) Includes wholesale interruptible sales.
- 2) Distributed generation reflects customer-owned self-service generation.

Schedule 3.2.1

High Case Forecast of Winter Peak Demand (MW)

Year	Total	Wholesale	Retail	Interruptible Load	Distributed Generation ¹	Residential		Commercial		Net Firm Demand
						Load Mgmt	Cons.	Load Mgmt.	Cons.	
2024-25	4,737	4,737	0	167	60	66	N/A	14	N/A	4,430
2025-26	4,543	4,543	0	67	60	69	N/A	14	N/A	4,333
2026-27	4,636	4,636	0	67	60	72	N/A	14	N/A	4,423
2027-28	4,722	4,722	0	67	60	74	N/A	14	N/A	4,507
2028-29	4,878	4,878	0	67	60	75	N/A	14	N/A	4,662
2029-30	5,010	5,010	0	67	60	77	N/A	14	N/A	4,792
2030-31	5,163	5,163	0	67	60	80	N/A	14	N/A	4,942
2031-32	5,257	5,257	0	67	60	81	N/A	14	N/A	5,035
2032-33	5,358	5,358	0	67	60	83	N/A	14	N/A	5,134
2033-34	5,460	5,460	0	67	60	83	N/A	14	N/A	5,236

Notes:

- 1) Distributed generation reflects customer-owned self-service generation.

Schedule 3.2.2

Low Case Forecast of Winter Peak Demand (MW)

Year	Total	Wholesale	Retail	Interruptible Load	Distributed Generation ¹	Residential		Commercial		Net Firm Demand
						Load Mgmt	Cons.	Load Mgmt.	Cons.	
2024-25	3,875	3,875	0	167	60	66	N/A	14	N/A	3,568
2025-26	3,680	3,680	0	67	60	69	N/A	14	N/A	3,470
2026-27	3,779	3,779	0	67	60	72	N/A	14	N/A	3,566
2027-28	3,870	3,870	0	67	60	74	N/A	14	N/A	3,655
2028-29	4,031	4,031	0	67	60	75	N/A	14	N/A	3,815
2029-30	4,167	4,167	0	67	60	77	N/A	14	N/A	3,949
2030-31	4,322	4,322	0	67	60	80	N/A	14	N/A	4,101
2031-32	4,416	4,416	0	67	60	81	N/A	14	N/A	4,194
2032-33	4,523	4,523	0	67	60	83	N/A	14	N/A	4,299
2033-34	4,627	4,627	0	67	60	83	N/A	14	N/A	4,403

Notes:

- 1) Distributed generation reflects customer-owned self-service generation.

Schedule 3.3

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

Year	Total	Conservation		Retail	Total Sales Including Sales for Resale	Utility Use & Losses Less SEPA	Net Energy for Load	Load Factor %
		Residential	Commercial					
2015	14,104	N/A	N/A	0	13,390	714	14,104	48.7
2016	14,471	N/A	N/A	0	13,829	642	14,471	50.0
2017	14,325	N/A	N/A	0	13,627	698	14,325	52.5
2018	14,912	N/A	N/A	0	14,276	636	14,912	43.2
2019	15,095	N/A	N/A	0	14,467	628	15,095	50.7
2020	15,662	N/A	N/A	0	14,942	720	15,662	51.9
2021	15,539	N/A	N/A	0	14,932	607	15,539	50.0
2022	16,330	N/A	N/A	0	15,566	764	16,330	47.6
2023	16,502	N/A	N/A	0	15,895	607	16,502	47.8
2024	17,359	N/A	N/A	0	16,805	554	17,359	52.3
2025	17,424	N/A	N/A	0	16,807	617	17,424	50.0
2026	17,908	N/A	N/A	0	17,250	658	17,908	52.8
2027	18,297	N/A	N/A	0	17,593	704	18,297	52.8
2028	18,615	N/A	N/A	0	17,848	767	18,615	52.7
2029	19,643	N/A	N/A	0	18,845	798	19,643	53.5
2030	20,515	N/A	N/A	0	19,679	836	20,515	54.3
2031	21,570	N/A	N/A	0	20,696	874	21,570	55.2
2032	22,116	N/A	N/A	0	21,228	888	22,116	55.5
2033	22,738	N/A	N/A	0	21,820	918	22,738	56.0
2034	23,368	N/A	N/A	0	22,416	952	23,368	56.4

Schedule 3.3.1

High Case Forecast of Annual Net Energy for Load (GWh)

Year	Total	Conservation		Retail	Total Sales Including Sales for Resale	Utility Use & Losses Less SEPA	Net Energy for Load	Load Factor %
		Residential	Commercial					
2025	18,511	N/A	N/A	0	17,863	648	18,511	47.7
2026	18,990	N/A	N/A	0	18,287	703	18,990	50.0
2027	19,380	N/A	N/A	0	18,644	736	19,380	50.0
2028	19,696	N/A	N/A	0	18,888	808	19,696	49.9
2029	20,722	N/A	N/A	0	19,872	850	20,722	50.7
2030	21,595	N/A	N/A	0	20,710	885	21,595	51.4
2031	22,647	N/A	N/A	0	21,718	929	22,647	52.3
2032	23,191	N/A	N/A	0	22,263	928	23,191	52.6
2033	23,810	N/A	N/A	0	22,858	952	23,810	52.9
2034	24,437	N/A	N/A	0	23,435	1,002	24,437	53.3

Schedule 3.3.2

Low Case Forecast of Annual Net Energy for Load (GWh)

Year	Total	Conservation		Retail	Total Sales Including Sales for Resale	Utility Use & Losses Less SEPA	Net Energy for Load	Load Factor %
		Residential	Commercial					
2025	16,586	N/A	N/A	0	16,005	581	16,586	53.1
2026	17,066	N/A	N/A	0	16,435	631	17,066	56.1
2027	17,458	N/A	N/A	0	16,795	663	17,458	55.9
2028	17,775	N/A	N/A	0	17,046	729	17,775	55.5
2029	18,803	N/A	N/A	0	18,032	771	18,803	56.3
2030	19,677	N/A	N/A	0	18,870	807	19,677	56.9
2031	20,732	N/A	N/A	0	19,882	850	20,732	57.7
2032	21,281	N/A	N/A	0	20,430	851	21,281	57.9
2033	21,903	N/A	N/A	0	21,027	876	21,903	58.2
2034	22,532	N/A	N/A	0	21,608	924	22,532	58.4

2.3 Monthly Peak Demand and Net Energy for Load

Schedules 4, 4.1 and 4.2 show actual net firm peak demand and net energy for load by month for 2024 and forecasts thereafter.

