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SENIOR COUNSEL

April 1, 2025

VIA ELECTRONIC DELIVERY

Adam J. Teitzman, Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: Ten-Year Site Plan as of December 31, 2024; Undocketed

Dear Mr. Teitzman:

Pursuant to Rule 25-22.071, F.A.C., please find enclosed for filing Duke Energy Florida, LLC's, 2025 Ten-Year Site Plan.

Thank you for your assistance in this matter and if you have any questions, please feel free to contact me at (850) 521-1425.

Sincerely,

/s/ Stephanie A. Cuello

Stephanie A. Cuello

SAC/mh
Attachment

cc: Greg Davis, GDavis@psc.state.fl.us and Phillip Ellis, PEllis@psc.state.fl.us, Division of Engineering, FPSC

Duke Energy Florida, LLC Ten-Year Site Plan

April 2025

2025-2034

**Submitted to:
Florida Public Service Commission**



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CODE IDENTIFICATION SHEET

Generating Unit Type

BA - Battery Storage
CC - Combined Cycle
COG - Cogeneration Facility
CT - Combustion Turbine
GT - Gas Turbine
NP - Steam Power - Nuclear
PV – Photovoltaic
SPP - Small Power Producer
SPS – Solar (PV) Plus Storage
ST - Steam Turbine - Non-Nuclear

Fuel Type

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

Fuel Transportation

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

Future Generating Unit Status

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

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EXECUTIVE SUMMARY

Duke Energy Florida's (DEF) 2025 Ten-Year Site Plan (TYSP) provides a description of the future electric generating unit additions and retirements selected to meet projected DEF customer resource needs for 2025 through 2034. DEF's plan continues the multi-year progress in the transition to a cleaner and more cost-effective generating fleet. In the near term, DEF anticipates the expiration of high-priced legacy contracts and retirement of numerous older simple cycle combustion turbine (CT) units offset by a planned investment in new solar, storage, and solar plus storage generation. At the end of this the ten-year planning period, DEF anticipates the retirement of the remaining two coal fired generating units and the potential to replace most of the energy supplied by those units with energy generated from the planned solar generating projects along with capacity support from energy storage (batteries) and new gas fired combustion turbines.

DEF's planned investments in renewable generation will enable fuel savings for customers, energy diversification, and will continue DEF's commitment towards a lower carbon future. Through this TYSP, DEF is planning to extend the successful deployment of utility scale solar projects pre-approved by the Florida Public Service Commission (FPSC) but subject to meeting the requirements specified in the 2024 Rate Case Settlement, which will bring over 900 MW of solar generating capacity to the DEF system through 2027. Over the remainder of the ten-year planning period, DEF projects the addition of at least 375 MW of utility scale solar per year through 2030 and 600 MW per year after that. By the end of the planning period, DEF expects to have 5,900 MW of utility scale solar generating capacity online.

DEF's measured and steady pace of projected solar generation adoption will combine with the increasingly clean gas-fired generating fleet. DEF is continuing to implement efficiency enhancements that will reduce fleet fuel consumption while adding close to 400 MW in highly efficient combined cycle generating capacity. Even with the additional CC upgrades, DEF anticipates that contract expirations and older unit retirements results in a reduction in the fossil fuel fired generation of approximately 3,000 MW from 2023 through the planning period.

Transmission-tied grid scale battery energy storage units are planned to be placed in service in years 2027, 2029, and 2034. The 2027-unit, Powerline, combines over 200 MWh of energy storage

and a 100 MW capacity to provide grid stabilization during periods of solar volatility and energy shifting to lower cost of energy based on time of day. In addition, DEF continues to plan batteries paired with solar units from 2028-2034 to further balance the system and provide reliability resources supporting the large amount of planned solar generation.

DEF will add four combustion turbines between years 2033 and 2034 that will replace some of the peak capacity from Crystal River North that is planned to be retired in year 2034.

Electric utilities across the nation are being impacted by the introduction of large-load customers, many associated with the expansion of data centers and AI infrastructure. DEF's plan does not currently include any new large-load customers. If such a customer were to make a firm plan to locate in the DEF service territory, DEF will inform the Commission and update its plans as appropriate.

DEF plans to meet the power needs of its customers cost-effectively while adding an increasing portfolio of low and non-carbon emitting assets. The future solar and storage in this expansion plan along with increased efficiency in conventional generation provides energy diversity by reducing natural gas consumption while maintaining reliable and dispatchable capacity.

INTRODUCTION

Section 186.801 of the Florida Statutes (F.S.) requires electric generating utilities to submit a TYSP to the FPSC. The TYSP includes historical and projected data pertaining to the utility's load and resource needs as well as a review of those needs. DEF's TYSP is compiled in accordance with FPSC Rules 25-22.070 through 25-22.072, Florida Administrative Code (F.A.C.).

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

This TYSP document contains four chapters as indicated below:

- **CHAPTER 1 - DESCRIPTION OF EXISTING FACILITIES**

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

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

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

- **CHAPTER 3 - FORECAST OF FACILITIES REQUIREMENTS**

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

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

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

CHAPTER 1

***DESCRIPTION OF
EXISTING FACILITIES***



CHAPTER 1

DESCRIPTION OF EXISTING FACILITIES

EXISTING FACILITIES OVERVIEW

OWNERSHIP

Duke Energy Florida, LLC (DEF or the Company) is a wholly owned subsidiary of Duke Energy Corporation (Duke Energy).

AREA OF SERVICE

DEF has an obligation to serve approximately 2.0 million customers in Florida. Its service area covers approximately 20,000 square miles in west central Florida and includes the densely populated areas around Orlando, as well as the cities of St. Petersburg and Clearwater. DEF is interconnected with 21 municipal and nine rural electric cooperative systems who serve additional customers in Florida. DEF is subject to the rules and regulations of the Federal Energy Regulatory Commission (FERC), the Nuclear Regulatory Commission (NRC), and the FPSC. DEF's Service Area is shown in Figure 1.1.

TRANSMISSION/DISTRIBUTION

The Company is part of a nationwide interconnected power network that enables power to be exchanged between utilities. The DEF transmission system includes approximately 5,400 circuit miles of transmission lines. The distribution system includes approximately 18,000 circuit miles of overhead distribution conductors and approximately 14,000 circuit miles of underground distribution cable.

ENERGY MANAGEMENT and ENERGY EFFICIENCY

The Company's residential Energy Management program represents a demand response (DR) type of program where participating customers help manage future load growth and costs. Approximately 433,000 customers participated in the residential Energy Management program during 2024, contributing about 634 MW of winter peak-shaving capacity for use during high load periods. DEF's currently approved DSM portfolio of programs consist of five residential programs

DUKE ENERGY FLORIDA

**SCHEDULE 1
EXISTING GENERATING FACILITIES**

AS OF DECEMBER 31, 2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
PLANT NAME	UNIT NO.	LOCATION (COUNTY)	UNIT TYPE	FUEL PRL	FUEL ALT.	FUEL TRANSPORT PRL	FUEL ALT.	ALT. FUEL DAYS USE	COM'L IN-SERVICE MO./YEAR	EXPECTED RETIREMENT MO./YEAR	GEN. MAX. NAMEPLATE KW	NET CAPABILITY SUMMER MW	NET CAPABILITY WINTER MW
<u>STEAM</u>													
ANCLOTE	1	PASCO	ST	NG		PL			10/74		556,200	508	521
ANCLOTE	2	PASCO	ST	NG		PL			10/78		556,200	497	504
CRYSTAL RIVER	4	CITRUS	ST	BIT		WA	RR		12/82	6/2034 **	739,260	712	721
CRYSTAL RIVER	5	CITRUS	ST	BIT		WA	RR		10/84	6/2034 **	739,260	710	721
											Steam Total	2,427	2,467
<u>COMBINED-CYCLE</u>													
P L BARTOW	4	PINELLAS	CC	NG	DFO	PL	TK	*	6/09		1,254,200	1,142	1,200
CITRUS COUNTY COMBINED CYCLE	PB1	CITRUS	CC	NG		PL			10/18		985,150	807	925
CITRUS COUNTY COMBINED CYCLE	PB2	CITRUS	CC	NG		PL			11/18		985,150	810	929
HINES ENERGY COMPLEX	1	POLK	CC	NG		PL			4/99		546,500	501	521
HINES ENERGY COMPLEX	2	POLK	CC	NG	DFO	PL	TK	*	12/03		548,250	532	549
HINES ENERGY COMPLEX	3	POLK	CC	NG	DFO	PL	TK	*	11/05		561,000	523	535
HINES ENERGY COMPLEX	4	POLK	CC	NG	DFO	PL	TK	*	12/07		610,500	544	544
OSPREY ENERGY CENTER POWER PLANT	1	POLK	CC	NG		PL			5/04		644,300	245	245
TIGER BAY	1	POLK	CC	NG		PL			8/97		278,100	199	230
											CC Total	5,303	5,678
<u>COMBUSTION TURBINE</u>													
BARTOW	P1	PINELLAS	CT	DFO		WA		*	5/72	6/2027 **	55,400	41	50
BARTOW	P2	PINELLAS	CT	NG	DFO	PL	WA	*	6/72	6/2034 **	55,400	41	53
BARTOW	P3	PINELLAS	CT	DFO		WA		*	6/72	6/2027 **	55,400	41	51
BARTOW	P4	PINELLAS	CT	NG	DFO	PL	WA	*	6/72	6/2034 **	55,400	45	58
BAYBORO	P1	PINELLAS	CT	DFO		WA		*	4/73	9/2026 **	56,700	37	55
BAYBORO	P2	PINELLAS	CT	DFO		WA		*	4/73	9/2026 **	56,700	19	28
BAYBORO	P3	PINELLAS	CT	DFO		WA		*	4/73	9/2026 **	56,700	40	54
BAYBORO	P4	PINELLAS	CT	DFO		WA		*	4/73	9/2026 **	56,700	41	56
DEBARY	P2	VOLUSIA	CT	DFO		TK		*	12/75-4/76	6/2027 **	73,440	45	57
DEBARY	P3	VOLUSIA	CT	DFO		TK		*	12/75-4/76	6/2027 **	73,440	45	59
DEBARY	P4	VOLUSIA	CT	DFO		TK		*	12/75-4/76	6/2027 **	73,440	46	59
DEBARY	P5	VOLUSIA	CT	DFO		TK		*	12/75-4/76	6/2027 **	73,440	45	58
DEBARY	P6	VOLUSIA	CT	DFO		TK		*	12/75-4/76	6/2027 **	73,440	46	59
DEBARY	P7	VOLUSIA	CT	NG	DFO	PL	TK	*	10/92		103,500	74	93
DEBARY	P8	VOLUSIA	CT	NG	DFO	PL	TK	*	10/92		103,500	75	94
DEBARY	P9	VOLUSIA	CT	NG	DFO	PL	TK	*	10/92		103,500	76	94
DEBARY	P10	VOLUSIA	CT	DFO		TK		*	10/92		103,500	72	88
INTERCESSION CITY	P1	OSCEOLA	CT	DFO		PL,TK		*	5/74	6/2034 **	56,700	45	61
INTERCESSION CITY	P2	OSCEOLA	CT	DFO		PL,TK		*	5/74	6/2034 **	56,700	46	60
INTERCESSION CITY	P3	OSCEOLA	CT	DFO		PL,TK		*	5/74	6/2034 **	56,700	46	61
INTERCESSION CITY	P4	OSCEOLA	CT	DFO		PL,TK		*	5/74	6/2034 **	56,700	46	62
INTERCESSION CITY	P5	OSCEOLA	CT	DFO		PL,TK		*	5/74	6/2034 **	56,700	45	59
INTERCESSION CITY	P6	OSCEOLA	CT	DFO		PL,TK		*	5/74	6/2034 **	56,700	47	60
INTERCESSION CITY	P7	OSCEOLA	CT	NG	DFO	PL	PL,TK	*	10/93		103,500	78	90
INTERCESSION CITY	P8	OSCEOLA	CT	NG	DFO	PL	PL,TK	*	10/93		103,500	77	88
INTERCESSION CITY	P9	OSCEOLA	CT	NG	DFO	PL	PL,TK	*	10/93		103,500	77	88
INTERCESSION CITY	P10	OSCEOLA	CT	NG	DFO	PL	PL,TK	*	10/93		103,500	74	86
INTERCESSION CITY	P11	OSCEOLA	CT	DFO		PL,TK		*	1/97		148,500	140	161
INTERCESSION CITY	P12	OSCEOLA	CT	NG	DFO	PL	PL,TK	*	12/00		98,260	73	89
INTERCESSION CITY	P13	OSCEOLA	CT	NG	DFO	PL	PL,TK	*	12/00		98,260	73	91
INTERCESSION CITY	P14	OSCEOLA	CT	NG	DFO	PL	PL,TK	*	12/00		98,260	73	90
SUWANNEE RIVER	P1	SUWANNEE	CT	NG	DFO	PL	TK	*	10/80	6/2034 **	65,999	48	65
SUWANNEE RIVER	P2	SUWANNEE	CT	NG		PL		*	10/80	6/2034 **	65,999	48	64
SUWANNEE RIVER	P3	SUWANNEE	CT	NG	DFO	PL	TK	*	11/80	6/2034 **	65,999	49	65
UNIVERSITY OF FLORIDA	P1	ALACHUA	GT	NG		PL			1/94		43,000	44	50
											CT Total	1,958	2,456

* APPROXIMATELY 2 TO 3 DAYS OF OIL USE TYPICALLY TARGETED FOR ENTIRE PLANT.

** DATES FOR RETIREMENT ARE APPROXIMATE AND SUBJECT TO CHANGE

DUKE ENERGY FLORIDA

SCHEDULE 1
EXISTING GENERATING FACILITIES

AS OF DECEMBER 31, 2024

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	UNIT	LOCATION	UNIT	FUEL	FUEL TRANSPORT	ALT. FUEL	SERVICE	RETIREMENT	NAMEPLATE	GEN. MAX.	NET CAPABILITY	SUMMER	WINTER
PLANT NAME	NO.	(COUNTY)	TYPE	PRI.	ALT.	PRI.	ALT.	DAYS USE	MO./YEAR	MO./YEAR	KW	MW	MW
<u>SOLAR</u>													
OSCEOLA SOLAR FACILITY	PV1	OSCEOLA	PV	SO					5/16		3,800	1.95	0.18
PERRY SOLAR FACILITY	PV1	TAYLOR	PV	SO					8/16		5,100	2.63	0.24
SUWANNEE RIVER SOLAR FACILITY	PV1	SUWANNEE	PV	SO					11/17		8,800	4.56	0.42
HAMILTON SOLAR POWER PLANT	PV1	HAMILTON	PV	SO					12/18		74,900	39.03	3.63
TRENTON SOLAR POWER PLANT	PV1	GILCHRIST	PV	SO					12/19		74,900	39.23	3.65
LAKE PLACID SOLAR POWER PLANT ***	PV1	HIGHLANDS	PV	SO					12/19		25,200	13.53	1.26
ST PETERSBURG PIER	PV1	PINELLAS	PV	SO					12/19		350	0.18	0.02
COLUMBIA SOLAR POWER PLANT	PV1	COLUMBIA	PV	SO					3/20		74,900	39.23	3.67
DEBARY SOLAR POWER PLANT	PV1	VOLUSIA	PV	SO					5/20		74,500	39.02	3.65
SANTA FE SOLAR POWER PLANT	PV1	COLUMBIA	PV	SO					3/21		74,900	39.42	3.69
TWIN RIVERS SOLAR POWER PLANT	PV1	HAMILTON	PV	SO					3/21		74,900	39.42	3.69
DUETTE SOLAR POWER PLANT	PV1	MANATEE	PV	SO					10/21		74,500	39.41	3.67
SANDY CREEK SOLAR POWER PLANT	PV1	BAY	PV	SO					5/22		74,900	39.62	3.71
FORT GREEN SOLAR POWER PLANT	PV1	HARDEE	PV	SO					6/22		74,900	39.62	3.71
CHARLIE CREEK SOLAR POWER PLANT	PV1	HARDEE	PV	SO					8/22		74,900	39.62	3.71
BAY TRAIL SOLAR POWER PLANT	PV1	CITRUS	PV	SO					9/22		74,900	39.82	3.71
HILDRETH SOLAR POWER PLANT	PV1	SUWANNEE	PV	SO					4/23		74,900	39.82	3.73
HIGH SPRINGS SOLAR POWER PLANT	PV1	ALACHUA	PV	SO					4/23		74,900	39.82	3.73
HARDEETOWN SOLAR POWER PLANT	PV1	LEVY	PV	SO					4/23		74,900	39.82	3.73
BAY RANCH SOLAR POWER PLANT	PV1	BAY	PV	SO					4/23		74,900	39.82	3.73
WINQUEPIN RENEWABLE ENERGY CENTER	PV1	MADISON	PV	SO					3/24		74,900	40.02	3.75
MULE CREEK RENEWABLE ENERGY CENTER	PV1	BAY	PV	SO					3/24		74,900	40.02	3.75
FALMOUTH RENEWABLE ENERGY CENTER	PV1	SUWANNEE	PV	SO					6/24		74,900	40.02	3.75
COUNTY LINE RENEWABLE ENERGY CENTER	PV1	ALACHUA	PV	SO					8/24		74,900	40.22	3.75
											Solar Total	775.9	72.5
											TOTAL RESOURCES (MW)	10,463	10,673

*** LAKE PLACID'S CAPACITY DERATED TEMPORARILY DUE TO HURRICANE IMPACT

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CHAPTER 2

FORECAST OF ELECTRIC POWER DEMAND AND ENERGY CONSUMPTION



CHAPTER 2
FORECAST OF ELECTRIC POWER DEMAND
AND
ENERGY CONSUMPTION

OVERVIEW

The information presented in Schedules 2, 3, and 4 represents DEF's history and forecast of customers, energy sales (GWh), and peak demand (MW). In general, this discussion refers to DEF's base forecast.

The DEF forecast utilized economic data from July 2024. From a macro perspective, the U.S. economy had been navigating a complex landscape. The Federal Reserve (Fed) was expected to begin cutting interest rates in the fall, aiming to gradually return to an equilibrium rate while maintaining a vigilant stance on inflation, which had been on track to approach the Fed's 2% target. Long-term Treasury yields had stabilized near 4%, aligning with nominal potential GDP growth. Fiscal policy, while challenged by a large federal deficit and high debt-to-GDP ratio, was expected to face pivotal changes after the November 2024 elections, with tax cuts and healthcare subsidies set to expire. A divided government was anticipated to lead to modest fiscal adjustments. The U.S. dollar had remained strong, supported by tight monetary policy and global uncertainties, though its value was expected to moderate as the Fed eased rates. From the most recent low in Q2 2020, inflation adjusted corporate profits remained above pre-pandemic levels and have continued to increase to all-time highs. Energy prices had been stable, with oil prices forecasted to remain in the \$80-\$90 range, aided by increased production and a well-supplied global market. Geopolitical risks, including the Ukraine conflict and U.S.-China tensions, had continued to cast a shadow but were unlikely to escalate into significant economic disruptions. Despite global uncertainties, the U.S. dollar's status as the reserve currency had remained unchallenged, and the economic fallout from the pandemic had largely receded, contributing to a cautiously optimistic outlook.