Schedule 4

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

Month	2024 Actual		2025 Forecast		2026 Forecast	
	Net Firm Demand (MW)	NEL (GWh)	Net Firm Demand (MW)	NEL (GWh)	Net Firm Demand (MW)	NEL (GWh)
January	3,415	1,334	3,975	1,415	3,873	1,424
February	2,842	1,140	3,089	1,220	3,189	1,264
March	2,493	1,154	2,772	1,244	2,869	1,292
April	2,967	1,209	2,922	1,280	3,000	1,316
May	3,633	1,647	3,346	1,532	3,428	1,575
June	3,787	1,752	3,487	1,636	3,568	1,681
July	3,671	1,829	3,533	1,753	3,613	1,794
August	3,693	1,813	3,737	1,776	3,815	1,820
September	3,515	1,600	3,413	1,601	3,497	1,648
October	3,217	1,322	2,998	1,385	3,086	1,430
November	2,681	1,251	2,710	1,226	2,796	1,264
December	3,350	1,308	3,150	1,356	3,245	1,400
ANNUAL		17,359		17,424		17,908

Schedule 4.1

2-Year High Case Forecast of Peak Demand and Net Energy for Load by Month

Month	2025 Forecast		2026 Forecast	
	Net Firm Demand (MW)	NEL (GWh)	Net Firm Demand (MW)	NEL (GWh)
January	4,430	1,575	4,333	1,582
February	3,363	1,298	3,465	1,341
March	2,980	1,322	3,077	1,369
April	3,089	1,352	3,167	1,387
May	3,532	1,605	3,616	1,649
June	3,797	1,725	3,882	1,770
July	3,772	1,828	3,850	1,869
August	3,824	1,837	3,903	1,882
September	3,616	1,651	3,668	1,697
October	3,258	1,498	3,345	1,543
November	2,879	1,314	2,965	1,351
December	3,572	1,506	3,663	1,550
ANNUAL		18,511		18,990

Schedule 4.2

2-Year Low Case Forecast of Peak Demand and Net Energy for Load by Month

Month	2025 Forecast		2026 Forecast	
	Net Firm Demand (MW)	NEL (GWh)	Net Firm Demand (MW)	NEL (GWh)
January	3,568	1,311	3,470	1,320
February	2,890	1,157	2,993	1,201
March	2,704	1,218	2,801	1,266
April	2,824	1,240	2,903	1,275
May	3,084	1,422	3,166	1,465
June	3,331	1,562	3,411	1,606
July	3,351	1,675	3,432	1,716
August	3,342	1,674	3,420	1,718
September	3,227	1,524	3,309	1,570
October	2,827	1,310	2,914	1,354
November	2,651	1,197	2,738	1,235
December	2,974	1,296	3,071	1,340
ANNUAL		16,586		17,066

2.4 Fuel Requirements

Seminole's coal, oil, and natural gas requirements for owned, tolling, and future generating units are shown in Schedule 5 below:

Schedule 5
Fuel Requirements For Seminole Generating Resources

Fuel Requirements	Units	Actual		Forecast										
		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	
Nuclear	Trillion BTU	-	-	0	0	0	0	0	0	0	0	0	0	0
Coal	1000 Tons	1,726	1,008	1,029	1,384	1,101	1,081	1,127	1,136	1,126	1,106	760	831	
Residual	Total	1000 BBL	-	-	0	0	0	0	0	0	0	0	0	
	Steam	1000 BBL	-	-	0	0	0	0	0	0	0	0	0	
	CC	1000 BBL	-	-	0	0	0	0	0	0	0	0	0	
	CT	1000 BBL	-	-	0	0	0	0	0	0	0	0	0	
Distillate	Total	1000 BBL	45	30	18	22	18	18	19	19	19	19	15	16
	Steam	1000 BBL	45	30	18	22	18	18	19	19	19	19	15	16
	CC	1000 BBL	-	-	0	0	0	0	0	0	0	0	0	0
	CT	1000 BBL	-	-	0	0	0	0	0	0	0	0	0	0
Natural Gas	Total	1000 MCF	53,873	71,137	74,090	72,016	89,470	91,778	98,124	102,220	111,243	113,813	131,609	133,486
	Steam	1000 MCF	-	-	0	0	0	0	0	0	0	0	0	0
	CC	1000 MCF	52,431	70,861	74,084	72,003	89,453	91,773	92,031	94,863	98,538	98,276	120,753	118,373
	CT	1000 MCF	1,442	276	6	13	17	5	6,093	7,357	12,705	15,537	10,856	15,113

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

2.5 Energy Sources by Fuel Type

Seminole's base case 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. Other than the purchases from solar facilities, Seminole's additional requirements for capacity beyond 2025 are assumed to be from resources with natural gas as the primary fuel.

Schedule 6.1
Energy Sources (GWh)

Energy Sources	Units	Actual		Forecast										
		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	
Inter-Regional Interchange	GWh	397	455	433	171	-	-	-	-	-	-	-	-	-
Nuclear	GWh	-	-	-	-	-	-	-	-	-	-	-	-	-
Coal	GWh	3,869	2,197	2,506	3,390	2,620	2,577	2,709	2,725	2,723	2,696	1,787	1,965	
Residual	Total	GWh	-	-	-	-	-	-	-	-	-	-	-	-
	Steam	GWh	-	-	-	-	-	-	-	-	-	-	-	-
	CC	GWh	-	-	-	-	-	-	-	-	-	-	-	-
	CT	GWh	-	-	-	-	-	-	-	-	-	-	-	-
Distillate	Total	GWh	19	14	8	11	9	9	9	9	9	9	6	6
	Steam	GWh	19	14	8	11	9	9	9	9	9	9	6	6
	CC	GWh	-	-	-	-	-	-	-	-	-	-	-	-
	CT	GWh	-	-	-	-	-	-	-	-	-	-	-	-
Natural Gas	Total	GWh	8,529	10,840	11,389	11,093	13,827	14,175	14,853	15,375	16,510	16,765	19,665	19,781
	Steam	GWh	-	-	-	-	-	-	-	-	-	-	-	-
	CC	GWh	8,403	10,834	11,389	11,092	13,826	14,175	14,199	14,590	15,163	15,107	18,496	18,154
	CT	GWh	126	6	-	1	1	-	654	785	1,347	1,658	1,169	1,627
NUG	GWh	-	-	-	-	-	-	-	-	-	-	-	-	-
Renewables *	GWh	-	-	3	3	3	3	3	3	3	3	3	3	
Other	GWh	3,688	3,853	3,085	3,240	1,838	1,851	2,069	2,403	2,325	2,643	1,278	1,613	
Total Renewables	GWh	397	383	892	807	725	724	718	714	711	709	704	700	
Non-Firm Interchange Renewables Solar	GWh	-	116	733	729	725	724	718	714	711	709	704	700	
Firm Interchange Renewables MSW	GWh	388	263	159	78	-	-	-	-	-	-	-	-	
Firm Interchange Renewables Biomass	GWh	-	-	-	-	-	-	-	-	-	-	-	-	
Firm Interchange Renewables Landfill Gas	GWh	9	4	-	-	-	-	-	-	-	-	-	-	
Firm Interchange Base	GWh	-	-	-	-	-	-	-	-	-	-	-	-	
Firm Interchange Intermediate	GWh	2,973	3,081	1,654	1,925	976	978	1,214	1,453	1,479	1,678	492	696	
Firm Interchange Peaking	GWh	318	389	539	508	137	149	137	236	135	256	82	217	
Net Energy for Load	GWh	16,502	17,359	17,424	17,908	18,297	18,615	19,643	20,515	21,570	22,116	22,739	23,368	

Notes:

- Net interchange, unit power purchases and DEF and SOCO system purchases are included under source fuel categories.
- Totals may not add due to rounding.
- Seminole receives renewable energy certificates (RECs) associated with its renewable generation procured from third parties.

Schedule 6.2
Energy Sources (Percent)

Energy Sources	Units	Actual					Forecast							
		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	
Inter-Regional Interchange	GWh	2.4%	2.6%	2.5%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Nuclear	GWh	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Coal	GWh	23.4%	12.7%	14.4%	18.9%	14.3%	13.8%	13.8%	13.3%	12.6%	12.2%	7.9%	8.4%	
Residual	Total	GWh	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	Steam	GWh	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	CC	GWh	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	CT	GWh	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Distillate	Total	GWh	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	Steam	GWh	0.1%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	CC	GWh	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	CT	GWh	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Natural Gas	Total	GWh	51.7%	62.4%	65.4%	61.9%	75.6%	76.1%	75.6%	74.9%	76.5%	75.8%	86.5%	
	Steam	GWh	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
	CC	GWh	50.9%	62.4%	65.4%	61.9%	75.6%	76.1%	72.3%	71.1%	70.3%	68.3%	81.3%	
	CT	GWh	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%	3.8%	6.2%	7.5%	5.1%	
NUG	GWh	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Renewables	GWh	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Other	GWh	22.3%	22.2%	17.7%	18.1%	10.0%	9.9%	10.5%	11.7%	10.8%	12.0%	5.6%	6.9%	
Total Renewables	GWh	2.4%	2.2%	5.1%	4.5%	4.0%	3.9%	3.7%	3.5%	3.3%	3.2%	3.1%	3.0%	
Non-Firm Interchange Renewables Solar	GWh	0.0%	0.7%	4.2%	4.1%	4.0%	3.9%	3.7%	3.5%	3.3%	3.2%	3.1%	3.0%	
Firm Interchange Renewables MSW	GWh	2.4%	1.5%	0.9%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Firm Interchange Renewables Biomass	GWh	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Firm Interchange Renewables Landfill Gas	GWh	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Firm Interchange Base	GWh	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Firm Interchange Intermediate	GWh	18.0%	17.7%	9.5%	10.7%	5.3%	5.3%	6.2%	7.1%	6.9%	7.6%	2.2%	3.0%	
Firm Interchange Peaking	GWh	1.9%	2.2%	3.1%	2.8%	0.7%	0.8%	0.7%	1.2%	0.6%	1.2%	0.4%	0.9%	
Net Energy for Load	GWh	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	

Notes:

- Net interchange, unit power purchases and DEF and SOCO system purchases are included under source fuel categories.
- Totals may not add due to rounding.
- Seminole receives renewable energy certificates (RECs) associated with its renewable generation procured from third parties.

FORECASTING METHODS AND PROCEDURES

3.1 Forecasting Methodology

Seminole adheres to generally accepted methodology and procedures currently employed in the electric utility industry to forecast number of consumers, energy, and peak demand. Forecast models are developed using regression analysis. Each Member is modeled separately based on the unique growth characteristics in that service territory. Seminole produces monthly forecasts for each Member system and by rate classification when applicable. Seminole's system forecast is the aggregate of Member system forecasts. Model input data sources include Member Rural Utilities Services Form-7 Financial and Statistical Reports (RUS Form-7), Moody's Economic Consumer and Credit Analytics (ECCA), University of Florida's Bureau of Economic and Business Research (UF BEBR), Seminole's Power Billing System (PBS), Itron, Bureau of Labor Statistics (BLS), Google Mobility movement data, and AccuWeather.

3.1.1 Consumer Model

Numbers of consumers are modeled by month with regression analysis. Explanatory variables analyzed in these models include population, housing statistics, and economic indicators. Consumer models are specified by Member total and by rate classification. Rate class forecasts are reconciled to match, in aggregate, the total consumer forecasts by Member.

Territorial agreements and information provided directly from Members regarding anticipated changes in service territories are incorporated in forecast

projections. The “Other” consumer class represents a small portion of Member energy sales, including irrigation, street and highway lighting, public buildings, and sales for resale.