In mid-2024, Florida's economy faced mixed signals. Recent performance showed a slowdown, with nonfarm employment growth at its weakest since the pandemic. Interest-rate-sensitive sectors, such as financial services and manufacturing, were shedding jobs. The housing market

had stagnated, with prices flat over the previous three months, and labor force growth had cooled. Key economic drivers, such as tourism and finance, remained bright spots. Tourism, though moderating as pent-up demand waned, was set to stay robust with cooling inflation and steady vacation plans. Finance, though still constrained by the inverted yield curve (when short-term rates are higher than long-term rates), was expected to recover in early 2025 when Federal Reserve rate cuts restored profitability, driving high-wage job growth in major metro areas such as Orlando. However, challenges persisted. New condo regulations requiring structural inspections and higher reserves could have weighed on the housing market, exacerbating existing pressures from high insurance premiums and taxes. Active inventories had risen, and price reductions were increasingly common. In construction, the recent resilience in employment, driven by multifamily and single-family building, was expected to fade as rising interest rates slowed new starts and builders worked through backlogs. While Florida's economy was expected to moderate through the rest of 2024, long-term prospects remained strong due to favorable costs, climate, and industrial dynamics. Tourism and financial services were expected to underpin gradual job growth, but structural and rate-sensitive challenges were likely to temper near-term expansion.

Historical 29-county service area household, population, and people per household data were used for the Base Case, High Case, and Low Case service area population projections. The historical DEF service area population was estimated to have grown at an average ten-year compound annual growth rate (CAGR) of 2.14% from 2015-2024 (Schedule 2.1.1 Column 2). The projected DEF service area population growth weakened to a level of 1.21% over the 2025-2034 period due a reversion to pre-pandemic levels of growth, as well as to higher mortality rates among aging baby-boomers, a slowing real estate market leading to slowing construction, and the increasing cost of homeowners' insurance. The rate of residential customer growth, which averaged 1.82% per year over the historical ten-year period, is expected to continue at an average of 1.70%. The total number of DEF customers grew from 1.72 million in 2015 to 2.01 million in 2024, an increase of 287,609 or 1.73% annual growth rate. The projected number of additional total customers between 2025 and 2034 is projected to be 322,563 for a 1.64% annual growth rate.

Responses to the pandemic, which changed the patterns of class energy consumption, have reverted to pre-COVID usage characteristics. Remote work in the DEF service area still exists but

at a much smaller level than that reached early in the pandemic. These changes imply a decrease in residential energy consumption which can be seen in the projected annual growth rate for average kWh consumption per customer (Schedule 2.1.1 Column 6). The projected ten-year annual growth rate for average kWh consumption per customer is -0.96% vs. a historical rate of -0.68%. Residential use per customer continues to decline due to higher energy prices/inflation, energy efficiency and rooftop solar adoption. In terms of annual residential sales growth, measured in GWh (0.72% projected vs. 1.12% historical), sustained residential customer growth (1.70% projected vs. 1.82% historical) is working to offset the declining use per customer. Favorable weather and the low cost of living in Florida relative to other parts of the U.S. continues to attract people to the state. Florida continues to be a tourist attraction and retirement haven. Given the increase in the retirement population in the U.S. over the near term as the “Baby Boomer” generation reaches 65 and older, the retirement cohort in Florida should increase significantly over the next five to ten years. Increases in commercial and industrial class energy requirements have returned as well. Commercial sales growth (0.89% projected vs. 0.46% historical) is projected to be driven by population growth, and consumer spending/tourism. Sales to the industrial class are expected to resume growth in the next ten years (0.95% projected vs. -0.02% historical). While recent sales in this sector have been flat, a new manufacturing customer will add 42 GWH to the system in 2025 and will grow to 160 GWH by 2032. Long-term, total retail sales continue to increase (0.74% projected vs. 0.72% historical) but remain subject to uncertain economic conditions such as global conflicts, inflation, political gridlock, and weakness in the labor market.

From 2015 to 2024, net energy for load (NEL) increased by 0.49% per year (Schedule 2.3.1 Column 4). The average projected ten-year CAGR for NEL is 0.72%. While Sales for Resale experienced an average annual decrease of -14.25% during the forecast period, sustained retail load growth offsets the loss of these contracts. Long term, DEF Sales for Resale energy sales are projected to essentially disappear.

During the 2015 to 2024 historical period, the DEF summer net firm demand (Schedule 3.1.1 Column 10) increased from 8,431 MW to 8,605 MW, an average annual ten-year increase of 0.23%. The Wholesale summer peak decreased as contracts were terminated with a ten-year CAGR of -1.86%. Wholesale load was offset by higher conservation levels and additional

residential demand response capability (Schedule 3.1.1). Going forward, the projected total DEF summer net firm demand, 2025 – 2034, grows at an average annual rate of 0.87% net of the declining Sales for Resale. The historical DEF firm winter peak ten-year CAGR was -3.16% per year, a result of historically low Wholesale demand, as well as increased conservation levels/demand reductions at the time of the system peak. Growth in projected total DEF winter net firm demand is marginally negative with an average annual rate of -0.07% between 2025 and 2034, a result of the declining Sales for Resale (-9.16% average annual decline). Both summer and winter Sales for Resale peak demand are expected to decline significantly towards the end of the ten-year projection.

DEF continues to provide alternate “high” and “low” forecasts for customers, energy, and peak demand, recognizing that the economic future is uncertain due to global conflicts, inflation, political gridlock, and weakness in the labor market. The Fed’s goal has been a “soft landing” where inflation is reined in to 2% without sending the economy into a recession. Moody’s S1 and S3 (high & low) Florida economic scenarios were used to provide a range of economic variables around the Base Case scenario. These were combined with high and low peak weather scenarios for each season and high and low population growth scenarios from Moody’s.

Electric utilities across the nation are being impacted by the introduction of large-load customers, many associated with the expansion of data centers and AI infrastructure. DEF’s plan does not currently include any new large-load customers. If such a customer were to make a firm plan to locate in the DEF service territory, DEF will inform the Commission and update its plans as appropriate.

ENERGY CONSUMPTION AND DEMAND FORECAST SCHEDULES

The below schedules have been provided to represent DEF's expectations for a Base Case as well as reasonable High and Low forecast scenarios for resource planning purposes. (Base-B, High-H and Low-L):

<u>SCHEDULE</u>	<u>DESCRIPTION</u>
2.1, 2.2 and 2.3	History and Forecast of Energy Consumption and Number of Customers by Customer Class (B, H and L)
3.1	History and Forecast of Base Summer Peak Demand (MW) (B, H and L)
3.2	History and Forecast of Base Winter Peak Demand (MW) (B, H and L)
3.3	History and Forecast of Base Annual Net Energy for Load (GWh) (B, H and L)
4	Previous Year Actual and Two-Year Forecast of Peak Demand and Net Energy for Load by Month (B, H and L)

DUKE ENERGY FLORIDA

SCHEDULE 2.1.1

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

BASE CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
RURAL AND RESIDENTIAL						COMMERCIAL		
YEAR	DEF POPULATION	MEMBERS PER HOUSEHOLD	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER
HISTORY:								
2015	3,794,138	2.489	19,932	1,524,605	13,074	12,070	169,147	71,359
2016	3,837,436	2.485	20,265	1,543,967	13,126	12,094	170,999	70,724
2017	3,906,975	2.483	19,791	1,573,260	12,579	11,918	173,695	68,612
2018	3,968,241	2.485	20,636	1,597,132	12,920	12,172	175,848	69,216
2019	4,037,435	2.483	20,775	1,626,117	12,776	12,198	178,036	68,514
2020	4,089,498	2.471	21,459	1,655,304	12,964	11,522	179,666	64,129
2021	4,130,929	2.448	21,192	1,687,471	12,558	11,785	182,195	64,686
2022	4,253,325	2.473	21,508	1,719,905	12,505	12,220	184,453	66,248
2023	4,308,553	2.457	21,750	1,753,583	12,403	12,450	186,524	66,749
2024	4,590,251	2.560	22,043	1,793,067	12,293	12,574	188,908	66,559
FORECAST:								
2025	4,619,282	2.538	21,737	1,820,048	11,943	12,654	192,478	65,744
2026	4,670,294	2.519	21,637	1,854,027	11,671	12,647	195,176	64,798
2027	4,724,132	2.503	21,863	1,887,388	11,584	12,776	197,826	64,584
2028	4,781,030	2.489	21,993	1,920,864	11,450	12,849	200,484	64,092
2029	4,841,118	2.477	22,197	1,954,428	11,357	12,988	203,150	63,934
2030	4,902,443	2.466	22,338	1,988,014	11,236	13,093	205,817	63,614
2031	4,962,537	2.455	22,466	2,021,400	11,114	13,194	208,468	63,290
2032	5,025,417	2.446	22,448	2,054,545	10,926	13,226	211,100	62,654
2033	5,086,302	2.437	22,921	2,087,116	10,982	13,518	213,687	63,261
2034	5,147,921	2.430	23,190	2,118,486	10,947	13,699	216,178	63,369

DUKE ENERGY FLORIDA

SCHEDULE 2.1.2

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

HIGH CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
RURAL AND RESIDENTIAL						COMMERCIAL		
YEAR	DEF POPULATION	MEMBERS PER HOUSEHOLD	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER
HISTORY:								
2015	3,794,138	2.489	19,932	1,524,605	13,074	12,070	169,147	71,359
2016	3,837,436	2.485	20,265	1,543,967	13,126	12,094	170,999	70,724
2017	3,906,975	2.483	19,791	1,573,260	12,579	11,918	173,695	68,612
2018	3,968,241	2.485	20,636	1,597,132	12,920	12,172	175,848	69,216
2019	4,037,435	2.483	20,775	1,626,117	12,776	12,198	178,036	68,514
2020	4,089,498	2.471	21,459	1,655,304	12,964	11,522	179,666	64,129
2021	4,130,929	2.448	21,192	1,687,471	12,558	11,785	182,195	64,686
2022	4,253,325	2.473	21,508	1,719,905	12,505	12,220	184,453	66,248
2023	4,308,553	2.457	21,750	1,753,583	12,403	12,450	186,524	66,749
2024	4,590,251	2.560	22,043	1,793,067	12,293	12,574	188,908	66,559
FORECAST:								
2025	4,633,096	2.538	24,233	1,825,491	13,275	13,227	192,910	68,567
2026	4,698,728	2.519	24,305	1,865,315	13,030	13,291	196,073	67,788
2027	4,759,282	2.503	24,571	1,901,431	12,922	13,434	198,941	67,526
2028	4,820,247	2.489	24,793	1,936,620	12,802	13,530	201,735	67,067
2029	4,883,926	2.477	25,039	1,971,710	12,699	13,692	204,522	66,946
2030	4,948,747	2.466	25,236	2,006,791	12,576	13,813	207,308	66,631
2031	5,012,258	2.455	25,382	2,041,653	12,432	13,921	210,076	66,269
2032	5,078,314	2.446	25,456	2,076,171	12,261	13,969	212,818	65,637
2033	5,142,026	2.437	25,896	2,109,982	12,273	14,261	215,502	66,176
2034	5,206,343	2.430	26,242	2,142,528	12,248	14,460	218,087	66,302

DUKE ENERGY FLORIDA

SCHEDULE 2.1.3

**HISTORY AND FORECAST OF ENERGY CONSUMPTION AND
NUMBER OF CUSTOMERS BY CUSTOMER CLASS**

LOW CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
RURAL AND RESIDENTIAL						COMMERCIAL		
YEAR	DEF POPULATION	MEMBERS PER HOUSEHOLD	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER
HISTORY:								
2015	3,794,138	2.489	19,932	1,524,605	13,074	12,070	169,147	71,359
2016	3,837,436	2.485	20,265	1,543,967	13,126	12,094	170,999	70,724
2017	3,906,975	2.483	19,791	1,573,260	12,579	11,918	173,695	68,612
2018	3,968,241	2.485	20,636	1,597,132	12,920	12,172	175,848	69,216
2019	4,037,435	2.483	20,775	1,626,117	12,776	12,198	178,036	68,514
2020	4,089,498	2.471	21,459	1,655,304	12,964	11,522	179,666	64,129
2021	4,130,929	2.448	21,192	1,687,471	12,558	11,785	182,195	64,686
2022	4,253,325	2.473	21,508	1,719,905	12,505	12,220	184,453	66,248
2023	4,308,553	2.457	21,750	1,753,583	12,403	12,450	186,524	66,749
2024	4,590,251	2.560	22,043	1,793,067	12,293	12,574	188,908	66,559
FORECAST:								
2025	4,618,792	2.538	19,212	1,819,855	10,557	12,063	192,463	62,678
2026	4,665,100	2.519	19,008	1,851,965	10,264	11,985	195,013	61,456
2027	4,705,925	2.503	19,186	1,880,114	10,204	12,210	197,248	61,899
2028	4,746,570	2.489	19,326	1,907,019	10,134	12,387	199,385	62,128
2029	4,792,014	2.477	19,482	1,934,604	10,070	12,568	201,575	62,347
2030	4,841,895	2.466	19,586	1,963,461	9,975	12,684	203,867	62,217
2031	4,893,586	2.455	19,662	1,993,314	9,864	12,786	206,238	61,995
2032	4,950,288	2.446	19,646	2,023,830	9,708	12,823	208,661	61,452
2033	5,006,024	2.437	19,972	2,054,175	9,723	13,099	211,071	62,061
2034	5,064,710	2.430	20,198	2,084,243	9,691	13,276	213,458	62,194

DUKE ENERGY FLORIDA

SCHEDULE 2.2.1

**HISTORY AND FORECAST OF ENERGY CONSUMPTION AND
NUMBER OF CUSTOMERS BY CUSTOMER CLASS**

BASE CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	INDUSTRIAL				STREET & HIGHWAY LIGHTING	OTHER SALES TO PUBLIC AUTHORITIES	TOTAL SALES TO ULTIMATE CONSUMERS
YEAR	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER	RAILROADS AND RAILWAYS GWh	GWh	GWh	GWh
HISTORY:							
2015	3,293	2,243	1,468,123	0	24	3,234	38,553
2016	3,197	2,178	1,467,860	0	24	3,194	38,774
2017	3,120	2,137	1,459,991	0	24	3,171	38,023
2018	3,107	2,080	1,493,750	0	24	3,206	39,144
2019	2,963	2,025	1,463,210	0	24	3,227	39,187
2020	3,147	1,999	1,574,287	0	23	3,079	39,230
2021	3,292	1,978	1,664,307	0	24	3,158	39,451
2022	3,508	1,868	1,877,916	0	33	3,244	40,512
2023	3,396	1,773	1,915,141	0	31	3,205	40,832
2024	3,287	1,671	1,966,630	0	29	3,199	41,132
FORECAST:							
2025	3,394	1,710	1,984,943	0	30	3,192	41,007
2026	3,547	1,702	2,083,782	0	29	3,171	41,031
2027	3,584	1,701	2,106,728	0	28	3,194	41,445
2028	3,628	1,703	2,130,550	0	27	3,194	41,692
2029	3,640	1,707	2,132,201	0	27	3,204	42,055
2030	3,683	1,713	2,149,925	0	26	3,207	42,347
2031	3,684	1,719	2,143,313	0	25	3,208	42,578
2032	3,676	1,726	2,130,019	0	25	3,184	42,559
2033	3,694	1,734	2,130,147	0	24	3,223	43,379
2034	3,695	1,743	2,120,081	0	24	3,220	43,828

DUKE ENERGY FLORIDA

SCHEDULE 2.2.2

**HISTORY AND FORECAST OF ENERGY CONSUMPTION AND
NUMBER OF CUSTOMERS BY CUSTOMER CLASS**

HIGH CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	INDUSTRIAL				STREET & HIGHWAY LIGHTING	OTHER SALES TO PUBLIC AUTHORITIES	TOTAL SALES TO ULTIMATE CONSUMERS
YEAR	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER	RAILROADS AND RAILWAYS GWh	GWh	GWh	GWh
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HISTORY:							
2015	3,293	2,243	1,468,123	0	24	3,234	38,553
2016	3,197	2,178	1,467,860	0	24	3,194	38,774
2017	3,120	2,137	1,459,991	0	24	3,171	38,023
2018	3,107	2,080	1,493,750	0	24	3,206	39,144
2019	2,963	2,025	1,463,210	0	24	3,227	39,187
2020	3,147	1,999	1,574,287	0	23	3,079	39,230
2021	3,292	1,978	1,664,307	0	24	3,158	39,451
2022	3,508	1,868	1,877,916	0	33	3,244	40,512
2023	3,396	1,773	1,915,141	0	31	3,205	40,832
2024	3,287	1,671	1,966,630	0	29	3,199	41,132
FORECAST:							
2025	3,434	1,710	2,007,967	0	30	3,284	44,208
2026	3,588	1,702	2,107,994	0	29	3,267	44,481
2027	3,625	1,701	2,130,808	0	28	3,291	44,948
2028	3,668	1,703	2,153,987	0	27	3,291	45,309
2029	3,679	1,707	2,155,385	0	27	3,300	45,738
2030	3,722	1,713	2,172,884	0	26	3,299	46,097
2031	3,724	1,719	2,166,090	0	25	3,299	46,352
2032	3,716	1,726	2,152,678	0	25	3,274	46,439
2033	3,733	1,734	2,152,685	0	24	3,310	47,224
2034	3,735	1,743	2,142,599	0	24	3,308	47,767

DUKE ENERGY FLORIDA

SCHEDULE 2.2.3

**HISTORY AND FORECAST OF ENERGY CONSUMPTION AND
NUMBER OF CUSTOMERS BY CUSTOMER CLASS**

LOW CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	INDUSTRIAL				STREET & HIGHWAY LIGHTING	OTHER SALES TO PUBLIC AUTHORITIES	TOTAL SALES TO ULTIMATE CONSUMERS
YEAR	GWh	AVERAGE NO. OF CUSTOMERS	AVERAGE KWh CONSUMPTION PER CUSTOMER	RAILROADS AND RAILWAYS GWh	GWh	GWh	GWh
HISTORY:							
2015	3,293	2,243	1,468,123	0	24	3,234	38,553
2016	3,197	2,178	1,467,860	0	24	3,194	38,774
2017	3,120	2,137	1,459,991	0	24	3,171	38,023
2018	3,107	2,080	1,493,750	0	24	3,206	39,144
2019	2,963	2,025	1,463,210	0	24	3,227	39,187
2020	3,147	1,999	1,574,287	0	23	3,079	39,230
2021	3,292	1,978	1,664,307	0	24	3,158	39,451
2022	3,508	1,868	1,877,916	0	33	3,244	40,512
2023	3,396	1,773	1,915,141	0	31	3,205	40,832
2024	3,287	1,671	1,966,630	0	29	3,199	41,132
FORECAST:							
2025	3,346	1,710	1,956,602	0	30	3,114	37,765
2026	3,502	1,702	2,057,779	0	29	3,094	37,618
2027	3,545	1,701	2,084,169	0	28	3,113	38,081
2028	3,592	1,703	2,109,468	0	27	3,113	38,446
2029	3,605	1,707	2,112,128	0	27	3,122	38,803
2030	3,648	1,713	2,129,665	0	26	3,126	39,070
2031	3,649	1,719	2,122,876	0	25	3,128	39,250
2032	3,641	1,726	2,109,657	0	25	3,103	39,238
2033	3,658	1,734	2,109,817	0	24	3,138	39,892
2034	3,660	1,743	2,099,825	0	24	3,135	40,292