3.1.2 Energy Model

Forecasts of Member energy purchases from Seminole are developed using regression analysis on hourly delivery point meter data aggregated to monthly values. Models are developed by Member total and by rate classification. Explanatory variables analyzed in these models include temperature and precipitation statistics, population and housing statistics, economic indicators, daily personal movement trends and price projections developed internally. Parameters explaining the reduction in load due to energy efficiency are also included. Member rate class energy purchases from Seminole are derived by scaling up RUS Form-7 monthly energy sales to end-users by distribution loss factors. Rate class forecasts are reconciled top-down to match total level forecasts.

3.1.3 Peak Demand Model

Maximum peak demand is modeled by month and by season for each Member system using regression analysis. Explanatory variables analyzed in these models include temperature and precipitation statistics, population and housing statistics, internal electricity price data, load factor, daily personal movement trends, and energy efficiency.

Seasonal peak models are designed to predict winter and summer peaks based on a range of months when the highest peaks are expected to occur in each season.

Winter seasonal peak models regress the highest peak during November through March of each year against contemporaneous explanatory variables. Summer seasonal peak models regress the highest peak from April through October of each year against contemporaneous explanatory variables. Seasonal peak forecasts replace monthly model forecast results for the month each seasonal peak is most likely to occur.

Seminole's maximum demand is the aggregate of the one-hour simultaneous demands of all Members that maximizes the peak of the system in a single month. Forecasts of Seminole maximum demand are derived by applying coincident factors to Member maximum demand forecasts. Future peak demands coincident with Seminole may be equal to or less than Member non-coincident maximum peaks if the Member peak is normally not coincident with Seminole.

3.1.4 Alternative-Scenario Model

In addition to the base forecast, Seminole forecasts load conditions given mild and severe temperatures in the Members' geographical regions based on the 10th and 90th percentiles of historical temperature observations.

3.1.5 Behind-the-Meter Solar

Seminole started adding behind-the-meter distributed solar projections to the load forecast study process in 2017. The purpose of the analysis is to reduce future energy and demand requirements that Seminole expects will be served by solar facilities that are owned by either Members or end-use consumers (e.g., rooftop

solar). Seminole only forecasts new incremental growth in solar capacity, as existing capacity is already accounted for in historical load data. The underlying data for this analysis are gathered from the Members. Data from the solar facilities owned by Members (currently only one Member owns solar facilities) are obtained directly from the Members. End-use consumer-owned rooftop solar are gathered from annual net metering reports that the Members submit to the Florida Public Service Commission, which show the number of customer-owned renewable generation connections and the capacity associated with those connections. The historical trend from these data is analyzed to produce solar capacity growth rates five years ahead. End-use solar capacity growth rates published in the U.S. Energy Information Administration's (EIA) Annual Energy Outlook (AEO) are utilized thereafter. The hourly impacts of the installed capacity are estimated using the solar resource calculator available on the National Renewable Energy Laboratory (NREL) website. The hourly values output by the calculator are scaled up by Seminole's capacity projections and aggregated to estimate monthly energy output. Monthly demand estimates are selected based on seasonal peak hours coincident with Seminole.

3.1.6 Electric Vehicles

In 2024, an electric vehicle projection was introduced into the forecast process. The incremental impacts of electric vehicle usage were added to the energy and demand forecasts.

In 2021, Seminole worked with the Electric Power Research Institute (EPRI) to produce projections of total electric vehicles and total electric vehicles annual usage for each Member territory. Additionally, various average hourly charging profiles were sourced from the NREL EV-Pro Lite Load Profile Tool. Combining these two sources of data allowed for a total projection of incremental energy and demand impacts to be added to each of the Members' respective models.

3.2 Load Forecast Data

The primary resources for load forecasting are weather data, economic data, Member retail data, delivery point meter data, Google Mobility sector-specific movement and energy efficiency data. Number of consumers and sales by consumer class are provided by Members through the RUS Form-7 financial report. Hourly delivery point load data is provided monthly by Seminole's System Operations department. Independent source data for economic, demographic and movement statistics as well as energy efficiency are provided by government and credit rating agencies, independent vendors, and local universities.

Energy efficiency data for load forecast models are derived by combining Itron Statistically Adjusted End-Use (SAE) spreadsheets and Member residential appliance saturation surveys. Itron's spreadsheets provide appliance energy consumption and equipment stock historical data and projections from the EIA's AEO for the South Atlantic census region. Seminole also uses electric appliance saturation statistics captured in Member residential surveys to better reflect Member territory equipment adoption trends. These data are analyzed by utilizing Itron's SAE indexing methodology interacted with temperature

statistics to produce “heat-use index,” “cool-use index” and “base-use index” time-series at the usage-per-consumer level. These statistics are scaled to fit Seminole’s total-energy requirement models by rate class and are aggregated to a Member system total using weighted combinations.

The SAE theory for calculating commercial energy efficiency variables is optimized by incorporating County-level employment by industry data from the BLS to approximate weighted shares and intensities of industrial equipment within each Member’s service territory as opposed to the broader South Atlantic census region.

3.2.1 Materials Reviewed and/or Employed

Load Data by Delivery Point:

- Seminole’s Power Billing System

Retail Number of Consumers, Energy Sales by Rate Class:

- Rural Utilities Services Form-7 Financial and Statistical Reports

Individual Large Consumer Loads Over 1000 kVA:

- Member provided

Demographic and Economic Indicators:

- DataBuffet, Moody's Analytics Economic Consumer and Credit Analytics
- Projections of Florida Population by County, University of Florida Bureau of Economic and Business Research; Quarterly Estimates from the Florida Legislative Office of Economic and Demographic Research

Energy Efficiency and Behind-the-Meter Solar:

- Annual Energy Outlook, U.S. Energy Information Administration

- Residential and Commercial Statistically Adjusted End-Use Spreadsheets, Itron
- Member Residential Appliance Saturation Survey
- National Renewable Energy Laboratory of the U.S. Department of Energy

Sector-Specific Personal Movement Data:

- Google, Inc.

Weather Data:

- AccuWeather, Inc.

3.3 Significant Load Forecast Assumptions

3.3.1 Economic Assumptions

The nine Member cooperatives serve electricity to primarily rural areas within 42 counties in the north, central, and south regions of Florida, which differ uniquely in geography, weather, and natural resources. These broad, low-density land areas are largely undeveloped. Population growth in Seminole’s territory is sensitive to national economic and demographic factors that influence population migration from other states and metropolitan areas within Florida.