DUKE ENERGY FLORIDA

SCHEDULE 2.3.1

**HISTORY AND FORECAST OF ENERGY CONSUMPTION AND
NUMBER OF CUSTOMERS BY CUSTOMER CLASS**

BASE CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)
YEAR	SALES FOR RESALE GWh	UTILITY USE & LOSSES GWh	NET ENERGY FOR LOAD GWh	OTHER CUSTOMERS (AVERAGE NO.)	TOTAL NO. OF CUSTOMERS
-----	-----	-----	-----	-----	-----
HISTORY:					
2015	1,243	2,484	42,280	25,866	1,721,861
2016	1,803	2,277	42,854	26,005	1,743,149
2017	2,196	2,700	42,919	26,248	1,775,340
2018	2,324	2,756	44,224	26,504	1,801,564
2019	2,910	2,704	44,801	26,707	1,832,885
2020	2,887	2,697	44,814	26,845	1,863,814
2021	3,302	2,311	45,064	27,082	1,898,726
2022	3,673	1,956	46,141	26,834	1,933,060
2023	1,396	1,821	44,049	26,342	1,968,221
2024	1,125	1,944	44,200	25,823	2,009,470
FORECAST:					
2025	281	2,159	43,447	26,018	2,040,254
2026	904	2,482	44,418	26,120	2,077,025
2027	900	2,320	44,665	26,136	2,113,051
2028	889	2,491	45,073	26,167	2,149,218
2029	887	2,372	45,314	26,209	2,185,494
2030	887	2,431	45,665	26,253	2,221,797
2031	70	2,398	45,047	26,290	2,257,877
2032	71	2,805	45,435	26,328	2,293,699
2033	70	2,289	45,739	26,367	2,328,904
2034	70	2,460	46,359	26,410	2,362,817

DUKE ENERGY FLORIDA

SCHEDULE 2.3.2

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

HIGH CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)
YEAR	SALES FOR RESALE GWh	UTILITY USE & LOSSES GWh	NET ENERGY FOR LOAD GWh	OTHER CUSTOMERS (AVERAGE NO.)	TOTAL NO. OF CUSTOMERS
-----	-----	-----	-----	-----	-----
HISTORY:					
2015	1,243	2,484	42,280	25,866	1,721,861
2016	1,803	2,277	42,854	26,005	1,743,149
2017	2,196	2,700	42,919	26,248	1,775,340
2018	2,324	2,756	44,224	26,504	1,801,564
2019	2,910	2,704	44,801	26,707	1,832,885
2020	2,887	2,697	44,814	26,845	1,863,814
2021	3,302	2,311	45,064	27,082	1,898,726
2022	3,673	1,956	46,141	26,834	1,933,060
2023	1,396	1,821	44,049	26,342	1,968,221
2024	1,125	1,944	44,200	25,823	2,009,470
FORECAST:					
2025	281	2,862	47,351	26,028	2,046,139
2026	904	3,140	48,525	26,149	2,089,239
2027	900	3,027	48,875	26,191	2,128,264
2028	889	3,172	49,371	26,226	2,166,284
2029	887	3,094	49,719	26,272	2,204,211
2030	887	3,150	50,135	26,280	2,242,092
2031	70	3,131	49,553	26,294	2,279,742
2032	71	3,471	49,980	26,321	2,317,036
2033	70	3,056	50,351	26,350	2,353,568
2034	70	3,209	51,047	26,384	2,388,742

DUKE ENERGY FLORIDA

SCHEDULE 2.3.3

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

LOW CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)
YEAR	SALES FOR RESALE GWh	UTILITY USE & LOSSES GWh	NET ENERGY FOR LOAD GWh	OTHER CUSTOMERS (AVERAGE NO.)	TOTAL NO. OF CUSTOMERS
-----	-----	-----	-----	-----	-----
HISTORY:					
2015	1,243	2,484	42,280	25,866	1,721,861
2016	1,803	2,277	42,854	26,005	1,743,149
2017	2,196	2,700	42,919	26,248	1,775,340
2018	2,324	2,756	44,224	26,504	1,801,564
2019	2,910	2,704	44,801	26,707	1,832,885
2020	2,887	2,697	44,814	26,845	1,863,814
2021	3,302	2,311	45,064	27,082	1,898,726
2022	3,673	1,956	46,141	26,834	1,933,060
2023	1,396	1,821	44,049	26,342	1,968,221
2024	1,125	1,944	44,200	25,823	2,009,470
FORECAST:					
2025	281	1,757	39,803	26,086	2,040,114
2026	904	1,993	40,515	26,161	2,074,841
2027	900	1,874	40,856	26,108	2,105,171
2028	889	2,006	41,341	26,117	2,134,224
2029	887	1,919	41,609	26,146	2,164,032
2030	887	1,962	41,919	26,203	2,195,244
2031	70	1,937	41,258	26,252	2,227,523
2032	71	2,260	41,569	26,278	2,260,495
2033	70	1,846	41,808	26,303	2,293,283
2034	70	1,980	42,343	26,342	2,325,786

DUKE ENERGY FLORIDA

SCHEDULE 3.1.1

HISTORY AND FORECAST OF SUMMER PEAK DEMAND (MW)

BASE CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(OTH)	(10)
					RESIDENTIAL LOAD MANAGEMENT	RESIDENTIAL CONSERVATION	COMM. / IND. LOAD MANAGEMENT	COMM. / IND. CONSERVATION	OTHER DEMAND REDUCTIONS	NET FIRM DEMAND
YEAR	TOTAL	WHOLESALE	RETAIL	INTERRUPTIBLE						
HISTORY:										
2015	10,058	772	9,286	303	360	435	124	324	80	8,431
2016	10,530	893	9,637	235	366	466	100	339	80	8,946
2017	10,220	808	9,412	203	342	498	95	349	80	8,653
2018	10,271	812	9,459	257	386	532	83	387	80	8,545
2019	11,029	1021	10,008	230	394	566	86	414	80	9,260
2020	10,765	901	9,864	250	393	599	83	440	80	8,921
2021	10,835	1,010	9,825	375	394	623	85	451	80	8,826
2022	11,012	1,045	9,966	341	361	513	85	441	80	9,190
2023	11,357	827	10,530	476	352	550	88	459	80	9,352
2024	10,539	652	9,887	415	357	548	91	443	80	8,605
FORECAST:										
2025	10,810	351	10,459	415	380	581	94	468	80	8,792
2026	10,957	451	10,506	415	386	600	97	471	80	8,908
2027	11,052	451	10,601	415	392	618	101	475	80	8,971
2028	11,070	451	10,619	415	393	637	104	479	80	8,962
2029	11,145	451	10,694	415	394	656	107	484	80	9,009
2030	11,307	451	10,856	415	395	675	110	488	80	9,143
2031	11,392	451	10,941	415	396	694	113	492	80	9,202
2032	11,522	401	11,121	415	397	713	116	495	80	9,305
2033	11,633	401	11,232	415	398	732	119	498	80	9,390
2034	11,771	401	11,371	415	399	751	123	500	80	9,504

Historical Values (2015 - 2024):

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

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

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

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

Projected Values (2025 - 2034):

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

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

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

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

DUKE ENERGY FLORIDA

SCHEDULE 3.1.2

HISTORY AND FORECAST OF SUMMER PEAK DEMAND (MW)

HIGH CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(OTH)	(10)
					RESIDENTIAL		COMM. / IND.		OTHER	
					LOAD	RESIDENTIAL	LOAD	COMM. / IND.	DEMAND	NET FIRM
YEAR	TOTAL	WHOLESALE	RETAIL	INTERRUPTIBLE	MANAGEMENT	CONSERVATION	MANAGEMENT	CONSERVATION	REDUCTIONS	DEMAND
<hr/>										
HISTORY:										
2015	10,058	772	9,286	303	360	435	124	324	80	8,431
2016	10,530	893	9,637	235	366	466	100	339	80	8,946
2017	10,220	808	9,412	203	342	498	95	349	80	8,653
2018	10,271	812	9,459	257	386	532	83	387	80	8,545
2019	11,029	1,021	10,008	230	394	566	86	414	80	9,260
2020	10,765	901	9,864	250	393	599	83	440	80	8,921
2021	10,835	1,010	9,825	375	394	623	85	451	80	8,826
2022	11,012	1,045	9,966	341	361	513	85	441	80	9,190
2023	11,357	827	10,530	476	352	550	88	459	80	9,352
2024	10,539	652	9,887	415	357	548	91	443	80	8,605
 FORECAST:										
2025	11,307	351	10,956	415	380	581	94	468	80	9,289
2026	11,489	451	11,038	415	386	600	97	471	80	9,440
2027	11,530	451	11,079	415	392	618	101	475	80	9,449
2028	11,601	451	11,150	415	393	637	104	479	80	9,493
2029	11,681	451	11,230	415	394	656	107	484	80	9,545
2030	11,775	451	11,324	415	395	675	110	488	80	9,611
2031	11,869	451	11,418	415	396	694	113	492	80	9,678
2032	12,056	401	11,655	415	397	713	116	495	80	9,839
2033	12,127	401	11,726	415	398	732	119	498	80	9,885
2034	12,275	401	11,874	415	399	751	123	500	80	10,007

Historical Values (2015 - 2024):

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

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

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

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

Projected Values (2025 - 2034):

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

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

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

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

DUKE ENERGY FLORIDA

SCHEDULE 3.1.3

HISTORY AND FORECAST OF SUMMER PEAK DEMAND (MW)

LOW CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(OTH)	(10)
YEAR	TOTAL	WHOLESALE	RETAIL	INTERRUPTIBLE	RESIDENTIAL LOAD MANAGEMENT	RESIDENTIAL CONSERVATION	COMM. / IND. LOAD MANAGEMENT	COMM. / IND. CONSERVATION	OTHER DEMAND REDUCTIONS	NET FIRM DEMAND
HISTORY:										
2015	10,058	772	9,286	303	360	435	124	324	80	8,431
2016	10,530	893	9,637	235	366	466	100	339	80	8,946
2017	10,220	808	9,412	203	342	498	95	349	80	8,653
2018	10,271	812	9,459	257	386	532	83	387	80	8,545
2019	11,029	1,021	10,008	230	394	566	86	414	80	9,260
2020	10,765	901	9,864	250	393	599	83	440	80	8,921
2021	10,835	1,010	9,825	375	394	623	85	451	80	8,826
2022	11,012	1,045	9,966	341	361	513	85	441	80	9,190
2023	11,357	827	10,530	476	352	550	88	459	80	9,352
2024	10,539	652	9,887	415	357	548	91	443	80	8,605
FORECAST:										
2025	10,283	351	9,932	415	380	581	94	468	80	8,265
2026	10,447	451	9,996	415	386	600	97	471	80	8,398
2027	10,549	451	10,098	415	392	618	101	475	80	8,468
2028	10,634	451	10,183	415	393	637	104	479	80	8,526
2029	10,713	451	10,262	415	394	656	107	484	80	8,577
2030	10,858	451	10,407	415	395	675	110	488	80	8,694
2031	10,884	451	10,432	415	396	694	113	492	80	8,693
2032	10,980	401	10,579	415	397	713	116	495	80	8,764
2033	11,099	401	10,698	415	398	732	119	498	80	8,856
2034	11,268	401	10,867	415	399	751	123	500	80	9,000

Historical Values (2015 - 2024):

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

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

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

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

Projected Values (2025 - 2034):

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

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

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

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

DUKE ENERGY FLORIDA

SCHEDULE 3.2.1

HISTORY AND FORECAST OF WINTER PEAK DEMAND (MW)

BASE CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(OTH)	(10)
					RESIDENTIAL LOAD MANAGEMENT	RESIDENTIAL CONSERVATION	COMM. / IND. LOAD MANAGEMENT	COMM. / IND. CONSERVATION	OTHER DEMAND REDUCTIONS	NET FIRM DEMAND
YEAR	TOTAL	WHOLESALE	RETAIL	INTERRUPTIBLE						
HISTORY:										
2014/15	10,648	1035	9,613	273	658	815	109	236	237	8,319
2015/16	9,678	1275	8,403	207	675	845	131	240	170	7,409
2016/17	8,739	701	8,038	191	695	878	79	243	165	6,489
2017/18	11,559	1071	10,488	244	699	913	79	246	196	9,182
2018/19	8,527	572	7,955	239	711	948	82	251	164	6,132
2019/20	9,725	613	9,112	292	670	982	80	256	177	7,268
2020/21	9,654	679	8,975	319	671	1,006	82	260	175	7,141
2021/22	10,594	1,038	9,556	317	668	1,013	83	261	195	8,056
2022/23	10,474	1,047	9,426	317	638	975	83	262	194	8,005
2023/24	8,854	506	8,348	412	634	1,055	87	263	172	6,232
FORECAST:										
2024/25	11,795	952	10,843	412	642	1,080	90	269	197	9,105
2025/26	12,000	1,052	10,947	412	650	1,108	94	269	198	9,269
2026/27	12,099	1,052	11,047	412	658	1,136	97	270	199	9,328
2027/28	11,603	451	11,151	412	659	1,165	100	270	200	8,796
2028/29	11,695	451	11,244	412	660	1,196	103	270	201	8,853
2029/30	11,787	451	11,336	412	661	1,226	106	271	202	8,910
2030/31	11,787	401	11,387	412	662	1,255	109	271	202	8,876
2031/32	11,853	401	11,452	412	663	1,285	112	272	202	8,907
2032/33	11,934	401	11,533	412	664	1,314	116	272	203	8,954
2033/34	12,066	401	11,665	412	665	1,343	119	272	204	9,050

Historical Values (2015 - 2024):

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

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

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

Projected Values (2025 - 2034):

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

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

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

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

DUKE ENERGY FLORIDA

SCHEDULE 3.2.2

HISTORY AND FORECAST OF WINTER PEAK DEMAND (MW)

HIGH CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(OTH)	(10)
					RESIDENTIAL LOAD MANAGEMENT	RESIDENTIAL CONSERVATION	COMM. / IND. LOAD MANAGEMENT	COMM. / IND. CONSERVATION	OTHER DEMAND REDUCTIONS	NET FIRM DEMAND
YEAR	TOTAL	WHOLESALE	RETAIL	INTERRUPTIBLE						
HISTORY:										
2014/15	10,648	1,035	9,613	273	658	815	109	236	237	8,319
2015/16	9,678	1,275	8,403	207	675	845	131	240	170	7,409
2016/17	8,739	701	8,038	191	695	878	79	243	165	6,489
2017/18	11,559	1,071	10,488	244	699	913	79	246	196	9,182
2018/19	8,527	572	7,955	239	711	948	82	251	164	6,132
2019/20	9,725	613	9,112	292	670	982	80	256	177	7,268
2020/21	9,654	679	8,975	319	671	1,006	82	260	175	7,141
2021/22	10,594	1,038	9,556	317	668	1,013	83	261	195	8,056
2022/23	10,474	1,047	9,426	317	638	975	83	262	194	8,005
2023/24	8,854	506	8,348	412	634	1,055	87	263	172	6,232
FORECAST:										
2024/25	13,735	952	12,783	412	642	1,080	90	269	197	11,045
2025/26	14,011	1,052	12,959	412	650	1,108	94	269	198	11,280
2026/27	14,153	1,052	13,101	412	658	1,136	97	270	199	11,382
2027/28	13,690	451	13,239	412	659	1,165	100	270	200	10,883
2028/29	13,816	451	13,365	412	660	1,196	103	270	201	10,974
2029/30	13,935	451	13,484	412	661	1,226	106	271	202	11,057
2030/31	13,944	401	13,543	412	662	1,255	109	271	202	11,032
2031/32	14,020	401	13,619	412	663	1,285	112	272	202	11,074
2032/33	14,120	401	13,719	412	664	1,314	116	272	203	11,140
2033/34	14,276	401	13,875	412	665	1,343	119	272	204	11,260

Historical Values (2015 - 2024):

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

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

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

Projected Values (2025 - 2034):

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

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

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

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

DUKE ENERGY FLORIDA

SCHEDULE 3.2.3

HISTORY AND FORECAST OF WINTER PEAK DEMAND (MW)

LOW CASE FORECAST

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(OTH)	(10)
					RESIDENTIAL LOAD MANAGEMENT	RESIDENTIAL CONSERVATION	COMM. / IND. LOAD MANAGEMENT	COMM. / IND. CONSERVATION	OTHER DEMAND REDUCTIONS	NET FIRM DEMAND
YEAR	TOTAL	WHOLESALE	RETAIL	INTERRUPTIBLE						
HISTORY:										
2014/15	10,648	1,035	9,613	273	658	815	109	236	237	8,319
2015/16	9,678	1,275	8,403	207	675	845	131	240	170	7,409
2016/17	8,739	701	8,038	191	695	878	79	243	165	6,489
2017/18	11,559	1,071	10,488	244	699	913	79	246	196	9,182
2018/19	8,527	572	7,955	239	711	948	82	251	164	6,132
2019/20	9,725	613	9,112	292	670	982	80	256	177	7,268
2020/21	9,654	679	8,975	319	671	1,006	82	260	175	7,141
2021/22	10,594	1,038	9,556	317	668	1,013	83	261	195	8,056
2022/23	10,474	1,047	9,426	317	638	975	83	262	194	8,005
2023/24	8,854	506	8,348	412	634	1,055	87	263	172	6,232
FORECAST:										
2024/25	9,589	952	8,637	412	642	1,080	90	269	197	6,898
2025/26	9,664	1,052	8,612	412	650	1,108	94	269	198	6,934
2026/27	9,749	1,052	8,697	412	658	1,136	97	270	199	6,978
2027/28	9,251	451	8,800	412	659	1,165	100	270	200	6,444
2028/29	9,339	451	8,888	412	660	1,196	103	270	201	6,497
2029/30	9,416	451	8,965	412	661	1,226	106	271	202	6,538
2030/31	9,404	401	9,003	412	662	1,255	109	271	202	6,492
2031/32	9,453	401	9,052	412	663	1,285	112	272	202	6,507
2032/33	9,516	401	9,115	412	664	1,314	116	272	203	6,535
2033/34	9,617	401	9,216	412	665	1,343	119	272	204	6,602

Historical Values (2015 - 2024):

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

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

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

Projected Values (2025 - 2034):

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

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

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

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

DUKE ENERGY FLORIDA

SCHEDULE 3.3.1

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

BASE CASE FORECAST

(1)	(2)	(3)	(4)	(OTH)	(5)	(6)	(7)	(8)	(9)
		RESIDENTIAL	COMM. / IND.	OTHER			UTILITY USE	NET ENERGY	LOAD
YEAR	TOTAL	CONSERVATION	CONSERVATION	ENERGY	RETAIL	WHOLESALE	& LOSSES	FOR LOAD	FACTOR
				REDUCTIONS					(%) *
HISTORY:									
2015	44,552	848	829	595	38,553	1,243	2,484	42,280	50.9
2016	45,200	892	857	596	38,774	1,803	2,277	42,854	50.6
2017	45,318	933	871	595	38,024	2,196	2,699	42,919	52.7
2018	46,729	977	933	595	39,145	2,304	2,775	44,224	48.9
2019	47,385	1,017	972	595	39,187	2,910	2,704	44,801	51.3
2020	47,476	1,050	1,016	596	39,230	2,887	2,697	44,814	52.9
2021	47,786	1,100	1,027	595	39,451	3,302	2,311	45,064	53.1
2022	48,842	1,120	986	595	40,512	3,673	1,956	46,141	52.8
2023	46,805	1,168	996	595	40,832	1,392	1,821	44,046	49.0
2024	46,918	1,223	1,004	492	41,132	1,125	1,944	44,200	53.1
FORECAST:									
2025	46,215	1,259	1,018	491	41,007	281	2,159	43,447	54.5
2026	47,233	1,297	1,028	491	41,031	904	2,482	44,418	54.7
2027	47,528	1,337	1,036	491	41,445	900	2,320	44,665	54.7
2028	47,985	1,376	1,044	492	41,692	889	2,491	45,073	57.3
2029	48,271	1,413	1,053	491	42,055	887	2,372	45,314	57.4
2030	48,665	1,447	1,062	491	42,347	887	2,431	45,665	57.0
2031	48,089	1,481	1,070	491	42,578	70	2,398	45,047	55.9
2032	48,519	1,515	1,077	492	42,559	71	2,805	45,435	55.6
2033	48,861	1,547	1,085	491	43,379	70	2,289	45,739	55.6
2034	49,519	1,577	1,092	491	43,828	70	2,460	46,359	55.7

* Historical Values (2015 - 2024): Load Factors for historical years are calculated using the actual and projected annual peak.

DUKE ENERGY FLORIDA

SCHEDULE 3.3.2

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

HIGH CASE FORECAST

(1)	(2)	(3)	(4)	(OTH)	(5)	(6)	(7)	(8)	(9)
		RESIDENTIAL	COMM. / IND.	OTHER			UTILITY USE	NET ENERGY	LOAD
YEAR	TOTAL	CONSERVATION	CONSERVATION	ENERGY REDUCTIONS	RETAIL	WHOLESALE	& LOSSES	FOR LOAD	FACTOR
									(%) *
HISTORY:									
2015	44,552	848	829	595	38,553	1,243	2,484	42,280	50.9
2016	45,200	892	857	596	38,774	1,803	2,277	42,854	50.6
2017	45,318	933	871	595	38,024	2,196	2,699	42,919	52.7
2018	46,729	977	933	595	39,145	2,304	2,775	44,224	48.9
2019	47,385	1,017	972	595	39,187	2,910	2,704	44,801	51.3
2020	47,476	1,050	1,016	596	39,230	2,887	2,697	44,814	52.9
2021	47,786	1,100	1,027	595	39,451	3,302	2,311	45,064	53.1
2022	48,842	1,120	986	595	40,512	3,673	1,956	46,141	52.8
2023	46,805	1,168	996	595	40,832	1,392	1,821	44,046	49.0
2024	46,918	1,223	1,004	492	41,132	1,125	1,944	44,200	53.1
FORECAST:									
2025	50,119	1,259	1,018	491	44,208	281	2,862	47,351	48.9
2026	51,340	1,297	1,028	491	44,481	904	3,140	48,525	49.1
2027	51,738	1,337	1,036	491	44,948	900	3,027	48,875	49.0
2028	52,283	1,376	1,044	492	45,309	889	3,172	49,371	51.6
2029	52,676	1,413	1,053	491	45,738	887	3,094	49,719	51.7
2030	53,135	1,447	1,062	491	46,097	887	3,150	50,135	51.8
2031	52,595	1,481	1,070	491	46,352	70	3,131	49,553	51.3
2032	53,065	1,515	1,077	492	46,439	71	3,471	49,980	51.4
2033	53,474	1,547	1,085	491	47,224	70	3,056	50,351	51.6
2034	54,208	1,577	1,092	491	47,767	70	3,209	51,047	51.8

* Historical Values (2015 - 2024): Load Factors for historical years are calculated using the actual and projected annual peak.

DUKE ENERGY FLORIDA

SCHEDULE 3.3.3

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

LOW CASE FORECAST

(1)	(2)	(3)	(4)	(OTH)	(5)	(6)	(7)	(8)	(9)
YEAR	TOTAL	RESIDENTIAL CONSERVATION	COMM. / IND. CONSERVATION	OTHER ENERGY REDUCTIONS	RETAIL	WHOLESALE	UTILITY USE & LOSSES	NET ENERGY FOR LOAD	LOAD FACTOR (%) *
HISTORY:									
2015	44,552	848	829	595	38,553	1,243	2,484	42,280	50.9
2016	45,200	892	857	596	38,774	1,803	2,277	42,854	50.6
2017	45,318	933	871	595	38,024	2,196	2,699	42,919	52.7
2018	46,729	977	933	595	39,145	2,304	2,775	44,224	48.9
2019	47,385	1,017	972	595	39,187	2,910	2,704	44,801	51.3
2020	47,476	1,050	1,016	596	39,230	2,887	2,697	44,814	52.9
2021	47,786	1,100	1,027	595	39,451	3,302	2,311	45,064	53.1
2022	48,842	1,120	986	595	40,512	3,673	1,956	46,141	52.8
2023	46,805	1,168	996	595	40,832	1,392	1,821	44,046	49.0
2024	46,918	1,223	1,004	492	41,132	1,125	1,944	44,200	53.1
FORECAST:									
2025	42,571	1,259	1,018	491	37,765	281	1,757	39,803	55.0
2026	43,331	1,297	1,028	491	37,618	904	1,993	40,515	55.1
2027	43,719	1,337	1,036	491	38,081	900	1,874	40,856	55.1
2028	44,253	1,376	1,044	492	38,446	889	2,006	41,341	55.2
2029	44,566	1,413	1,053	491	38,803	887	1,919	41,609	55.4
2030	44,920	1,447	1,062	491	39,070	887	1,962	41,919	55.0
2031	44,300	1,481	1,070	491	39,250	70	1,937	41,258	54.2
2032	44,653	1,515	1,077	492	39,238	71	2,260	41,569	54.0
2033	44,931	1,547	1,085	491	39,892	70	1,846	41,808	53.9
2034	45,503	1,577	1,092	491	40,292	70	1,980	42,343	53.7

* Historical Values (2015 - 2024): Load Factors for historical years are calculated using the actual and projected annual peak.

DUKE ENERGY FLORIDA

SCHEDULE 4.1

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

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	ACTUAL		FORECAST		FORECAST	
	2024		2025		2026	
	PEAK DEMAND	NEL	PEAK DEMAND	NEL	PEAK DEMAND	NEL
MONTH	MW	GWh	MW	GWh	MW	GWh
JANUARY	7,365	3,181	10,366	3,232	10,543	3,313
FEBRUARY	6,659	2,813	8,354	2,899	8,524	2,970
MARCH	6,562	3,074	7,785	3,186	7,888	3,263
APRIL	7,425	3,184	7,664	3,307	7,744	3,380
MAY	9,068	4,288	8,614	3,944	8,716	4,026
JUNE	9,448	4,371	8,933	4,154	9,040	4,234
JULY	9,468	4,717	9,529	4,423	9,607	4,504
AUGUST	9,269	4,625	9,681	4,564	9,806	4,654
SEPTEMBER	8,881	4,195	8,591	3,921	8,720	4,008
OCTOBER	8,407	3,437	7,877	3,509	8,010	3,595
NOVEMBER	7,163	3,258	6,683	3,076	6,832	3,154
<u>DECEMBER</u>	6,911	<u>3,057</u>	7,989	<u>3,232</u>	8,168	<u>3,316</u>
TOTAL		44,200		43,447		44,418

NOTE: Recorded Net Peak demands and NEL include off-system wholesale contracts.
2024 peak is in July.

DUKE ENERGY FLORIDA

SCHEDULE 4.2

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

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	ACTUAL		FORECAST		FORECAST	
	-----		-----		-----	
	2024		2025		2026	
	-----		-----		-----	
MONTH	PEAK DEMAND MW	NEL GWh	PEAK DEMAND MW	NEL GWh	PEAK DEMAND MW	NEL GWh
-----	-----	-----	-----	-----	-----	-----
JANUARY	7,365	3,181	12,306	3,677	12,554	3,782
FEBRUARY	6,659	2,813	9,516	3,341	9,732	3,432
MARCH	6,562	3,074	8,765	3,682	8,911	3,779
APRIL	7,425	3,184	8,195	3,610	8,354	3,700
MAY	9,068	4,288	9,092	4,154	9,231	4,254
JUNE	9,448	4,371	9,422	4,354	9,566	4,452
JULY	9,468	4,717	10,043	4,612	10,159	4,711
AUGUST	9,269	4,625	10,178	4,746	10,339	4,852
SEPTEMBER	8,881	4,195	9,008	4,079	9,167	4,180
OCTOBER	8,407	3,437	8,474	3,813	8,635	3,912
NOVEMBER	7,163	3,258	7,375	3,478	7,594	3,568
<u>DECEMBER</u>	6,911	<u>3,057</u>	9,638	<u>3,805</u>	9,882	<u>3,904</u>
TOTAL		44,200		47,351		48,525

NOTE: Recorded Net Peak demands and NEL include off-system wholesale contracts.
2024 peak is in July.

DUKE ENERGY FLORIDA

SCHEDULE 4.3

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

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	ACTUAL		FORECAST		FORECAST	
	-----		-----		-----	
	2024		2025		2026	
	-----		-----		-----	
MONTH	PEAK DEMAND MW	NEL GWh	PEAK DEMAND MW	NEL GWh	PEAK DEMAND MW	NEL GWh
-----	-----	-----	-----	-----	-----	-----
JANUARY	7,365	3,181	8,160	2,859	8,207	2,892
FEBRUARY	6,659	2,813	7,265	2,488	7,352	2,524
MARCH	6,562	3,074	6,949	2,779	6,984	2,823
APRIL	7,425	3,184	7,212	3,056	7,235	3,100
MAY	9,068	4,288	8,187	3,760	8,230	3,813
JUNE	9,448	4,371	8,432	3,935	8,487	3,989
JULY	9,468	4,717	9,045	4,244	9,080	4,305
AUGUST	9,269	4,625	9,154	4,351	9,296	4,426
SEPTEMBER	8,881	4,195	8,116	3,714	8,224	3,791
OCTOBER	8,407	3,437	7,289	3,208	7,407	3,287
NOVEMBER	7,163	3,258	6,049	2,712	6,176	2,786
<u>DECEMBER</u>	6,911	<u>3,057</u>	6,435	<u>2,697</u>	6,567	<u>2,778</u>
TOTAL		44,200		39,803		40,515

NOTE: Recorded Net Peak demands and NEL include off-system wholesale contracts.
2024 peak is in July.

FUEL REQUIREMENTS AND ENERGY SOURCES

DEF's two-year actual and ten-year projected nuclear, coal, oil, and gas requirements (by fuel unit) are shown in Schedule 5. DEF's two-year actual and ten-year projected energy sources by fuel type are presented in Schedules 6.1 and 6.2, in GWh and percent (%) respectively. Although DEF's fuel mix continues to rely on an increasing amount of natural gas to meet its generation needs, DEF continues to maintain alternate fuel supplies including long term operation of some coal fired facilities, adequate supplies of oil for dual fuel back up and increasing amounts of renewable generation particularly from solar generation. Projections shown in Schedules 5 and 6 reflect the Base Load and Energy Forecasts.

DUKE ENERGY FLORIDA

SCHEDULE 5 FUEL REQUIREMENTS

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	
				-ACTUAL-												
FUEL REQUIREMENTS				UNITS	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
(1)	NUCLEAR		TRILLION BTU	0	0	0	0	0	0	0	0	0	0	0	0	0
(2)	COAL		1,000 TON	1,825	1,587	1,091	881	794	813	705	654	726	686	739	326	
(3)	RESIDUAL	TOTAL	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0	0
(4)		STEAM	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0	0
(5)		CC	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0	0
(6)		CT	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0	0
(7)		DIESEL	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0	0
(8)	DISTILLATE	TOTAL	1,000 BBL	124	116	24	28	69	66	50	22	18	23	13	12	
(9)		STEAM	1,000 BBL	54	45	11	11	9	16	19	12	13	12	10	5	
(10)		CC	1,000 BBL	0	1	0	0	0	0	0	0	0	0	0	0	
(11)		CT	1,000 BBL	70	70	13	17	60	50	32	10	5	11	3	7	
(12)		DIESEL	1,000 BBL	0	0	0	0	0	0	0	0	0	0	0	0	
(13)	NATURAL GAS	TOTAL	1,000 MCF	265,288	274,814	255,205	263,043	259,620	257,323	253,396	250,159	237,276	229,952	222,311	224,612	
(14)		STEAM	1,000 MCF	21,181	19,054	13,355	14,240	12,653	15,437	12,080	10,827	9,539	7,338	5,339	7,596	
(15)		CC	1,000 MCF	234,659	245,640	237,005	243,705	242,165	237,611	237,216	235,914	224,440	219,084	213,232	212,657	
(16)		CT	1,000 MCF	9,448	10,120	4,845	5,098	4,802	4,275	4,101	3,418	3,297	3,529	3,740	4,359	
OTHER (SPECIFY)																
(17)	OTHER, DISTILLATE	ANNUAL FIRM INTERCHANGE	1,000 BBL	N/A	N/A	0	0	0	0	0	0	0	0	0	0	0
(18)	OTHER, NATURAL GAS	ANNUAL FIRM INTERCHANGE, CC	1,000 MCF	N/A	N/A	0	0	0	0	0	0	0	0	0	0	0
(18.1)	OTHER, NATURAL GAS	ANNUAL FIRM INTERCHANGE, CT	1,000 MCF	N/A	N/A	2,682	2,530	714	0	0	0	0	0	0	0	0
(19)	OTHER, COAL	ANNUAL FIRM INTERCHANGE, STEAM	1,000 TON	N/A	N/A	0	0	0	0	0	0	0	0	0	0	0

DUKE ENERGY FLORIDA

SCHEDULE 6.1 ENERGY SOURCES (GWh)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
				-ACTUAL-											
ENERGY SOURCES			UNITS	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
(1)	ANNUAL FIRM INTERCHANGE 1/		GWh	60	-541	274	260	148	65	34	6	6	11	4	9
(2)	NUCLEAR		GWh	0	0	0	0	0	0	0	0	0	0	0	0
(3)	COAL		GWh	3,829	3,262	2,269	1,789	1,590	1,585	1,372	1,252	1,400	1,350	1,475	657
(4)	RESIDUAL	TOTAL	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(5)		STEAM	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(6)		CC	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(7)		CT	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(8)		DIESEL	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(9)	DISTILLATE	TOTAL	GWh	29	30	6	9	30	24	16	5	2	5	1	3
(10)		STEAM	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(11)		CC	GWh	0	1	0	0	0	0	0	0	0	0	0	0
(12)		CT	GWh	29	29	6	9	30	24	16	5	2	5	1	3
(13)		DIESEL	GWh	0	0	0	0	0	0	0	0	0	0	0	0
(14)	NATURAL GAS	TOTAL	GWh	35,526	37,494	36,662	37,833	37,565	37,060	36,708	36,332	34,435	33,423	32,280	32,440
(15)		STEAM	GWh	1,737	1,635	1,162	1,267	1,095	1,363	1,035	906	802	574	398	609
(16)		CC	GWh	32,996	35,012	35,008	36,052	35,977	35,244	35,234	35,044	33,261	32,459	31,476	31,356
(17)		CT	GWh	792	847	492	514	492	452	438	382	372	390	406	475
(18)	OTHER 2/														
	QF PURCHASES		GWh	1,814	601	492	0	0	0	0	0	0	0	0	0
	RENEWABLES OTHER		GWh	0	0	0	0	0	0	0	0	0	0	0	0
	RENEWABLES MSW		GWh	624	565	500	501	502	503	500	501	501	503	502	501
	RENEWABLES BIOMASS		GWh	0	0	0	0	0	0	0	0	0	0	0	0
	RENEWABLES SOLAR		GWh	2,165	2,789	3,244	4,026	4,843	5,861	6,768	7,703	8,860	10,325	11,688	13,034
	BATTERIES		GWh	0	0	0	0	-11	-26	-84	-134	-157	-183	-211	-285
	IMPORT FROM OUT OF STATE		GWh	0	0	0	0	0	0	0	0	0	0	0	0
	EXPORT TO OUT OF STATE		GWh	0	0	0	0	0	0	0	0	0	0	0	0
(19)	NET ENERGY FOR LOAD		GWh	44,046	44,200	43,447	44,418	44,665	45,073	45,314	45,665	45,047	45,435	45,739	46,359

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

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

DUKE ENERGY FLORIDA

SCHEDULE 6.2

ENERGY SOURCES (PERCENT)

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
				-ACTUAL-											
	ENERGY SOURCES		UNITS	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
(1)	ANNUAL FIRM INTERCHANGE 1/		%	0.1%	-1.2%	0.6%	0.6%	0.3%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
(2)	NUCLEAR		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(3)	COAL		%	8.7%	7.4%	5.2%	4.0%	3.6%	3.5%	3.0%	2.7%	3.1%	3.0%	3.2%	1.4%
(4)	RESIDUAL	TOTAL	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(5)		STEAM	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(6)		CC	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(7)		CT	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(8)		DIESEL	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(9)	DISTILLATE	TOTAL	%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(10)		STEAM	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(11)		CC	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(12)		CT	%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(13)		DIESEL	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(14)	NATURAL GAS	TOTAL	%	80.7%	84.8%	84.4%	85.2%	84.1%	82.2%	81.0%	79.6%	76.4%	73.6%	70.6%	70.0%
(15)		STEAM	%	3.9%	3.7%	2.7%	2.9%	2.5%	3.0%	2.3%	2.0%	1.8%	1.3%	0.9%	1.3%
(16)		CC	%	74.9%	79.2%	80.6%	81.2%	80.6%	78.2%	77.8%	76.7%	73.8%	71.4%	68.8%	67.6%
(17)		CT	%	1.8%	1.9%	1.1%	1.2%	1.1%	1.0%	1.0%	0.8%	0.8%	0.9%	0.9%	1.0%
(18)	OTHER 2/														
	QF PURCHASES		%	4.1%	1.4%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	RENEWABLES OTHER		%	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 MSW		%	1.4%	1.3%	1.2%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%	1.1%
	RENEWABLES BIOMASS		%	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 SOLAR		%	4.9%	6.3%	7.5%	9.1%	10.8%	13.0%	14.9%	16.9%	19.7%	22.7%	25.6%	28.1%
	BATTERIES		%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.2%	-0.3%	-0.3%	-0.4%	-0.5%	-0.6%
	IMPORT FROM OUT OF STATE		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	EXPORT TO OUT OF STATE		%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
(19)	NET ENERGY FOR LOAD		%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

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

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

FORECASTING METHODS AND PROCEDURES

INTRODUCTION

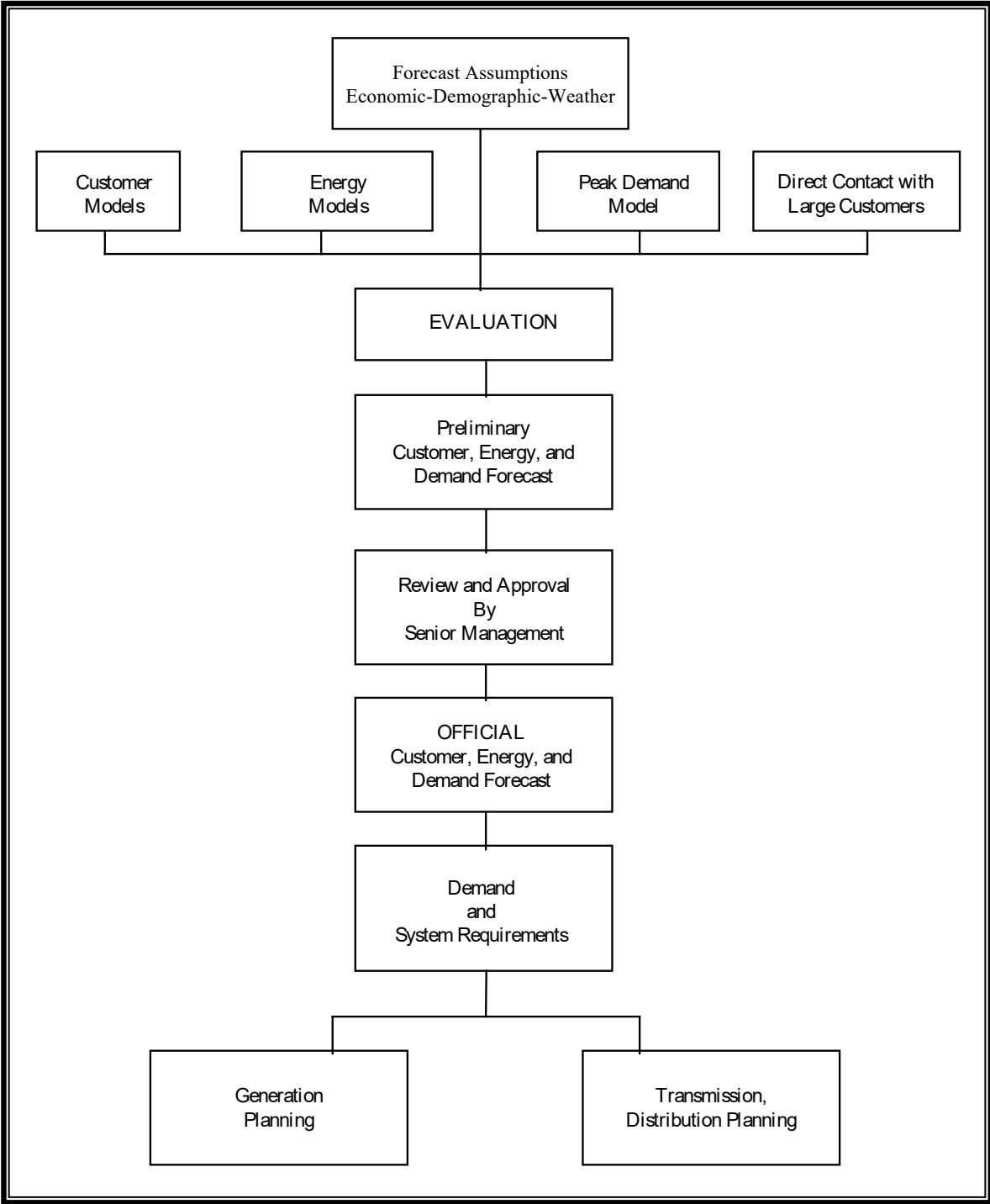
Accurate forecasts of long-range electric energy consumption, customer growth, and peak demand are essential elements in electric utility planning. Accurate projections of a utility's future load growth require a forecasting methodology with the ability to account for a variety of factors influencing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

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

FORECAST ASSUMPTIONS

The first step in any forecasting effort is the development of assumptions upon which the forecast is based. A collaborative internal Company effort develops these assumptions including the research efforts of several external sources. These assumptions specify major factors that influence the level of customers, energy sales, or peak demand over the forecast horizon. The following set of assumptions forms the basis for the forecast presented in this document.