Historically, consumer growth in the Member systems has grown at a faster rate than the State of Florida as a whole and this trend is expected to continue. The leading indicators for load growth are Florida’s expanding economy and net migration prospects into the state.

3.3.2 Weather Assumptions

Hourly temperature data for 25 weather stations in the proximity of Member service

territories are provided by AccuWeather. Weather statistics for each Member's geographical area are derived from a set of weather stations that are found to best predict Member load over recent years.

Historical weather statistics input into forecast models include precipitation and relative humidity, minimum and maximum temperatures, and heating and cooling degree days. Monthly heating degree days represent the sum of degrees that each daily average temperature falls below 61 degrees Fahrenheit, which is an approximate temperature at which consumers turn on heating devices. Alternatively, monthly cooling degree days represent the sum of degrees that each daily average temperature exceeds 72 degrees Fahrenheit, which is an approximate temperature at which consumers turn on air conditioning units.

Normal weather statistics are based on a 30-year horizon of historical monthly observations. The two seasonal peak demand months for each year across the 30-year horizon are used to generate seasonal weather statistics. Extreme weather used for alternative-scenario forecasts include the 10th and 90th percentiles of historical temperatures, which represent mild and severe events, respectively.

FORECAST OF FACILITIES REQUIREMENTS

Seminole's base case forecasts of capacity to meet the projected summer and winter peak demands are in the following Schedules 7.1 and 7.2, respectively. The forecast includes the addition of approximately 2,101 MW of winter capacity by 2034. Such capacity is needed to replace expiring purchased power contracts and to serve increased Member load requirements while maintaining Seminole's reliability criteria. Overall, these additions, expirations, and changes result in a net increase of 549 MW of total winter capacity by 2034.

Seminole's capacity expansion plan includes the addition of the Shady Hills Energy Center, a new advanced, large-frame one-on-one natural gas 575 MW combined cycle unit, located in Pasco County and interconnected with the Duke Energy Florida 230 kV transmission system. Construction began in 2023, and the unit is expected to be commercially operational by the end of 2026.

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	
						Total	Obligation	MW	% of Pk		MW	% of Pk
2025	2,992	1,517	0	0	4,509	3,737	3,737	772	21%	0	772	21%
2026	2,992	1,607	0	0	4,599	3,815	3,815	784	21%	0	784	21%
2027	3,538	1,105	0	0	4,643	3,852	3,852	791	21%	0	791	21%
2028	3,538	1,149	0	0	4,687	3,890	3,890	797	20%	0	797	20%
2029	3,931	945	0	0	4,876	4,011	4,011	865	22%	0	865	22%
2030	3,931	1,031	0	0	4,962	4,129	4,129	833	20%	0	833	20%
2031	4,324	795	0	0	5,119	4,252	4,252	867	20%	0	867	20%
2032	4,324	895	0	0	5,219	4,338	4,338	881	20%	0	881	20%
2033	4,883	415	0	0	5,298	4,419	4,419	879	20%	0	879	20%
2034	4,883	535	0	0	5,418	4,510	4,510	908	20%	0	908	20%

- NOTE:
- Total installed capacity and the associated reserve margins are based on Seminole's current base plan and are based on a 15% reserve margin criterion.
 - Total Installed Capacity does not include SEPA.
 - Percent reserves are calculated at 15% of Seminole's obligation and include any surplus capacity.
 - 40% of Solar Summer Peak Rating is included in reserve calculation.

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	
						Total	Obligation	MW	% of Pk		MW	% of Pk
2025/26	3,162	2,030	0	0	5,192	3,873	3,873	794 ¹	20%	0	794	20%
2026/27	3,737	1,552	0	0	5,289	3,957	3,957	807 ¹	20%	0	807	20%
2027/28	3,737	1,114	0	0	4,851	4,033	4,033	818	20%	0	818	20%
2028/29	4,190	857	0	0	5,047	4,191	4,191	856	20%	0	856	20%
2029/30	4,190	986	0	0	5,176	4,315	4,315	861	20%	0	861	20%
2030/31	4,643	707	0	0	5,350	4,459	4,459	891	20%	0	891	20%
2031/32	4,643	807	0	0	5,450	4,546	4,546	904	20%	0	904	20%
2032/33	5,263	291	0	0	5,554	4,638	4,638	916	20%	0	916	20%
2033/34	5,263	416	0	0	5,679	4,732	4,732	947	20%	0	947	20%
2034/35	5,263	478	0	0	5,741	4,806	4,806	935	19%	0	935	19%

- NOTE:
- Total installed capacity and the associated reserve margins are based on Seminole's current base plan and are based on a 15% reserve margin criterion.
 - Total Installed Capacity does not include SEPA.
 - Percent reserves are calculated at 15% of Seminole's obligation and include any surplus capacity.
 - Solar capacity is not included in reserve calculations at the time of the winter peak.
- 1) Capacity for Shady Hills CTs 1-3 excluded due to transmission limitations.

4.1 Planned and Prospective Generating Facility Additions and Changes

Schedule 8 below shows Seminole’s planned and prospective generating facility additions and changes.

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							
Shady Hills Energy Center	1	Pasco	CC	NG		PL		2023	12/2026		612.0	546.0	575.0	U
UNNAMED CC ¹	1	UNKNOWN	CC	NG		PL		2029	12/2032		619.6	559.4	619.6	P
UNNAMED CT ¹	1	UNKNOWN	CT	NG		PL		2027	12/2028		453.0	393.2	453.0	P
UNNAMED CT ¹	2	UNKNOWN	CT	NG		PL		2029	12/2030		453.0	393.2	453.0	P

Notes:

- Abbreviations – See Schedule 1; U = Under Construction; P = Planned, not under construction
- 1) Represents proxy resource necessary for maintaining sufficient capacity to meet reserve requirement obligations. At this time, it has not determined if the capacity need will be met via self-build, acquisition, and/or purchased power alternatives. The ultimate method, type, size and location (if necessary) will be determined subsequent to the completion of a solicitation.

4.2 Proposed Generating Facilities

Schedule 9 below reports the status and specifications of Seminole’s proposed generating facilities.