FIGURE 2.1
Customer, Energy, and Demand Forecast



GENERAL ASSUMPTIONS

1. Normal weather conditions for energy sales are assumed over the forecast horizon using a sales-weighted 30-year average of conditions at the St. Petersburg, Orlando, and Tallahassee weather stations. For billed kilowatt-hour (kWh) sales projections, the normal weather calculation begins with a historical 30-year average of calendar and billing cycle weighted monthly heating and cooling degree-days (HDD and CDD). The expected consumption period read dates for each projected billing cycle determines the exact historical dates for developing the 30-year average weather condition each month. Each class displays different weather-sensitive base temperatures from which degree day (DD) values begin to accumulate. Seasonal and monthly peak demand projections are based on a 30-year historical average of system-weighted degree days using the “Itron Rank-Sort Normal” approach which takes annual weather extremes into account as well as the date and hour of occurrence.
2. The DEF customer forecast is based upon Moody’s historical and forecasted population estimates of the 29 counties served by DEF. National and Florida economic projections produced by Moody’s Analytics in their July 2024 forecast, along with Energy Information Administration (EIA) 2023 surveys of residential appliance saturation and average appliance efficiency levels provided the basis for development of the DEF energy forecast.
3. Within the DEF service area, the phosphate mining industry is the dominant sector in the industrial sales class. Two major customers accounted for approximately 32% of the industrial class MWh sales in 2024. These energy-intensive “crop nutrient” producers mine and process phosphate-based fertilizer products for the global marketplace. The supply and demand (price) for their products are dictated by global conditions that include, but are not limited to, foreign competition, national/international agricultural industry conditions, exchange-rate fluctuations, international trade pacts and U.S. environmental regulations. The market price of the raw mined commodity often dictates production levels. Load and energy consumption at the DEF-served mining or chemical processing sites depend heavily on plant operations, which are heavily influenced by these global as well as the local conditions, including environmental regulations. Going forward, global currency fluctuations and global stockpiles of farm commodities will determine the demand for fertilizers. Any increase in self-service generation will act to reduce energy

requirements from DEF. An upside risk to this projection lies in the price of energy, especially low natural gas price, which is a major cost in mining and producing phosphoric fertilizers.

4. DEF has supplied capacity and energy service to wholesale customers on a “full” and “partial” requirement basis for many years. Many Sales for Resale Customers have moved to other suppliers for their needs or have begun to self-generate. What remains are Partial Requirements (PR) contracted loads with the Reedy Creek Improvement District (RCID) and Seminole Electric Cooperative, Inc. (SECI). The forecast reflects the current contractual obligations based on the nature of the stratified load being requested, plus their ability to receive dispatched energy from power marketers any time it is more economical for them to do so. All contracts are projected to expire in the specific year designated in the respective contracts.
5. This forecast assumes that DEF will successfully renew all future franchise agreements.
6. This forecast incorporates demand and energy reductions expected to be realized through currently FPSC approved DSM goals as stated in Docket No. 20240013-EG.
7. This forecast reflects impacts from both Plug-in Hybrid Electric Vehicle (PHEV) and behind the meter customer-owned renewable generation which is mostly solar photovoltaic (PV) installations on energy and peak demand. PHEV customer penetration levels, which are expected to be a small share of the total DEF service area vehicle stock over the planning horizon, incorporates an EPRI Model view that includes gasoline price expectations. DEF customer PV penetration levels are expected to continue to grow over the planning horizon and the forecast incorporates a view on equipment and electric price impacts on customer use.
8. Expected energy and demand reductions from customer-owned self-service cogeneration facilities are also included in this forecast. DEF will supply the supplemental load of self-service cogeneration customers. While DEF offers “standby” service to all cogeneration customers, the forecast does not assume an unplanned need for power at time of peak.

This forecast assumes that the regulatory environment and the obligation to serve our retail customers will continue throughout the forecast horizon. Regarding wholesale customers, the forecast does not plan for generation resources unless a long-term contract is in place.

ECONOMIC ASSUMPTIONS

The economic outlook for this forecast was developed in the summer of 2024. As mentioned in the overview, the Federal Reserve was expected to reduce interest rates in September 2024, contingent on inflation consistently moving toward the 2% target. Long-term Treasury yields had stabilized near 4%, while the federal government's budget deficit remained large. Fiscal policy changes, including expiring tax cuts and subsidies, depended on the outcome of the 2024 elections. The U.S. dollar remained strong, global oil prices stabilized between \$80 and \$90 per barrel, and geopolitical tensions, while persistent, did not cause major economic disruptions. It is with this background that the DEF Customer, Energy and Peak Demand forecast was developed and the environment in which the Moody's Analytics July 2024 U.S. forecast and Florida forecast was applied. Major assumptions were as follows:

- Moody's expected the Federal Reserve would cut the policy rate by 25 basis points twice in 2024, in September and December. Policymakers were also expected to maintain the pace of quantitative tightening.
- Incoming data suggested that disinflation was in the homestretch with monthly consumer price inflation in May coming in better than expected. The July baseline predicted consumer price inflation of 3.3% year over year in the second quarter. Moody's predicted that inflation would stabilize by early 2025. The 10-year Treasury yield averaged 4.5% in the second quarter. The rate would approach its equilibrium level of 4% in 2025 and remain near this level until the end of the decade.
- With a budget and supplemental spending in place, fiscal policy was unlikely to change until after the election, and given the uncertain outcome, post-election policy assumptions were unlikely to be changed until after the election.

- A full-employment economy is one with an unemployment rate around 3.5% to 4%, a 62.5% labor force participation rate, and a prime-age employment-to-population ratio in the range of 80%. The economy was at that level July 2024.
- The failures of several U.S. banks in the first half of 2023 and recent issues around other banks were unsettling, but they were not symptomatic of a serious broader problem in the financial system. Policymakers' aggressive response would ensure the failures do not weaken the system or further undermine economic growth.

Throughout the ten-year forecast horizon, risks and uncertainties are always recognized and handled on a "highest probability of outcome" basis. General rules of economic theory, namely supply and demand equilibrium, are maintained in the long run. This notion is applied to energy/commodity prices, currency levels, the housing market, wage rates, birth rates, inflation, and interest rates. Uncertainty surrounding specific weather anomalies (hurricanes or earthquakes), international crises such as wars or terrorist acts, or future pandemic events, are not explicitly designed into this projection. Thus, any situations of this variety will result in a deviation from this forecast.

FORECAST METHODOLOGY

The DEF forecast of customers, energy sales, and peak demand applies both an econometric and end-use methodology. The residential and commercial energy projections incorporate Itron's SAE approach while other classes use customer-class specific econometric models. These models are expressly designed to capture class-specific variation over time. Peak demand models are projected on a disaggregated basis as well. This allows for appropriate handling of individual assumptions in the areas of wholesale contracts, demand response, interruptible service, and changes in self-service generation capacity.

ENERGY AND CUSTOMER FORECAST

In the retail jurisdiction, customer class models have been specified showing a historical relationship to weather and economic/demographic indicators using monthly data for sales models and customer models. Sales are regressed against "driver" variables that best explain monthly fluctuations over the historical sample period. Forecasts of these input variables are either derived internally or come from a review of the latest projections made by several independent forecasting concerns. Internal company

forecasts are used for projections of electricity price, weather conditions, the length of the billing month and rates of customer owned renewable and electric vehicle adoption. The external sources of data include Moody's Analytics forecasts of changes in population, demographics, and economic conditions. The incorporation of residential and commercial "end-use" energy has been modeled as well. Surveys of residential appliance saturation and average efficiency performed by the company's Market Research department and the EIA, along with trended projections of both by Itron capture a significant piece of the changing future environment for electric energy consumption. Specific sectors are modeled as follows:

Residential Sector

Residential kWh usage per customer is modeled using the SAE framework. This approach explicitly introduces trends in appliance saturation and efficiency, dwelling size, and thermal efficiency. It allows for an explanation of usage levels and changes in weather-sensitivity over time. The "bundling" of 19 residential appliances into "heating", "cooling" and "other" end uses form the basis of equipment-oriented drivers that interact with typical exogenous factors such as real median household income, average household size, cooling degree-days, heating degree-days, the real price of electricity to the residential class and the average number of billing days in each sales month. This structure captures significant variation in residential usage caused by changing appliance efficiency and saturation levels, economic cycles, weather fluctuations, electric price, and sales month duration. Projections of kWh usage per customer combined with the customer forecast provide the forecast of total residential energy sales. The residential customer forecast is developed by correlating monthly residential customers with county level population projections, provided by Moody's, for counties in which DEF serves residential customers.

Commercial Sector

Commercial MWh energy sales are forecast based on commercial sector (non-agricultural, non-manufacturing and non-governmental) employment, real retail sales, GDP, and the real price of electricity to the commercial class, the average number of billing days in each sales month, and the heating and cooling degree-day values. As in the residential sector, these variables interact with the commercial end-use equipment (listed below) after trends in equipment efficiency and saturation rates have been projected.

- Heating
- Cooling
- Ventilation
- Water heating
- Cooking
- Refrigeration
- Outdoor Lighting
- Indoor Lighting
- Office Equipment (PCs)
- Miscellaneous

The SAE model contains indices that are based on end-use energy intensity projections developed from EIA's commercial end-use forecast database. Commercial energy intensity is measured in terms of end-use energy use per square foot. End-use energy intensity projections are based on end-use efficiency and saturation estimates that are in turn driven by assumptions in available technology and costs, energy prices, and economic conditions. Energy intensities are calculated from the EIA's Annual Energy Outlook (AEO) commercial database. End-use intensity projections are derived for eleven building types. The energy intensity (EI) is derived by dividing end-use electricity consumption projections by square footage:

$$EI_{bet} = Energy_{bet} / sqft_{bt}$$

Where:

$Energy_{bet}$ = energy consumption for building type b, end-use e, year t

$Sqft_{bt}$ = square footage for building type b in year t

Commercial customers are modeled using the projected level of residential customers.

Industrial Sector

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

energy sales are modeled using Florida manufacturing employment, energy prices, and the average number of sales month billing days.

The industrial phosphate mining industry is modeled using customer-specific information with respect to anticipated market conditions. Since this sub-sector is comprised of only three customers, the forecast is dependent upon information received from direct customer contact. DEF Large Account Management employees provide specific phosphate customer information regarding customer production schedules, inventory levels, area mine-out and start-up predictions, and changes in self-service generation or energy supply situations over the forecast horizon. These Florida mining companies compete globally into a global market where farming conditions dictate the need for “crop nutrients.”

The projection of industrial accounts was not expected to decline as rapidly as it has in the previous ten years. The pace of “off-shoring” manufacturing jobs was expected to decline from past levels as the current administrations has favored the rebuilding of the American manufacturing sector. Also, the rapid increase in Florida population may recalibrate Florida’s competitiveness in “location analysis” studies performed by industry when determining site selection for new operations.

Street Lighting

Electricity sales to the street and highway lighting class are projected to decrease over the forecast period due to increased energy efficiency. The number of accounts has increased due to rate changes from the Public Authority class. A simple time-trend was used to project energy consumption and customer growth in this class.

Public Authorities

Energy sales to public authorities (SPA), comprised of federal, state, and local government operated services, are projected to increase within the DEF’s service area. This is a result of a growing economy and population representing a larger tax base. The level of government services, and thus energy, can be tied to the population base, as well as the amount of tax revenue collected to pay for these services. Factors affecting population growth will affect the need for additional governmental services (i.e., public schools, city services, etc.) thereby increasing SPA energy consumption. Government

employment has been determined to be the best indicator of the level of government services provided. This variable, along with cooling degree-days, energy prices and the sales month billing days, explains most of the variation over the historical sample period. Adjustments are also included in this model to account for the large change in school-related energy use throughout the year. The SPA customer forecast is projected linearly as a function of a time-trend. Recent budget issues have also had an impact on the near-term pace of growth.

Sales for Resale Sector

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

SECI is a wholesale, or Sales for Resale, customer of DEF that contracts for both seasonal and stratified loads over the forecast horizon. The municipal Sales for Resale class includes a number of customers, divergent not only in scope of service (i.e., full or partial requirement), but also in composition of ultimate consumers. Each customer is modeled separately in order to accurately reflect its individual profile. DEF serves partial requirement service (PR) to load serving customers such as Reedy Creek Improvement District. In each case, these customers contract with DEF for a specific level and type of stratified capacity (MW) needed to provide their particular electrical system with an appropriate level of reliability. The energy forecast for each contract is derived using information provided by the purchaser who better understands their needs. Electric energy growth and competitive market prices will dictate the amount of wholesale demand and energy throughout the forecast horizon.

PEAK DEMAND FORECAST

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

Total retail load refers to projections of DEF retail monthly net peak demand before any activation of DEF's General Load Reduction Plan. The historical values of this series are constructed to show the size of DEF's retail net peak demand assuming no utility activated load control had ever taken place. The value of constructing such a "clean" series enables the forecaster to observe and correlate the underlying trend in retail peak demand to retail customer levels and coincident weather conditions at the time of the peak and the amounts of Base-Heating-Cooling load estimated by the monthly Itron models without the impacts of year-to-year variation in utility-sponsored DR programs. Monthly peaks are projected using the Itron SAE generated use patterns for both weather sensitive (cooling & heating) appliances and base load appliances calculated by class in the energy models. Daily and hourly models of applying DEF class-of-business load research survey data lead to class and total retail hourly load profiles when a 30-year normal weather template replaces actual weather. The projections of retail peak are the result of a monthly model driven by the summation of class base, heating and cooling energy interpolated 30-year normal weather pattern-driven load profile. The projection for the months of January (winter) and August (summer) are typically when the seasonal peaks occur. Energy conservation and direct load control estimates consistent with DEF's DSM goals that have been established by the FPSC are applied to the MW forecast. Projections of dispatchable and cumulative non-dispatchable DSM impacts are subtracted from the projection of potential firm retail demand resulting in a projected series of firm retail monthly peak demand figures. The Interruptible and Curtailable service (IS and CS) tariff load projection is developed from historic monthly trends, as well as the incorporation of specific projected information obtained from DEF's large industrial accounts on these tariffs by account executives. Developing this piece of the demand forecast allows for appropriate firm retail demand results in the total retail coincident peak demand projection.

Sales for Resale demand projections represent load supplied by DEF to other electric suppliers such as SECI, RCID, and other electric transmission and distribution entities. For Partial Requirement demand projections, contracted MW levels dictate the level of seasonal demands.

DEF "company use" at the time of system peak is estimated using load research metering studies similar to potential firm retail. It is assumed to remain stable over the forecast horizon as it has historically.

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

HIGH AND LOW SCENARIOS

DEF has developed high and low scenarios around the base case energy sales and peak demand projections. Both scenarios incorporate historical variation in weather and economic conditions as well as service area population and household growth. Historical variation for economic driver variables selected in the base case energy sales models using the Moody's S1 & S3 (High/Low) scenarios. High and low weather variables were determined for the energy and peak weather variables (HDDs, CDDs, and monthly peak DDs) using actual 30-year weather conditions. Each weather variable used in the modeling process is ranked monthly from "high-to-low" degree days. The high (hottest or coldest) one-third of each variable is averaged and becomes a normal "High Case" weather condition. Similarly, the "mildest" one-third of each weather variable's observations are averaged and become the normal "Low Case" weather condition. A review of historical variation of DEF 29-county population growth based on Moody's high and low customer projections out ten years resulted in the final area of variability around the Load Forecast.

This procedure captures the most influential variables around energy sales and peak demand by estimating high and low cases for economics, demographics, and weather conditions. DEF has evaluated the load projections generated through this process against projected loads based on extreme temperature events over the last 30 years and concluded that the range of load represented in these cases encompasses the probable outcome of such extreme weather recurrence.

DEMAND SIDE MANAGEMENT

Pursuant to the provisions of Florida Statutes Section 366.82 (the "FEECA Statute"), which requires the FPSC to adopt goals for the FEECA utilities to increase energy efficiency and increase

the development of demand-side renewable energy systems and directs the FPSC to review those goals every five years, in 2024, the FPSC conducted its statutorily required review and approved the Goals for the period of 2025-2034 time period and directed the utilities to file Program Plans designed to achieve these goals (Order No. PSC-2024-0429-FOF-EG). In December 2024, DEF submitted a Plan designed to achieve the approved goals to the Commission and a Final Order is pending. The programs included in the proposed Plan are subject to periodic monitoring and evaluation to ensure that all demand-side resources are acquired in a cost-effective manner and that the program savings are durable. Tables 2.1 and 2.2 reflect the annual Program achievements for the residential and commercial sector compared to the Commission established goals for the 2020-2024 time period.

RESIDENTIAL DEMAND SIDE MANAGEMENT PROGRAMS

TABLE 2.1
Residential DSM MW and GWH Savings

RESIDENTIAL									
YEAR	WINTER PEAK MW REDUCTION			SUMMER PEAK MW REDUCTION			GWH ENERGY REDUCTION		
	COMMISSION			COMMISSION			COMMISSION		
	TOTAL	APPROVED	%	TOTAL	APPROVED	%	TOTAL	APPROVED	%
	ACHIEVED	GOAL	VARIANCE	ACHIEVED	GOAL	VARIANCE	ACHIEVED	GOAL	VARIANCE
2020	31	32	-5%	18	16	13%	35	9	277%
2021	16	28	-42%	10	14	-26%	25	6	311%
2022	25	25	1%	16	12	30%	49	4	1205%
2023	30	22	36%	19	11	70%	50	2	2244%
2024	29	21	37%	18	11	64%	46	1	3915%

The following provides a list of DEF's Residential DSM programs as of December 31, 2024, along with a brief overview of each program:

Home Energy Check – This is DEF's home energy audit program as required by Rule 25-17.003(3)(b), F.A.C. DEF offers a variety of options to customers for home energy audits including walk-through audits, phone assisted audits, and on-line audits. At the completion of the audit, DEF also provides kits that contain energy saving measures that may be easily installed by the customer.

Residential Incentive Program – This program provides incentives on a variety of cost-effective measures designed to provide energy savings. DEF expects to provide incentives to customers for the installation of approximately 75,000 energy saving measures over the 2020 to 2024 time period. These measures primarily include heating and cooling, duct repair, insulation, and energy efficient windows and home energy management systems. The measures and incentive levels included in this program have been updated to reflect the impacts of new codes and standards.

Neighborhood Energy Saver – This program is designed to provide energy saving education and assistance to low-income customers. This program targets neighborhoods that meet certain income eligibility requirements. DEF plans to install energy saving measures in approximately 5,250 homes annually over the 2020 to 2024 time period. Additionally, DEF increased its targeted homes by 5% or 250 homes above the annual projected homes for the calendar years 2022-2024. These measures will be installed at no cost to the customer and include air infiltration measures, water heating measures, lighting, insulation, duct repair, and heat pump and air conditioning tune-ups.

Low Income Weatherization Assistance Program – DEF partners with local agencies to provide funding for energy efficiency and weatherization measures to low-income customers through this program. DEF expects to provide assistance to approximately 500 customers annually through this program.

Residential Load Management a/k/a EnergyWise – This is a voluntary residential demand response program that provides monthly bill credits to customers who allow DEF to reduce peak demand by controlling service to selected electric equipment through various devices and communication options installed on the customer's premises. These interruptions are at DEF's option, during specified time periods, and coincident with hours of peak demand. Customers must have a minimum average monthly usage of 600 kWh to be eligible to participate in this program.

The Company is actively replacing 3G load control devices at customer premises and it remains on track for that work to be completed in 2025, as noted in the 2023 Ten-Year Site Plan. Regional control testing, along with interval meter data, is being utilized to determine the likelihood of

connectivity of one-way paging load control devices. The results of this analysis will dictate DEF's campaign strategy for requesting access to replace older non-functioning devices inside customer homes. DEF filed its plan for incremental capability in the 2024 DSM goal setting docket and will reflect the Commission approved increases in the 2026 Ten-Year Site Plan.

COMMERCIAL/INDUSTRIAL DEMAND SIDE MANAGEMENT PROGRAMS

TABLE 2.2

Commercial/Industrial DSM MW and GWH Savings

COMMERCIAL / INDUSTRIAL									
YEAR	WINTER PEAK MW REDUCTION			SUMMER PEAK MW REDUCTION			GWH ENERGY REDUCTION		
	COMMISSION			COMMISSION			COMMISSION		
	TOTAL	APPROVED	%	TOTAL	APPROVED	%	TOTAL	APPROVED	%
	ACHIEVED	GOAL	VARIANCE	ACHIEVED	GOAL	VARIANCE	ACHIEVED	GOAL	VARIANCE
2020	24	5	354%	46	8	460%	40	6	582%
2021	11	5	124%	24	7	248%	22	4	454%
2022	5	5	1%	5	6	-17%	3	2	25%
2023	30	5	510%	27	6	377%	10	1	654%
2024	24	5	421%	21	5	327%	9	1	1142%

The following provides a list of DEF's Commercial DSM programs as of December 31, 2024, along with a brief overview of each program:

Business Energy Check – This is a commercial energy audit program that provides commercial customers with an analysis of their energy usage and information about energy-saving practices specific to their business and operations and cost-effective measures that they can implement at their facilities.

Smart Saver Business f/k/a Better Business – This program provides incentives to commercial customers on a variety of cost-effective energy efficiency measures. These measures are primarily comprised of measures that reduce cooling and heating load.

Smart Saver Custom Incentive f/k/a Florida Custom Incentive – The objective of this program is to encourage customers to make capital investments for the installation of energy efficiency measures which reduce energy and peak demand. This program provides incentives for customized

energy efficiency projects and measures that are cost effective but are not otherwise included in DEF's prescriptive commercial programs.

Interruptible Service – This program is available to commercial customers with a minimum billing demand of 500 KW or more who are willing to have their power interrupted at times of capacity shortage during peak or emergency conditions. DEF has remote control access to the switch providing power to the customer's equipment. Customers participating in the Interruptible Service program receive a monthly interruptible demand credit based on their bills.

Curtable Service - This program is an indirect load control program that reduces DEF's energy demand at times of capacity shortage during peak or emergency conditions. The program is available to commercial customers with a minimum of 500 KW or more who are willing to curtail their load.

Standby Generation - This program is a demand control program that reduces DEF's demand based upon the control of the customer's back-up generator. The program is a voluntary program available to all commercial and industrial customers who have on-site stand-by generation capacity of at least 50 KW and are willing to allow remote activation of their on-site generation capability in emergencies.

OTHER DSM PROGRAMS

The following provides an overview of other DSM programs:

Technology Development – This program is used to fund research, testing and development of new energy efficiency and demand response technologies. This program provides the opportunity to investigate and test new technologies and determine their usefulness and feasibility in the support of energy efficiency and demand response programs.

Qualifying Facilities – This program analyzes, forecasts, facilitates, and administers the potential and actual power purchases from Qualifying Facilities (QFs) and the state jurisdictional QF or

distributed generator interconnections. The program supports meetings with interested parties or potential QFs, including cogeneration and small power production facilities including renewables interested in providing renewable capacity or energy deliveries within our service territory. Project, interconnection, and avoided cost discussions with renewable and combined heat and power developers who are also exploring distributed generation options continue to remain steady. Most of the interest is coming from companies utilizing solar photovoltaic technology as the price of photovoltaic panels has decreased over time. The cost of this technology continues to decrease, and subsidies remain in place. As of December 31st, 2024, DEF had 53 active solar projects totaling approximately 3,940 MW in its FERC jurisdictional interconnection queue and 17 of those projects included DEF as the project developer. As the technologies advance and the market evolves, the Company's policies will continue to be refined and remain compliant.

CHAPTER 3

FORECAST OF FACILITIES REQUIREMENTS



CHAPTER 3

FORECAST OF FACILITIES REQUIREMENTS

RESOURCE PLANNING FORECAST

OVERVIEW OF CURRENT FORECAST

Supply-Side Resources

As of December 31, 2024, DEF had a summer total firm capacity resource of 11,305 MW (see Table 3.1). This capacity resource includes fossil steam generators (2,427 MW), combined cycle plants (5,303 MW), combustion turbines (1,958 MW), solar power plants (776 MW), independent power purchases (660 MW), and non-utility purchased power (182 MW). Table 3.2 presents DEF's firm capacity contracts with renewable and cogeneration Facilities.

Demand-Side Programs

In September 2024, the FPSC approved demand-side management programs designed to meet the DSM goals established by the Commission in Order PSC-2024-0429-FOF-EG. Total DSM resources are presented in Schedules 3.1 and 3.2 of Chapter 2. These programs include Non-Dispatchable DSM, Interruptible Load, and Dispatchable Load Control resources.

Capacity and Demand Forecast

DEF's forecasts of capacity and demand for the projected summer and winter peaks can be found in Schedules 7.1 and 7.2, respectively. Demand forecasts shown in these schedules are based on Schedules 3.1.1 and 3.2.1, the base summer and winter forecasts. DEF's forecasts of capacity and demand are based on serving expected growth in retail requirements in its regulated service area and meeting commitments to wholesale power customers who have entered into supply contracts with DEF. In its planning process, DEF balances its supply plan for the needs of retail and wholesale customers and endeavors to ensure that cost-effective resources are available to meet the needs across the customer base.

Base Expansion Plan

DEF's planned supply resource additions and changes are shown in Schedule 8 and are referred to as DEF's Base Expansion Plan. This plan includes a net addition of over 4,400 MW of solar PV generation with an expected equivalent summer firm capacity contribution of approximately 860 MW and winter firm capacity contribution of approximately 184 MW. It also includes an addition of 1,325 MWs of storage capacity with a firm capacity of approximately 1,080 MW; and 940 MW of combustion turbine firm capacity added in years 2033 and 2034. The incorporation of the full firm capacity of the Osprey Energy Center takes place in June 2025. Between 2025 and 2026, DEF will add the last 200 MW of combined cycle capacity that results from projects focusing on increasing the fuel efficiency of the combined cycle generating units. DEF continues to consider market supply-side resource alternatives to enhance DEF's resource plan.

DEF recognizes that as solar penetration increases, including both DEF and customer owned PV, the relationship between the solar production and the coincident load peak will change. DEF conducted an Effective Load Carrying Capability Study (ELCC) for our solar resources and used the results of that study for the solar firmness for summer and winter.

Resources added in	Solar Firmness	
	Summer	Winter
2018-2024	53.7%	5.0%
2025	34.4%	4.9%
2026	36.5%	4.4%
2027	33.5%	4.1%
* Increm. 600MW	27.5%	4.1%
* Increm. 600MW	21.5%	4.1%
* Increm. 600MW	15.5%	4.1%
* Additional resources	9.5%	4.1%

- Only the values through 2027 came from the ELCC study.

In this plan, DEF has assigned this DEF owned solar PV generation an equivalent summer capacity value equal to the values included in the table above multiplied by the nameplate capacity of the existing and planned installations from 2018 to 2034. An annual performance degradation factor of 0.5% has been assigned to the PV installations. DEF will perform additional ELCC studies for solar

resources beyond the additions through year 2027 and for storage resources as well and revise these values in future Site Plans based on changes in project designs and the data received from actual operation of these facilities once they are installed. In addition, DEF recognizes that higher penetration of PV resources on the system will result in a need for additional balancing of generation intermittency. The declining capacity value for PV installations late in this decade and beyond could be improved substantially if battery technology advances support economic pairing of PV with energy storage, which could also help to address the need for balancing generation intermittency. DEF's strategy of steady and carefully paced additions of PV to the system will allow continued evaluation of these impacts and the need for additional resources in the future to meet these needs.

In their ongoing efforts to regulate greenhouse gas emissions, on June 19, 2019, the Environmental Protection Agency (EPA) issued the Affordable Clean Energy (ACE) Rule to replace the 2015 Clean Power Plan (CPP). However, on January 19, 2021, the U.S. Court of Appeals for the District of Columbia issued its opinion vacating the ACE Rule and remanding the rule to the EPA. On October 29, 2021, the Supreme Court agreed to hear the appeal of the ACE vacatur. The case was heard at the Supreme Court in February 2022, and on June 30, 2022, the Court issued a decision reversing and remanding the January 19, 2021, D.C. Circuit Court decision. Currently, neither the CPP nor the ACE rule are in effect, as the EPA is working on a replacement rule. On May 23, 2023, EPA proposed five separate actions, which include establishing Greenhouse Gas (GHG) performance standards for fossil fuel fired electric generating units and combustion turbines as well as repealing the ACE rule. The EPA proposal implements more GHG emission standards, which are potentially applicable to several DEF coal and natural gas combustion turbine units. DEF will continue to monitor the proposed rule, which was finalized in April 2024, and the potentially applicable requirements to the DEF emission units.

On May 9, 2024, EPA published final rules in the *Federal Register* to regulate greenhouse gas emissions from fossil fuel-fired power plants under Section 111 of the CAA. On July 19, 2024, the U.S. Court of Appeals for the D.C. Circuit (D.C. Circuit) unanimously denied petitioners' attempt to stay the rule and ordered an expedited briefing schedule. Subsequently, on October 16, 2024, the U.S. Supreme Court rejected a request to stay the rule, recognizing that the D.C. Circuit's final decision was pending but noting that the lower court should proceed "with dispatch." On

December 6, 2024, the D.C. Circuit heard oral argument from EPA and the petitioners. There is no specific date set for the court to issue its decision; however, on February 5, 2025, EPA filed a motion requesting the D.C. Circuit to withhold issuing an opinion and place the case in a 60-day abeyance to allow time for new EPA leadership to review the issues and underlying rules and determine how they wish to proceed. The court has yet to rule. Importantly, putting the case in abeyance will not stay the effectiveness of the rules. DEF will continue to monitor the status of the rule and associated litigation and any applicable requirements to the DEF emission units.

Duke Energy has set a goal at the enterprise level of achieving at least a 50% reduction in CO₂ emissions from a 2005 baseline by 2030 and net-zero emissions by 2050. DEF has incorporated anticipated tax savings from the 2022 IRA into our resource plan optimization and production cost models. These savings have increased the cost effectiveness of clean energy resources, particularly solar and batteries, enabling further cost-effective progress toward achievement of Duke Energy's enterprise level target.

DEF continues to modernize its generation resources with the retirement and projected retirements of several of the older units in the fleet, particularly combustion turbines at Bayboro, DeBary P2 - P6, and Bartow P1 & P3. Continued operations of the peaking units at Bayboro are planned through the year 2026. The DeBary units P2 - P6 and Bartow units P1 & P3 are projected to retire in 2027. Our coal generating plants Crystal River 4 and 5 are scheduled to be retired in May 2034, together with other peaking units such as Bartow P2 & P4, Suwannee P1 – P3 and Intercession City P1 -P6. There are many factors which may impact these retirements including environmental regulations and permitting, unit age and maintenance requirements, local operational needs, their relatively small capacity size and system requirement needs. In addition to retirements, DEF anticipates the expiration of one firm capacity contract with a Qualifying Facility (QF) and an Independent Power Producer (IPP) over the plan period. Although the Base Expansion Plan projects expiration of all these contracts, DEF continues to consider options for renewing these contracts in a manner that provides system reliability and cost-effective energy for our customers.

DEF continues to improve the performance of its generation fleet. Starting in mid-2023 and through the end of 2026, DEF will perform upgrades to the combustion turbines associated with several of the

fleet combined cycle units. The goal of these upgrades is to reduce the unit heat rates, improve the fleet fuel efficiency, and reduce DEF CO₂ emissions. These upgrades will also result in the addition of close to 400 MWs of combined cycle capacity.

DEF's Base Expansion Plan projects the need for additional capacity with proposed in-service dates during the ten-year period from 2025 through 2034. The planned capacity additions, together with purchases from QFs, Investor-Owned Utilities (IOUs), and IPPs enable the DEF system to meet the energy requirements of its customer base. The capacity needs identified in this plan may be impacted by DEF's ability to extend or replace existing purchased power, cogeneration and QF contracts and to secure new renewable purchased power resources in their respective projected timeframes. The additions in the Base Expansion Plan depend, in part, on projected load growth, and obtaining all necessary state and federal permits under current schedules. Changes in these or other factors could impact DEF's Base Expansion Plan.

DEF has examined the high and low load scenarios presented in Schedules 3.1 and 3.2. As discussed in Chapter 2, these scenarios were developed to present and test a range of likely outcomes in peak load and energy demand. DEF found that the Base Expansion Plan was robust under the range of conditions examined. Current planned capacity is sufficient to meet the demand including reserve margin in these cases through 2028 allowing DEF sufficient time to plan additional generation capacity either through power purchase or new generation construction as needed if higher than baseline conditions emerge. If lower than baseline conditions emerge, DEF can defer future generation additions.

Status reports and specifications for the planned new generation facilities are included in Schedule 9. Planned transmission lines associated with the DEF Bulk Electric System (BES) are shown in Schedule 10.

TABLE 3.1 DUKE ENERGY FLORIDA TOTAL CAPACITY RESOURCES OF POWER PLANTS AND PURCHASED POWER CONTRACTS AS OF DECEMBER 31, 2024	
PLANTS	SUMMER NET DEPENDABLE CAPABILITY (MW)
Fossil Steam	2,427
Combined Cycle	5,303
Combustion Turbine	1,958
Solar	776
Total Net Dependable Generating Capability	10,463
Dependable Purchased Power	841
Firm Qualifying Facility Contracts (182 MW) *	
Investor Owned Utilities (0 MW)	
Independent Power Producers (660 MW)	
TOTAL DEPENDABLE CAPACITY RESOURCES	11,305

* Pinellas and Pasco County (78MW) are included. Their contracts expire on 12/31/2024

<p align="center">TABLE 3.2</p> <p align="center">DUKE ENERGY FLORIDA</p> <p align="center">FIRM RENEWABLES</p> <p align="center">AND COGENERATION CONTRACTS</p> <p align="center">AS OF DECEMBER 31, 2024</p>	
Facility Name	Firm Capacity (MW)
Orange Cogen (CFR-Biogen)	104
Pasco County Resource Recovery *	23
Pinellas County Reserve Recovery *	55
TOTAL	182

* Contracts expire on 12/31/2024

DUKE ENERGY FLORIDA

SCHEDULE 7.1

FORECAST OF CAPACITY, DEMAND AND SCHEDULED MAINTENANCE AT TIME OF SUMMER PEAK

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	TOTAL INSTALLED CAPACITY	FIRM ^a CAPACITY IMPORT	FIRM CAPACITY EXPORT		TOTAL CAPACITY AVAILABLE	SYSTEM FIRM SUMMER PEAK DEMAND	RESERVE MARGIN BEFORE MAINTENANCE		SCHEDULED MAINTENANCE	RESERVE MARGIN AFTER MAINTENANCE	
YEAR	MW	MW	MW	QF ^b MW	MW	MW	MW % OF PEAK		MW	MW % OF PEAK	
2025	10,936	764	0	0	11,699	8,792	2,907 33%		0	2,907 33%	
2026	11,205	660	0	0	11,865	8,908	2,957 33%		0	2,957 33%	
2027	10,999	0	0	0	10,999	8,971	2,029 23%		0	2,029 23%	
2028	11,237	0	0	0	11,237	8,962	2,276 25%		0	2,276 25%	
2029	11,618	0	0	0	11,618	9,009	2,609 29%		0	2,609 29%	
2030	11,782	0	0	0	11,782	9,143	2,639 29%		0	2,639 29%	
2031	11,964	0	0	0	11,964	9,202	2,762 30%		0	2,762 30%	
2032	12,105	0	0	0	12,105	9,305	2,800 30%		0	2,800 30%	
2033	12,717	0	0	0	12,717	9,390	3,326 35%		0	3,326 35%	
2034	11,567	0	0	0	11,567	9,504	2,064 22%		0	2,064 22%	

Notes:

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

b. QF includes Firm Renewables

DUKE ENERGY FLORIDA

SCHEDULE 7.2

FORECAST OF CAPACITY, DEMAND AND SCHEDULED MAINTENANCE AT TIME OF WINTER PEAK

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	TOTAL INSTALLED CAPACITY	FIRM ^a CAPACITY IMPORT	FIRM CAPACITY EXPORT		TOTAL CAPACITY AVAILABLE	SYSTEM FIRM WINTER PEAK DEMAND	RESERVE MARGIN BEFORE MAINTENANCE		SCHEDULED MAINTENANCE	RESERVE MARGIN AFTER MAINTENANCE	
YEAR	MW	MW	MW	QF ^b MW	MW	MW	MW	% OF PEAK	MW	MW	% OF PEAK
2024/25	10,673	808	0	0	11,481	9,105	2,377	26%	0	2,377	26%
2025/26	11,254	704	0	0	11,958	9,269	2,690	29%	0	2,690	29%
2026/27	11,287	704	0	0	11,991	9,328	2,664	29%	0	2,664	29%
2027/28	10,996	0	0	0	10,996	8,796	2,200	25%	0	2,200	25%
2028/29	11,101	0	0	0	11,101	8,853	2,248	25%	0	2,248	25%
2029/30	11,408	0	0	0	11,408	8,910	2,499	28%	0	2,499	28%
2030/31	11,513	0	0	0	11,513	8,876	2,638	30%	0	2,638	30%
2031/32	11,627	0	0	0	11,627	8,907	2,720	31%	0	2,720	31%
2032/33	11,736	0	0	0	11,736	8,954	2,782	31%	0	2,782	31%
2033/34	12,357	0	0	0	12,357	9,050	3,307	37%	0	3,307	37%