Schedule 9
Status Report and Specifications of Proposed Generating Facilities

1	Plant Name & Unit Number	Shady Hills Energy Center	Unnamed Combined Cycle Unit 1 ²	Unnamed Combustion Turbine 1 ²	Unnamed Combustion Turbine 2 ²
2	Capacity				
	a. Summer (MW):	546.0	559.4	393.2	393.2
	b. Winter (MW):	575.0	619.6	453.0	453.0
	c. ISO (MW):	575.0	610.0	444.9	444.9
3	Technology Type:	Combined Cycle	Combined Cycle	Combustion Turbine	Combustion Turbine
4	Anticipated Construction Timing				
	a. Field construction start-date ¹ :	2023	2029	2027	2029
	b. Commercial in-service date:	Q4-2026	2032	2028	2030
5	Fuel				
	a. Primary fuel:	Natural Gas	Natural Gas	Natural Gas	Natural Gas
	b. Alternate fuel:	None	None	None	None
6	Air Pollution Control Strategy	Dry Low Nox Combustion, Selective Catalytic Reduction	TBD	TBD	TBD
7	Cooling Method:	Mechanical Draft Cooling Tower	TBD	TBD	TBD
8	Total Site Area:	Appx. 14 Acres (Permanent)	TBD	TBD	TBD
9	Construction Status:	Less than or equal to 50% complete	Planned	Planned	Planned
10	Certification Status:	Complete	Planned	Planned	Planned
11	Status With Federal Agencies	N/A	N/A	N/A	N/A
12	Projected Unit Performance Data				
	Planned Outage Factor (POF):	4.00	TBD	TBD	TBD
	Forced Outage Factor (FOF):	3.00	TBD	TBD	TBD
	Equivalent Availability Factor (EAF):	93.00	TBD	TBD	TBD
	Resulting Capacity Factor (%):	7044%	TBD	TBD	TBD
	Average Net Operating Heat Rate (ANOHR):	6,371 Btu/kWh	TBD	TBD	TBD
13	Projected Unit Financial Data (\$2022)				
	Book Life (Years):	33	33	33	33
	Total Installed Cost (In-Service Year \$/kW):	1304	TBD	TBD	TBD
	Direct Construction Cost (\$/kW):	1235	TBD	TBD	TBD
	AFUDC Amount (\$/kW):	70	TBD	TBD	TBD
	Escalation (\$/kW):	Included in values above	TBD	TBD	TBD
	Fixed O&M (\$/kW-Yr):	31	TBD	TBD	TBD
	Variable O&M (\$/Run Hour):	included in Fixed O&M	TBD	TBD	TBD
	Variable O&M (\$/MWH):	N/A	TBD	TBD	TBD
	K Factor:	N/A	TBD	TBD	TBD

Notes:

- 1) Assumes thirty-six months of construction for CCs, and twelve months for CTs.
- 2) Represents proxy resource necessary for maintaining sufficient capacity to meet reserve requirement obligations.

4.3 Proposed Transmission Lines

Schedule 10 below reports status and specifications of Seminole’s proposed directly associated transmission lines corresponding with proposed generating facilities.

Schedule 10

Status Report and Specifications of Proposed Associated Transmission Lines

1	Point of Origin and Termination:	Shady Hills Energy Center, LLC to DEF Hudson North
2	Number of Lines:	1
3	Right-of-Way	New transmission line right-of-way
4	Line Length:	0.51
5	Voltage:	230
6	Anticipated Construction Timing:	Start construction 2023, finish construction 11/2025, backfeed 11/2025
7	Anticipated Capital Investment:	\$2.5MM
8	Substation:	Shady Hills Energy Center, LLC Switchyard, DEF Hudson North
9	Participation with Other Utilities:	Duke Energy Florida (DEF)

OTHER PLANNING ASSUMPTIONS AND INFORMATION

5.1 Transmission Reliability

Seminole models its transmission planning guidelines after the Florida Reliability Coordinating Council's (FRCC) planning guidelines and procedures and in alignment with the North American Electric Reliability Corporation's (NERC) Reliability Standards. The FRCC also models its planning guidelines consistent with the NERC's Reliability Standards. Seminole's transmission facilities are planned such that they shall not exceed their applicable facility rating under normal conditions or contingency events. In addition, Seminole uses the following voltage guidelines for all applicable stations:

Table 1.3			
	Phase-to-Phase Voltage	No Contingency ¹ Normal Conditions (lower/upper limit)	Post Contingency ¹
Seminole Owned	230 kV	0.95pu/1.05pu	0.95pu/1.05pu
	115 kV	0.90pu/1.05pu	0.90pu/1.05pu
	69 kV	0.90pu/1.05pu	0.90pu/1.05pu
Member Owned	230 kV	0.90pu/1.05pu	0.90pu/1.05pu
	138 kV	0.90pu/1.05pu	0.90pu/1.05pu
	115 kV	0.90pu/1.05pu	0.90pu/1.05pu
	69 kV	0.90pu/1.05pu	0.90pu/1.05pu

Notes:

- 1) Exception: For Seminole and Member-owned BES transmission systems, the lower voltage limits used during transient/stability studies are in accordance with the FRCC's Stability Criteria document. For Seminole's owned 230 kV transmission system, the upper voltage limit during steady-state and transient studies can reach up to 1.065 pu; however, typically the transmission planner will utilize 1.05 pu as a starting point.

5.2 Plan Economics

Seminole creates a base case scenario using the most recent load forecast, fuel forecast, operational cost assumptions, and financial assumptions against which power supply alternatives are then compared to determine the overall effect on the present worth of revenue requirements (PWRR). All other relevant factors being constant, the option with the lowest long-term PWRR is normally selected. Sensitivity and risk analyses are completed to test the robustness of the selected generation option when various parameters change from the base study assumptions (e.g., load forecast, fuel price, and capital costs of new generation).