Notes:

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

b. QF includes Firm Renewables

DUKE ENERGY FLORIDA
SCHEDULE 8
PLANNED AND PROSPECTIVE GENERATING FACILITY ADDITIONS AND CHANGES
AS OF JANUARY 1, 2025 THROUGH DECEMBER 31, 2034

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
PLANT NAME	UNIT	LOCATION	UNIT	FUEL	FUEL TRANSPORT			CONST.	COM'L IN-	EXPECTED	GEN. MAX.	FIRM NET CAPABILITY		STATUS ^a	NOTES ^b
								START	SERVICE	RETIREMENT	NAMEPLATE	SUMMER	WINTER		
								MO. / YR	MO. / YR	MO. / YR	KW	MW	MW		
P.L. BARTOW	4	PINELLAS	CC	NG	DFO	PL	TK		04/2025				59	P	(1)
HINES	2	POLK	CC	NG	DFO	PL	TK	02/2025	04/2025			65	65	P	(5) and (7)
OSPREY CC	1	POLK	CC	NG	DFO	PL	TK		06/2025			371	366	P	(3)
SUNDANCE	1	MADISON	PV	SO				05/2024	07/2025		74,900	26	4	P	(7)
LAKE PLACID	PV1	HIGHLANDS	PV	SO					07/2025			11	1	P	(8)
OSPREY CC	1	POLK	CC	NG	DFO	PL	TK		11/2025			0	40	P	(6)
TIGER BAY	1	POLK	CC	NG	DFO	PL	TK	09/2025	11/2025			22	22	P	(5) and (7)
CITRUS	PB1	CITRUS	CC	NG				02/2025	11/2025			22	22	P	(5) and (7)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(4)	(0.3)	D	(2)
RATTLER	1	HERNANDO	PV	SO				02/2025	01/2026		74,900	26	4	P	(7)
HALF MOON	1	SUMTER	PV	SO				02/2025	01/2026		74,900	26	4	P	(7)
CITRUS	PB2	CITRUS	CC	NG				02/2026	04/2026			22	44	P	(5) and (7)
BAILEY MILL	1	JEFFERSON	PV	SO				04/2025	05/2026		74,900	26	4	P	(7)
P.L. BARTOW	4	PINELLAS	CC	NG	DFO	PL	TK	09/2024	05/2026			38	63	P	(6)
HINES	3	POLK	CC	NG	DFO	PL	TK	03/2026	05/2026			65	65	P	(5) and (7)
JUMPER CREEK	1	SUMTER	PV	SO				06/2025	06/2026		74,900	27	3	P	(7)
BAYBORO	P1 - P4	PINELLAS	CT	DFO		WA				9/2026		(137)	(193)	RT	(7)
HINES	4	POLK	CC	NG	DFO	PL	TK	09/2026	11/2026			22	33	P	(5) and (7)
TURNPIKE	1	OSCEOLA	PV	SO				01/2025	12/2026		74,900	27	3	P	(7)
LONESOME CAMP	1	OSCEOLA	PV	SO				02/2025	12/2026		74,900	27	3	P	(7)
BANNER	1	COLUMBIA	PV	SO				02/2025	12/2026		74,500	27	3	P	(7)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(4)	(0.4)	D	(2)

a. See page v. for Code Identification of Future Generating Unit Status.

b. NOTES

- (1) Provisional interconnection agreement to go above 1200 net MW possibly after March 2025.
- (2) Solar capacity degrades by 0.5% every year
- (3) Osprey CC total capacity is available once Transmission Upgrades are in service
- (4) Multiple 74.9 MWs units at different sites. For SPS, 50 MW of storage for 74.9 MW of Solar PV.
- (5) Combustion Turbines Heat Rate upgrades for Combined Cycles
- (6) Testing for the Combined Cycle Heat Rate upgrades
- (7) Planned, Prospective, or Committed project.
- (8) Repaired after Hurricane Impact

DUKE ENERGY FLORIDA

SCHEDULE 8

PLANNED AND PROSPECTIVE GENERATING FACILITY ADDITIONS AND CHANGES

AS OF JANUARY 1, 2025 THROUGH DECEMBER 31, 2034

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
PLANT NAME	UNIT	LOCATION	UNIT	FUEL		FUEL TRANSPORT		CONST.	COM'L IN-	EXPECTED	GEN. MAX.	FIRM		STATUS ^a	NOTES ^b
				PRI.	ALT.	PRI.	ALT.	START	SERVICE	RETIREMENT	NAMEPLATE	SUMMER	WINTER		
				MO./YR	MO./YR	MO./YR	KW	MW	MW						
POWERLINE		CITRUS	BA	N/A		N/A		01/2026	03/2027		100,000	90	90	P	(7)
DEBARY	P2 - P6	VOLUSIA	CT	DFO		TK				06/2027		(227)	(292)	RT	(7)
BARTOW	P1, P3	PINELLAS	CT	DFO		WA				06/2027		(82)	(101)	RT	(7)
UNKNOWN		UNKNOWN	PV	SO				12/2025	06/2027		149,800	50	6	P	(4) and (7)
UNKNOWN		UNKNOWN	PV	SO				05/2026	12/2027		149,800	50	6	P	(4) and (7)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(5)	(0.5)	D	(2)
UNKNOWN		UNKNOWN	PV	SO				01/2026	07/2028		224,700	62	9	P	(4) and (7)
UNKNOWN		UNKNOWN	SPSPV	SO				01/2026	07/2028		149,800	41	6	P	(4) and (7)
UNKNOWN		UNKNOWN	SPSBA	N/A				01/2026	07/2028		100,000	90	90	P	(4) and (7)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(5)	(0.5)	D	(2)
UNKNOWN		UNKNOWN	BA	N/A				01/2027	06/2029		225,000	203	203	P	(7)
UNKNOWN		UNKNOWN	PV	SO				01/2027	07/2029		224,700	62	9	P	(4) and (7)
UNKNOWN		UNKNOWN	SPSPV	SO				01/2027	07/2029		149,800	32	6	P	(4) and (7)
UNKNOWN		UNKNOWN	SPSBA	N/A				01/2027	07/2029		100,000	90	90	P	(4) and (7)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(6)	(0.6)	D	(2)
UNKNOWN		UNKNOWN	PV	SO				01/2028	07/2030		224,700	48	9	P	(4) and (7)
UNKNOWN		UNKNOWN	SPSPV	SO				01/2028	07/2030		149,800	32	6	P	(4) and (7)
UNKNOWN		UNKNOWN	SPSBA	N/A				01/2028	07/2030		100,000	90	90	P	(4) and (7)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(6)	(0.7)	D	(2)
UNKNOWN		UNKNOWN	PV	SO				01/2029	07/2031		74,900	16	3	P	(4) and (7)
UNKNOWN		UNKNOWN	PV	SO				01/2029	07/2031		374,500	58	15	P	(4) and (7)
UNKNOWN		UNKNOWN	SPSPV	SO				01/2029	07/2031		149,800	23	6	P	(4) and (7)
UNKNOWN		UNKNOWN	SPSBA	N/A				01/2029	07/2031		100,000	90	90	P	(4) and (7)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(6.8)	(0.8)	D	(2)

a. See page v. for Code Identification of Future Generating Unit Status.

b. NOTES

- (2) Solar capacity degrades by 0.5% every year
- (4) Multiple 74.9 MW units at different sites. For SPS, 50 MW of storage for 74.9 MW of Solar PV.
- (5) Combustion Turbines Heat Rate upgrades for Combined Cycles
- (7) Planned, Prospective, or Committed project.

DUKE ENERGY FLORIDA

SCHEDULE 8

PLANNED AND PROSPECTIVE GENERATING FACILITY ADDITIONS AND CHANGES

AS OF JANUARY 1, 2025 THROUGH DECEMBER 31, 2034

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
												FIRM			
												NET CAPABILITY			
												SUMMER	WINTER		
PLANT NAME	UNIT NO.	LOCATION (COUNTY)	UNIT TYPE	FUEL PRI.	FUEL ALT.	FUEL TRANSPORT PRI.	FUEL TRANSPORT ALT.	CONST. START MO./YR	COM'L IN-SERVICE MO./YR	EXPECTED RETIREMENT MO./YR	GEN. MAX. NAMEPLATE KW	MW	MW	STATUS ^a	NOTES ^b
UNKNOWN		UNKNOWN	PV	SO				01/2030	07/2032		74,900	12	3	P	(4) and (7)
UNKNOWN		UNKNOWN	PV	SO				01/2030	07/2032		374,500	36	15	P	(4) and (7)
UNKNOWN		UNKNOWN	SPS PV	SO				01/2030	07/2032		149,800	14	6	P	(4) and (7)
UNKNOWN		UNKNOWN	SPS BA	N/A				01/2030	07/2032		100,000	85	85	P	(4) and (7)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(7.2)	(0.9)	D	(2)
UNKNOWN	P1 - P2	UNKNOWN	CT	NG	DFO	FL	TK	01/2029	06/2033		509,046	491	527	P	(7)
UNKNOWN		UNKNOWN	PV	SO				01/2031	07/2033		449,400	43	18	P	(4) and (7)
UNKNOWN		UNKNOWN	SPS PV	SO				01/2031	07/2033		149,800	14	6	P	(4) and (7)
UNKNOWN		UNKNOWN	SPS BA	N/A				01/2031	07/2033		100,000	70	70	P	(4) and (7)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(7.5)	(1.0)	D	(2)
INTERCESSION CITY	P1 - P6	OSCEOLA	CT	DFO		PL, TK				06/2034		(275)	(363)	RT	(7)
BARTOW	P2, P4	PINELLAS	CT	NG	DFO	PL	WA			06/2034		(86)	(111)	RT	(7)
SUWANNEE	P1, P3	SUWANNEE	CT	NG	DFO	PL	TK			06/2034		(97)	(130)	RT	(7)
SUWANNEE	P2	SUWANNEE	CT	NG		PL				06/2034		(48)	(64)	RT	(7)
CRYSTAL RIVER	4, 5	CITRUS	ST	BIT		WA	RR			06/2034		(1422)	(1442)	RT	(7)
UNKNOWN	P3 - P4	UNKNOWN	CT	NG	DFO	FL	TK	01/2030	06/2034		458,600	449	465	P	(7)
UNKNOWN		UNKNOWN	BA	N/A				01/2032	06/2034		300,000	210	210	P	(7)
UNKNOWN		UNKNOWN	PV	SO				01/2032	07/2034		449,400	43	18	P	(4) and (7)
UNKNOWN		UNKNOWN	SPS PV	SO				01/2032	07/2034		149,800	14	6	P	(4) and (7)
UNKNOWN		UNKNOWN	SPS BA	N/A				01/2032	07/2034		100,000	70	70	P	(4) and (7)
SOLAR DEGRADATION	N/A	N/A	N/A	N/A		N/A		N/A	N/A	N/A	N/A	(7.7)	(1.1)	D	(2)

a. See page v. for Code Identification of Future Generating Unit Status.

b. NOTES

(2) Solar capacity degrades by 0.5% every year

(4) Multiple 74.9 MWs units at different sites. For SPS, 50 MW of storage for 74.9 MW of Solar PV.

(7) Planned, Prospective, or Committed project.

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

- | | | | |
|--------------------------------------------------|--------------------------------------------|----------------|--|
| (1) Plant Name and Unit Number: | Sundance | | |
| (2) Capacity | | | |
| a. Nameplate (MWac): | 74.9 | | |
| b. Summer Firm (MWac): | 25.8 | | |
| c. Winter Firm (MWac): | 3.7 | | |
| (3) Technology Type: | PHOTOVOLTAIC | | |
| (4) Anticipated Construction Timing | | | |
| a. Field construction start date: | 05/2024 | | |
| b. Commercial in-service date: | 07/2025 | (EXPECTED) | |
| (5) Fuel | | | |
| a. Primary fuel: | SOLAR | | |
| b. Alternate fuel: | N/A | | |
| (6) Air Pollution Control Strategy: | N/A | | |
| (7) Cooling Method: | N/A | | |
| (8) Total Site Area | ~500-600 ACRES
PER SOLAR SITE (74.9 MW) | | |
| (9) Construction Status: | UNDER CONSTRUCTION | | |
| (10) Certification Status: | | | |
| (11) Status with Federal Agencies: | | | |
| (12) Projected Unit Performance Data | | | |
| a. Planned Outage Factor (POF): | | N/A % | |
| b. Forced Outage Factor (FOF): | | N/A % | |
| c. Equivalent Availability Factor (EAF): | | N/A % | |
| d. Resulting Capacity Factor (%): | | 26.2% % | |
| e. Average Net Operating Heat Rate (ANOHR): | | N/A BTU/Kwh | |
| (13) Projected Unit Financial Data | | | |
| a. Book Life (Years): | | 35 | |
| b. Total Installed Cost (In-service year \$/Kw): | | 1,481 | |
| c. Direct Construction Cost (\$/Kw ac): | (\$2025) | | |
| d. AFUDC Amount (\$/Kw): | | | |
| e. Escalation (\$/Kw): | | | |
| f. Fixed O&M (\$/Kw dc-yr): | (\$2025) | 11.48 | |
| g. Variable O&M (\$/MWh): | (\$2025) | 0.00 | |
| h. K Factor: | | NO CALCULATION | |

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

- | | | | |
|--------------------------------------------------|--------------------------------------------|------------|--|
| (1) Plant Name and Unit Number: | Half Moon | | |
| (2) Capacity | | | |
| a. Nameplate (MWac): | 74.9 | | |
| b. Summer Firm (MWac): | 25.8 | | |
| c. Winter Firm (MWac): | 3.7 | | |
| (3) Technology Type: | PHOTOVOLTAIC | | |
| (4) Anticipated Construction Timing | | | |
| a. Field construction start date: | 02/2025 | | |
| b. Commercial in-service date: | 01/2026 | (EXPECTED) | |
| (5) Fuel | | | |
| a. Primary fuel: | SOLAR | | |
| b. Alternate fuel: | N/A | | |
| (6) Air Pollution Control Strategy: | N/A | | |
| (7) Cooling Method: | N/A | | |
| (8) Total Site Area: | ~500-600 ACRES
PER SOLAR SITE (74.9 MW) | | |
| (9) Construction Status: | UNDER CONSTRUCTION | | |
| (10) Certification Status: | | | |
| (11) Status with Federal Agencies: | | | |
| (12) Projected Unit Performance Data | | | |
| a. Planned Outage Factor (POF): | N/A | % | |
| b. Forced Outage Factor (FOF): | N/A | % | |
| c. Equivalent Availability Factor (EAF): | N/A | % | |
| d. Resulting Capacity Factor (%): | 25.7% | % | |
| e. Average Net Operating Heat Rate (ANOHR): | N/A | BTU/Kwh | |
| (13) Projected Unit Financial Data | | | |
| a. Book Life (Years): | 35 | | |
| b. Total Installed Cost (In-service year \$/Kw): | 1,938 | | |
| c. Direct Construction Cost (\$/Kw ac): | (\$2025) | | |
| d. AFUDC Amount (\$/Kw): | | | |
| e. Escalation (\$/Kw): | | | |
| f. Fixed O&M (\$/Kw dc-yr): | (\$2025) | 11.30 | |
| g. Variable O&M (\$/MWh): | (\$2025) | 0.00 | |
| h. K Factor: | NO CALCULATION | | |

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

- | | | | |
|--------------------------------------------------|--------------------------------------------|------------|--|
| (1) Plant Name and Unit Number: | Rattler | | |
| (2) Capacity | | | |
| a. Nameplate (MWac): | 74.9 | | |
| b. Summer Firm (MWac): | 25.8 | | |
| c. Winter Firm (MWac): | 3.7 | | |
| (3) Technology Type: | PHOTOVOLTAIC | | |
| (4) Anticipated Construction Timing | | | |
| a. Field construction start date: | 02/2025 | | |
| b. Commercial in-service date: | 01/2026 | (EXPECTED) | |
| (5) Fuel | | | |
| a. Primary fuel: | SOLAR | | |
| b. Alternate fuel: | N/A | | |
| (6) Air Pollution Control Strategy: | N/A | | |
| (7) Cooling Method: | N/A | | |
| (8) Total Site Area: | ~500-600 ACRES
PER SOLAR SITE (74.9 MW) | | |
| (9) Construction Status: | UNDER CONSTRUCTION | | |
| (10) Certification Status: | | | |
| (11) Status with Federal Agencies: | | | |
| (12) Projected Unit Performance Data | | | |
| a. Planned Outage Factor (POF): | N/A | % | |
| b. Forced Outage Factor (FOF): | N/A | % | |
| c. Equivalent Availability Factor (EAF): | N/A | % | |
| d. Resulting Capacity Factor (%): | 26.2% | % | |
| e. Average Net Operating Heat Rate (ANOHR): | N/A | BTU/Kwh | |
| (13) Projected Unit Financial Data | | | |
| a. Book Life (Years): | 35 | | |
| b. Total Installed Cost (In-service year \$/Kw): | 1,837 | | |
| c. Direct Construction Cost (\$/Kw ac): | (\$2025) | | |
| d. AFUDC Amount (\$/Kw): | | | |
| e. Escalation (\$/Kw): | | | |
| f. Fixed O&M (\$/Kw dc-yr): | (\$2025) | 10.78 | |
| g. Variable O&M (\$/MWh): | (\$2025) | 0.00 | |
| h. K Factor: | NO CALCULATION | | |

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

- | | | | |
|--------------------------------------------------|--------------------------------------------|------------|--|
| (1) Plant Name and Unit Number: | Bailey Mill | | |
| (2) Capacity | | | |
| a. Nameplate (MWac): | 74.9 | | |
| b. Summer Firm (MWac): | 25.8 | | |
| c. Winter Firm (MWac): | 3.7 | | |
| (3) Technology Type: | PHOTOVOLTAIC | | |
| (4) Anticipated Construction Timing | | | |
| a. Field construction start date: | 04/2025 | | |
| b. Commercial in-service date: | 05/2026 | (EXPECTED) | |
| (5) Fuel | | | |
| a. Primary fuel: | SOLAR | | |
| b. Alternate fuel: | N/A | | |
| (6) Air Pollution Control Strategy: | N/A | | |
| (7) Cooling Method: | N/A | | |
| (8) Total Site Area: | ~500-600 ACRES
PER SOLAR SITE (74.9 MW) | | |
| (9) Construction Status: | PLANNED | | |
| (10) Certification Status: | | | |
| (11) Status with Federal Agencies: | | | |
| (12) Projected Unit Performance Data | | | |
| a. Planned Outage Factor (POF): | N/A | % | |
| b. Forced Outage Factor (FOF): | N/A | % | |
| c. Equivalent Availability Factor (EAF): | N/A | % | |
| d. Resulting Capacity Factor (%): | 25.0% | % | |
| e. Average Net Operating Heat Rate (ANOHR): | N/A | BTU/Kwh | |
| (13) Projected Unit Financial Data | | | |
| a. Book Life (Years): | 35 | | |
| b. Total Installed Cost (In-service year \$/Kw): | 1,705 | | |
| c. Direct Construction Cost (\$/Kw ac): | (\$2025) | | |
| d. AFUDC Amount (\$/Kw): | | | |
| e. Escalation (\$/Kw): | | | |
| f. Fixed O&M (\$/Kw dc-yr): | (\$2025) | 10.47 | |
| g. Variable O&M (\$/MWh): | (\$2025) | 0.00 | |
| h. K Factor: | NO CALCULATION | | |