5.3 Fuel Price Forecast

5.3.1 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, as environmental rules/standards, coal generating station retirements, coal supply/demand imbalances, coal transportation availability/pricing, and world energy markets all combine to affect U.S. coal prices. The underlying value of coal at the mine will continue to be driven by changing domestic demand, reductions to the number of available coal suppliers, planned coal unit retirements, export opportunities for U.S. coal, and federal/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 the volatility in coal deliveries, skilled labor imbalances, federal rules and legislative changes, and fuel oil markets, all of which are impacting rail service in the U.S. CSX Transportation, Inc. is Seminole's sole coal transport provider, operating under a confidential multi-year rail transportation contract. Seminole also has a coal contract that supplies most of its coal requirements from the Illinois Basin. These arrangements reduce Seminole's coal price volatility risk for the near term.

5.3.2 Fuel Oil

The domestic price for fuel oil will continue to reflect the price volatility of the world energy market for crude oil and refined products. Currently Seminole is only purchasing ultra-low sulfur fuel oil for its generating stations, generally as a backup fuel to natural gas. Since Seminole uses limited quantities of fuel oil to provide for the energy requirements of the Members, fuel oil volatility is not a major driver of system energy costs.

5.3.3 Natural Gas

Natural gas prices were generally stable in 2024, similar to 2023. There was a 4-day period in February 2024 where prices peaked at \$12.97 per MMBtu, but stable prices followed and Henry Hub spot gas prices averaged \$2.25 per MMBtu for the year 2024. Relative to 2023, natural gas prices in 2024 fell about 11% on average due to consecutive moderate winters, healthy domestic gas production and ample gas in storage, amongst other factors. Natural gas pricing and volatility are

generally expected to increase due to domestic natural gas needs, including new liquefied natural gas facilities and modest increases to natural gas production. For 2025 and beyond, nominal gas prices are projected to average \$3.52 per MMBtu through 2034.

5.3.4 Modeling of Fuel Sensitivity

Given the uncertainty of future fuel prices, the historical volatility of natural gas prices, and Seminole's reliance on gas as a significant component of its fuel portfolio, it is prudent to evaluate the impact of various natural gas prices on Seminole's long-term resource portfolio. For this, Seminole incorporates both a high and low natural gas price forecast as a complement to its base case price forecast to support resource planning. Calculated with available market information, Seminole's high/low gas price curves form a statistical confidence interval around its base case price forecast.

5.4 Coal/Gas Price Differential

The 2024 market prices for natural gas and coal delivered to Seminole's generating units were generally stable in both markets. On average in 2024, natural gas pricing was lower than coal pricing. Coal prices in 2025 are projected to be lower than natural gas prices, and this trend is generally expected to remain throughout the balance of the study period.

5.5 Modeling of Generation Unit Performance

Recent historical data, planned activities and manufacturers' design performance data are used in the development of modeling assumptions (capacity, heat rate, ramp rates and forced outage rates) for existing units. Purchased power agreements are modeled in

accordance with contractual requirements.

5.6 Financial Assumptions

Expansion plans are evaluated based on Seminole's forecast of market-based loan interest rates with Member rates adequate to adhere to financial metric targets defined in Seminole's debt covenants.

5.7 Resource Planning Process

Seminole's primary long-range resource planning goal is to develop the most cost-effective resource portfolio necessary to meet the Members' load requirements while simultaneously maintaining high system reliability and managing risk. This goal is achieved by the implementation of Seminole's integrated resource planning process. Seminole's optimization process for resource selection is driven by total revenue requirements. As a not-for-profit cooperative, revenue requirements translate directly into rates to the Members. The plan with the lowest revenue requirements is generally selected, assuming that other factors such as reliability impact, initial rate impact, risk, 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.

5.8 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
- to account for load forecast uncertainty

Seminole's primary reliability criteria is a minimum reserve margin of 15%, plus Seminole's Florida Reserve Sharing Group (FRSG) Contingency Reserve Allocation of approximately 200 MW, which ensures that Seminole has adequate generating capacity to provide reliable service to the Members.

5.9 Demand-Side Management Programs

Schedules 3.1 and 3.2 reflect the estimated savings from residential and commercial load management programs. Seminole promotes Member involvement in demand-side management (DSM) through its rate structure, which provides Members with price signals that reflect Seminole's cost of supplying power in aggregate. Under this rate structure, Seminole's demand charge to each of the Members is applied to each Member's demand at the time of Seminole's peak. This encourages Members to concentrate their load-management efforts on controlling Seminole's overall system peak rather than their separate peaks. In addition, Seminole's wholesale rate to the Members includes time-of-use fuel charges to reflect the differences in fuel costs incurred by Seminole to serve Members during the peak, off-peak and super off-peak periods.

Each Member may use these price signals to evaluate the cost-effectiveness of DSM, energy efficiency and conservation measures for its own circumstances. To ensure Members have the opportunity to achieve maximum load management benefit, Seminole provides a coordinated load management / demand reduction strategy and provides notifications to Members when Seminole's monthly billing peak is expected to occur.

Members participate in Seminole's coordinated load management / demand reduction strategy during peak demand billing events through distribution system voltage reduction and coincident peak power rate programs. Members also offer a variety of programs and services to end-use consumers in order to promote energy efficiency, conservation and cost savings. Member DSM, energy efficiency and conservation programs include:

- **Distribution System Voltage Reduction (VR):** Coordinated load management / demand reduction program where Member system operators will lower voltage during critical peak billing periods, within allowable thresholds on distribution feeders to reduce demand during critical peak billing periods.
- **Commercial Coincident Peak Power (CPP) Rates:** Coordinated load management / demand reduction program where enrolled commercial and industrial consumers are signaled to shed load during critical peak billing periods.
- **Commercial Interruptible Rates:** Direct load control program where Seminole or Members interrupt electrical service to enrolled consumers during extreme peak demand, capacity shortage or emergency conditions.
- **Commercial Customer Load Generation Program:** Standby peak-shaving generators, which Seminole and the Members may dispatch for the purpose of load management and enhanced reliability. Members with standby generators under this program receive a billing credit.
- **Time-of-Use (TOU) Rates:** Residential, commercial, or industrial rates that encourage consumers to use power during off-peak hours when prices are relatively less expensive.

- **Residential Pre-Pay:** Residential consumers pre-pay for their electricity and receive enhanced feedback on their energy use and costs. The increased energy awareness that this program provides results in behavioral changes that produce energy savings.
- **LED Efficient Bulb Giveaway:** This program provides end-use consumers with free energy-efficient 10-watt equivalent light-emitting diode (“LED”) bulbs to replace their existing compact fluorescent light (“CFL”) bulbs or incandescent bulbs.
- **LED Outdoor and Street Lighting:** Replacement of Member-owned outdoor and street lighting with lower wattage LEDs.
- **Energy Smart Rebates:** A rebate is given to residential consumers to upgrade to more efficient equipment and/or improve the building envelope. Rebate opportunities include air conditioners and heat pumps, heat pump water heaters, solar water heaters, insulation (batt or spray foam) and window film.
- **Energy Audits:** On-site energy audit program for residential, commercial and industrial consumers.

Seminole assists the Members in evaluating and implementing DSM measures. Since 2008, Seminole and the Members have participated in an Energy Efficiency Working Group to coordinate and further enhance energy conservation and efficiency initiatives. The function of this group is to promote conservation, efficiency, and DSM programs through the sharing of information, consumer education, and joint assessment of energy efficiency technologies. In addition to participating in the Working Group, Seminole has sponsored its own conservation and efficiency initiatives, which include giving LED light bulbs to consumers during Member meetings and administering an LED light bulb bulk purchase

program for Members. Seminole also provides Members with materials that can be distributed to end-use consumers including educational brochures, manufactured housing weatherization brochures, videos on energy efficiency home auditing, and a video on Cooperative Solar. Seminole remains active in upgrading utility system efficiency at administration and generation facilities.

In addition, Seminole works with the Members to evaluate and implement pilot programs. In 2019, Seminole, in coordination with the Members, began the implementation of a Smart Thermostat demand response pilot program that in the first year had 1,100 end-use consumer member thermostats enrolled. The second phase of the Smart Thermostat pilot began in May 2021 and was successfully completed in December 2022 with over 2,750 thermostats available for demand response control. The results of both pilots were analyzed, and it was decided to proceed with a full Smart Thermostat program beginning in 2023. As of the end of 2024, Seminole has more than 10,000 enrolled thermostats available for control with Members managing enrollment and participation payments.

Finally, Seminole is committed to working with the Members to improve program tracking and increase future savings by enhancing current efforts and adding new measures to existing programs when appropriate. Seminole has applied for funding from the Federal Government to explore adding additional demand response programs, such as water heaters, pool pumps, commercial and residential batteries, and commercial and residential electric vehicle charging equipment.

5.10 Strategic Concerns

In the rapidly changing utility industry, strategic and risk-related issues are becoming increasingly important considerations in addition to economics within Seminole's integrated resource planning process currently underway. Seminole values resource diversity, flexibility, and optionality as a hedge against a variety of risks, as evidenced by its current generation portfolio. Long-term resources contribute stability while shorter-term arrangements add flexibility. Seminole considers both system and unit-specific capacity when determining reserve requirements. Resource location, potential large loads, transmission interconnection availability, process and timeframes, and deliverability are all considerations for Seminole in developing its resource portfolio. Flexibility in fuel supply is another significant strategic concern. A portfolio that relies on a diverse number of fuel types is better protected against extreme price fluctuations, supply interruptions, and transportation constraints/instability. Seminole believes that the existing and future diversity in its power supply plan has significant strategic value, allowing Seminole to respond to both market and industry changes while remaining competitive.

5.11 Procurement of Supply-Side Resources

In making decisions on future procurement of power supply, Seminole compares self-build, acquisition, and purchased power alternatives. Seminole solicits proposals from reliable, creditworthy counterparties in the wholesale market. Seminole's evaluation of its options includes an assessment of economic life cycle cost, reliability, operational flexibility, strategic concerns, and risk elements, among other factors.

5.12 Transmission Construction and Upgrade Plans

Seminole does not have any transmission construction or upgrade plans in the planning horizon that require certification under the Transmission Line Siting Act (403.52 – 403.536, F.S.).

ENVIRONMENTAL AND LAND USE INFORMATION

6.1 Potential Sites

Seminole identifies two (2) Potential Sites under evaluation for the 2025 TYSP in accordance with Rules 25-22.070 and 25-22.072 F.A.C.

6.1.1 Gilchrist Site – Gilchrist County, Florida

Seminole currently owns approximately 520 acres of contiguous land in Gilchrist County that may support future photovoltaic solar generation coupled with battery energy storage systems, and/or peaking generation.

A) U.S. Geological Survey (USGS) General Location:

See provided **Map 3**.

B) Existing Land Uses including Adjacent Areas:

Much of the site consists of longleaf and slash pine communities. Surrounding area land uses include pine plantations, row crops and other agricultural lands, mixed with low-density residential areas.

C) General Environmental Features of Site:

Few natural upland communities remain on the site with sparse isolated wetland areas

within the eastern portion. Listed species representation is expected to include gopher tortoises (state threatened).

D) Water Usage Information:

Water usage expected to be limited to occasional photovoltaic panel cleaning.

E) Water Source Information:

Undetermined at this point of site evaluation.

6.1.2 Seminole Generating Station Site – Putnam County, Florida

Seminole’s existing state certified generating site of approximately 1,981.5 acres in Putnam County, Florida includes one (1) permitted coal-fired generating unit under preliminary consideration for future natural gas co-firing (percentage undetermined).

A) U.S. Geological Survey (USGS) General Location:

See provided **Map 4**

B) Existing Land Uses including Adjacent Areas:

Much of the site is developed and utilized for power generation including one retired coal generating unit, one active coal generating unit, and a two-on-one natural gas-fired generating plant. Adjoining land uses per Putnam County’s Future Land Use Plan consist of “A2” Agricultural areas and an industrial site fronting Route 17 to the west of the site. Rural “RR” residential areas are located south of CR-209 to the south of the site.

C) General Environmental Features of Site:

Undeveloped areas include both forested uplands and wetland communities. Listed species representation is expected to include gopher tortoises (state threatened).

D) Water Usage Information:

As currently permitted.

E) Water Source Information:

As currently permitted.

6.2 Preferred Sites

Seminole identifies zero (0) Preferred Sites under evaluation for the 2025 TYSP in accordance with Rules 25-22.070 and 25-22.072 F.A.C.

Map 4