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

- (1) Plant Name and Unit Number: **Jumper Creek**
- (2) Capacity
- | | |
|------------------------|------|
| a. Nameplate (MWac): | 74.9 |
| b. Summer Firm (MWac): | 27.3 |
| c. Winter Firm (MWac): | 3.3 |
- (3) Technology Type: PHOTOVOLTAIC
- (4) Anticipated Construction Timing
- | | |
|-----------------------------------|--------------------|
| a. Field construction start date: | 06/2025 |
| b. Commercial in-service date: | 06/2026 (EXPECTED) |
- (5) Fuel
- | | |
|--------------------|-------|
| a. Primary fuel: | SOLAR |
| b. Alternate fuel: | N/A |
- (6) Air Pollution Control Strategy: N/A
- (7) Cooling Method: N/A
- (8) Total Site Area: ~500-600 ACRES
PER SOLAR SITE (74.9 MW)
- (9) Construction Status: PLANNED
- (10) Certification Status:
- (11) Status with Federal Agencies:
- (12) Projected Unit Performance Data
- | | |
|---------------------------------------------|-------------|
| a. Planned Outage Factor (POF): | N/A % |
| b. Forced Outage Factor (FOF): | N/A % |
| c. Equivalent Availability Factor (EAF): | N/A % |
| d. Resulting Capacity Factor (%): | ~26.5 % |
| e. Average Net Operating Heat Rate (ANOHR): | N/A BTU/Kwh |
- (13) Projected Unit Financial Data
- | | |
|--------------------------------------------------|----------------|
| a. Book Life (Years): | 35 |
| b. Total Installed Cost (In-service year \$/Kw): | 1,611 |
| c. Direct Construction Cost (\$/Kw ac): | (\$2025) |
| d. AFUDC Amount (\$/Kw): | |
| e. Escalation (\$/Kw): | |
| f. Fixed O&M (\$/Kw dc-yr): | (\$2025) 11.01 |
| g. Variable O&M (\$/MWh): | (\$2025) 0.00 |
| h. K Factor: | NO CALCULATION |

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

- | | | | |
|--------------------------------------------------|--------------------------------------------|----------------|--|
| (1) Plant Name and Unit Number: | Lonesome Camp | | |
| (2) Capacity | | | |
| a. Nameplate (MWac): | 74.9 | | |
| b. Summer Firm (MWac): | 27.3 | | |
| c. Winter Firm (MWac): | 3.3 | | |
| (3) Technology Type: | PHOTOVOLTAIC | | |
| (4) Anticipated Construction Timing | | | |
| a. Field construction start date: | 02/2025 | | |
| b. Commercial in-service date: | 12/2026 | (EXPECTED) | |
| (5) Fuel | | | |
| a. Primary fuel: | SOLAR | | |
| b. Alternate fuel: | N/A | | |
| (6) Air Pollution Control Strategy: | N/A | | |
| (7) Cooling Method: | N/A | | |
| (8) Total Site Area: | ~500-600 ACRES
PER SOLAR SITE (74.9 MW) | | |
| (9) Construction Status: | PLANNED | | |
| (10) Certification Status: | | | |
| (11) Status with Federal Agencies: | | | |
| (12) Projected Unit Performance Data | | | |
| a. Planned Outage Factor (POF): | | N/A % | |
| b. Forced Outage Factor (FOF): | | N/A % | |
| c. Equivalent Availability Factor (EAF): | | N/A % | |
| d. Resulting Capacity Factor (%): | | ~26.5 % | |
| e. Average Net Operating Heat Rate (ANOHR): | | N/A BTU/Kwh | |
| (13) Projected Unit Financial Data | | | |
| a. Book Life (Years): | | 35 | |
| b. Total Installed Cost (In-service year \$/Kw): | | 1,656 | |
| c. Direct Construction Cost (\$/Kw ac): | (\$2025) | | |
| d. AFUDC Amount (\$/Kw): | | | |
| e. Escalation (\$/Kw): | | | |
| f. Fixed O&M (\$/Kw dc-yr): | (\$2025) | 11.01 | |
| g. Variable O&M (\$/MWh): | (\$2025) | 0.00 | |
| h. K Factor: | | NO CALCULATION | |

DUKE ENERGY FLORIDA

SCHEDULE 9

**STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2025**

- (1) Plant Name and Unit Number: **Turnpike**
- (2) Capacity
- a. Nameplate (MWac): 74.9
 - b. Summer Firm (MWac): 27.3
 - c. Winter Firm (MWac): 3.3
- (3) Technology Type: PHOTOVOLTAIC
- (4) Anticipated Construction Timing
- a. Field construction start date: 01/2025
 - b. Commercial in-service date: 12/2026 (EXPECTED)
- (5) Fuel
- a. Primary fuel: SOLAR
 - b. Alternate fuel: N/A
- (6) Air Pollution Control Strategy: N/A
- (7) Cooling Method: N/A
- (8) Total Site Area: ~500-600 ACRES
PER SOLAR SITE (74.9 MW)
- (9) Construction Status: PLANNED
- (10) Certification Status:
- (11) Status with Federal Agencies:
- (12) Projected Unit Performance Data
- a. Planned Outage Factor (POF): N/A %
 - b. Forced Outage Factor (FOF): N/A %
 - c. Equivalent Availability Factor (EAF): N/A %
 - d. Resulting Capacity Factor (%): ~26.5 %
 - e. Average Net Operating Heat Rate (ANOHR): N/A BTU/Kwh
- (13) Projected Unit Financial Data
- a. Book Life (Years): 35
 - b. Total Installed Cost (In-service year \$/Kw): 1,906
 - c. Direct Construction Cost (\$/Kw ac): (\$2025)
 - d. AFUDC Amount (\$/Kw):
 - e. Escalation (\$/Kw):
 - f. Fixed O&M (\$/Kw dc-yr): (\$2025) 11.01
 - g. Variable O&M (\$/MWh): (\$2025) 0.00
 - h. K Factor: NO CALCULATION

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

- | | | | |
|--------------------------------------------------|--------------------------------------------|----------------|--|
| (1) Plant Name and Unit Number: | Banner | | |
| (2) Capacity | | | |
| a. Nameplate (MWac): | 74.5 | | |
| b. Summer Firm (MWac): | 27.2 | | |
| c. Winter Firm (MWac): | 3.3 | | |
| (3) Technology Type: | PHOTOVOLTAIC | | |
| (4) Anticipated Construction Timing | | | |
| a. Field construction start date: | 02/2025 | | |
| b. Commercial in-service date: | 12/2026 | (EXPECTED) | |
| (5) Fuel | | | |
| a. Primary fuel: | SOLAR | | |
| b. Alternate fuel: | N/A | | |
| (6) Air Pollution Control Strategy: | N/A | | |
| (7) Cooling Method: | N/A | | |
| (8) Total Site Area: | ~500-600 ACRES
PER SOLAR SITE (74.9 MW) | | |
| (9) Construction Status: | PLANNED | | |
| (10) Certification Status: | | | |
| (11) Status with Federal Agencies: | | | |
| (12) Projected Unit Performance Data | | | |
| a. Planned Outage Factor (POF): | | N/A % | |
| b. Forced Outage Factor (FOF): | | N/A % | |
| c. Equivalent Availability Factor (EAF): | | N/A % | |
| d. Resulting Capacity Factor (%): | | ~26.5 % | |
| e. Average Net Operating Heat Rate (ANOHR): | | N/A BTU/Kwh | |
| (13) Projected Unit Financial Data | | | |
| a. Book Life (Years): | | 35 | |
| b. Total Installed Cost (In-service year \$/Kw): | | 1,617 | |
| c. Direct Construction Cost (\$/Kw ac): | (\$2025) | | |
| d. AFUDC Amount (\$/Kw): | | | |
| e. Escalation (\$/Kw): | | | |
| f. Fixed O&M (\$/Kw dc-yr): | (\$2025) | 11.01 | |
| g. Variable O&M (\$/MWh): | (\$2025) | 0.00 | |
| h. K Factor: | | NO CALCULATION | |

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

- | | | | |
|--------------------------------------------------|------------------------|------------|--|
| (1) Plant Name and Unit Number: | POWERLINE | | |
| (2) Capacity | | | |
| a. Nameplate (MWac): | 100 | | |
| b. Summer Firm (MWac): | 90 | | |
| c. Winter Firm (MWac): | 90 | | |
| (3) Technology Type: | BATTERY STORAGE | | |
| (4) Anticipated Construction Timing | | | |
| a. Field construction start date: | 01/2026 | | |
| b. Commercial in-service date: | 03/2027 | (EXPECTED) | |
| (5) Fuel | | | |
| a. Primary fuel: | N/A | | |
| b. Alternate fuel: | N/A | | |
| (6) Air Pollution Control Strategy: | N/A | | |
| (7) Cooling Method: | N/A | | |
| (8) Total Site Area: | ~1 ACRE / 10 MW | | |
| (9) Construction Status: | PLANNED | | |
| (10) Certification Status: | | | |
| (11) Status with Federal Agencies: | | | |
| (12) Projected Unit Performance Data | | | |
| a. Planned Outage Factor (POF): | N/A | % | |
| b. Forced Outage Factor (FOF): | N/A | % | |
| c. Equivalent Availability Factor (EAF): | N/A | % | |
| d. Resulting Capacity Factor (%): | ~10 | % | |
| e. Average Net Operating Heat Rate (ANOHR): | N/A | BTU/Kwh | |
| (13) Projected Unit Financial Data | | | |
| a. Book Life (Years): | 15 | | |
| b. Total Installed Cost (In-service year \$/Kw): | 1,722 | | |
| c. Direct Construction Cost (\$/Kw ac): | (\$2025) | | |
| d. AFUDC Amount (\$/Kw): | | | |
| e. Escalation (\$/Kw): | | | |
| f. Fixed O&M (\$/Kw dc-yr): | (\$2025) | 30.00 | |
| g. Variable O&M (\$/MWh): | (\$2025) | 0.00 | |
| h. K Factor: | NO CALCULATION | | |

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

- | | | | |
|--------------------------------------------------|--------------------------------------------|----------------|--|
| (1) Plant Name and Unit Number: | TBD | | |
| (2) Capacity | | | |
| a. Nameplate (MWac): | 149.8 | | |
| b. Summer Firm (MWac): | 50 | | |
| c. Winter Firm (MWac): | 6 | | |
| (3) Technology Type: | PHOTOVOLTAIC | | |
| (4) Anticipated Construction Timing | | | |
| a. Field construction start date: | 12/2025 | | |
| b. Commercial in-service date: | 06/2027 | (EXPECTED) | |
| (5) Fuel | | | |
| a. Primary fuel: | SOLAR | | |
| b. Alternate fuel: | N/A | | |
| (6) Air Pollution Control Strategy: | N/A | | |
| (7) Cooling Method: | N/A | | |
| (8) Total Site Area: | ~500-600 ACRES
PER SOLAR SITE (74.9 MW) | | |
| (9) Construction Status: | PLANNED | | |
| (10) Certification Status: | | | |
| (11) Status with Federal Agencies: | | | |
| (12) Projected Unit Performance Data | | | |
| a. Planned Outage Factor (POF): | | N/A % | |
| b. Forced Outage Factor (FOF): | | N/A % | |
| c. Equivalent Availability Factor (EAF): | | N/A % | |
| d. Resulting Capacity Factor (%): | | ~26.5 % | |
| e. Average Net Operating Heat Rate (ANOHR): | | N/A BTU/Kwh | |
| (13) Projected Unit Financial Data | | | |
| a. Book Life (Years): | | 35 | |
| b. Total Installed Cost (In-service year \$/Kw): | | 1,645 | |
| c. Direct Construction Cost (\$/Kw ac): | (\$2025) | | |
| d. AFUDC Amount (\$/Kw): | | | |
| e. Escalation (\$/Kw): | | | |
| f. Fixed O&M (\$/Kw dc-yr): | (\$2025) | 17.31 | |
| g. Variable O&M (\$/MWh): | (\$2025) | 0.00 | |
| h. K Factor: | | NO CALCULATION | |

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

- | | | |
|--------------------------------------------------|--------------------------------------------|------------|
| (1) Plant Name and Unit Number: | TBD | |
| (2) Capacity | | |
| a. Nameplate (MWac): | 149.8 | |
| b. Summer Firm (MWac): | 50 | |
| c. Winter Firm (MWac): | 6 | |
| (3) Technology Type: | PHOTOVOLTAIC | |
| (4) Anticipated Construction Timing | | |
| a. Field construction start date: | 05/2026 | |
| b. Commercial in-service date: | 12/2027 | (EXPECTED) |
| (5) Fuel | | |
| a. Primary fuel: | SOLAR | |
| b. Alternate fuel: | N/A | |
| (6) Air Pollution Control Strategy: | N/A | |
| (7) Cooling Method: | N/A | |
| (8) Total Site Area: | ~500-600 ACRES
PER SOLAR SITE (74.9 MW) | |
| (9) Construction Status: | PLANNED | |
| (10) Certification Status: | | |
| (11) Status with Federal Agencies: | | |
| (12) Projected Unit Performance Data | | |
| a. Planned Outage Factor (POF): | N/A | % |
| b. Forced Outage Factor (FOF): | N/A | % |
| c. Equivalent Availability Factor (EAF): | N/A | % |
| d. Resulting Capacity Factor (%): | ~26.5 | % |
| e. Average Net Operating Heat Rate (ANOHR): | N/A | BTU/Kwh |
| (13) Projected Unit Financial Data | | |
| a. Book Life (Years): | 35 | |
| b. Total Installed Cost (In-service year \$/Kw): | 1,645 | |
| c. Direct Construction Cost (\$/Kw ac): | (\$2025) | |
| d. AFUDC Amount (\$/Kw): | | |
| e. Escalation (\$/Kw): | | |
| f. Fixed O&M (\$/Kw dc-yr): | (\$2025) | 17.31 |
| g. Variable O&M (\$/MWh): | (\$2025) | 0.00 |
| h. K Factor: | NO CALCULATION | |

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

- | | | | |
|--------------------------------------------------|--------------------------------------------|----------------|--|
| (1) Plant Name and Unit Number: | TBD | | |
| (2) Capacity | | | |
| a. Nameplate (MWac): | 224.7 | | |
| b. Summer Firm (MWac): | 62 | | |
| c. Winter Firm (MWac): | 9 | | |
| (3) Technology Type: | PHOTOVOLTAIC | | |
| (4) Anticipated Construction Timing | | | |
| a. Field construction start date: | 01/2026 | | |
| b. Commercial in-service date: | 07/2028 | (EXPECTED) | |
| (5) Fuel | | | |
| a. Primary fuel: | SOLAR | | |
| b. Alternate fuel: | N/A | | |
| (6) Air Pollution Control Strategy: | N/A | | |
| (7) Cooling Method: | N/A | | |
| (8) Total Site Area: | ~500-600 ACRES
PER SOLAR SITE (74.9 MW) | | |
| (9) Construction Status: | PLANNED | | |
| (10) Certification Status: | | | |
| (11) Status with Federal Agencies: | | | |
| (12) Projected Unit Performance Data | | | |
| a. Planned Outage Factor (POF): | | N/A % | |
| b. Forced Outage Factor (FOF): | | N/A % | |
| c. Equivalent Availability Factor (EAF): | | N/A % | |
| d. Resulting Capacity Factor (%): | | ~26.5 % | |
| e. Average Net Operating Heat Rate (ANOHR): | | N/A BTU/Kwh | |
| (13) Projected Unit Financial Data | | | |
| a. Book Life (Years): | | 35 | |
| b. Total Installed Cost (In-service year \$/Kw): | | 2,087 | |
| c. Direct Construction Cost (\$/Kw ac): | (\$2025) | | |
| d. AFUDC Amount (\$/Kw): | | | |
| e. Escalation (\$/Kw): | | | |
| f. Fixed O&M (\$/Kw dc-yr): | (\$2025) | 17.31 | |
| g. Variable O&M (\$/MWh): | (\$2025) | 0.00 | |
| h. K Factor: | | NO CALCULATION | |

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

(1) Plant Name and Unit Number:	TBD		
(2) Capacity	Solar	Storage	
a. Nameplate (MWac):	149.8	100	
b. Summer Firm (MWac):	41.2	90	
c. Winter Firm (MWac):	6.1	90	
(3) Technology Type:	PHOTOVOLTAIC WITH BATTERY STORAGE		
(4) Anticipated Construction Timing			
a. Field construction start date:	01/2026		
b. Commercial in-service date:	07/2028	(EXPECTED)	
(5) Fuel			
a. Primary fuel:	SOLAR		
b. Alternate fuel:	N/A		
(6) Air Pollution Control Strategy:	N/A		
(7) Cooling Method:	N/A		
(8) Total Site Area:	~500-600 ACRES PER SOLAR SITE (74.9 MW)		
(9) Construction Status:	PLANNED		
(10) Certification Status:			
(11) Status with Federal Agencies:			
(12) Projected Unit Performance Data			
a. Planned Outage Factor (POF):	N/A %		
b. Forced Outage Factor (FOF):	N/A %		
c. Equivalent Availability Factor (EAF):	N/A %		
d. Resulting Capacity Factor (%):	~26.5 %		~16%
e. Average Net Operating Heat Rate (ANOHR):	N/A BTU/Kwh		
(13) Projected Unit Financial Data			
a. Book Life (Years):	35		
b. Total Installed Cost (In-service year \$/Kw):	2,087		1,602
c. Direct Construction Cost (\$/Kw ac):	(\$2025)		
d. AFUDC Amount (\$/Kw):			
e. Escalation (\$/Kw):			
f. Fixed O&M (\$/Kw dc-yr):	(\$2025)	17.31	30.00
g. Variable O&M (\$/MWh):	(\$2025)	0.00	0.00
h. K Factor:	NO CALCULATION		

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

- | | | | |
|--------------------------------------------------|-----------------|----------------|--|
| (1) Plant Name and Unit Number: | TBD | | |
| (2) Capacity | | | |
| a. Nameplate (MWac): | 225 | | |
| b. Summer Firm (MWac): | 203 | | |
| c. Winter Firm (MWac): | 203 | | |
| (3) Technology Type: | BATTERY STORAGE | | |
| (4) Anticipated Construction Timing | | | |
| a. Field construction start date: | 01/2027 | | |
| b. Commercial in-service date: | 06/2029 | (EXPECTED) | |
| (5) Fuel | | | |
| a. Primary fuel: | N/A | | |
| b. Alternate fuel: | N/A | | |
| (6) Air Pollution Control Strategy: | N/A | | |
| (7) Cooling Method: | N/A | | |
| (8) Total Site Area: | ~1 ACRE / 10 MW | | |
| (9) Construction Status: | PLANNED | | |
| (10) Certification Status: | | | |
| (11) Status with Federal Agencies: | | | |
| (12) Projected Unit Performance Data | | | |
| a. Planned Outage Factor (POF): | | N/A % | |
| b. Forced Outage Factor (FOF): | | N/A % | |
| c. Equivalent Availability Factor (EAF): | | N/A % | |
| d. Resulting Capacity Factor (%): | | ~16 % | |
| e. Average Net Operating Heat Rate (ANOHR): | | N/A BTU/Kwh | |
| (13) Projected Unit Financial Data | | | |
| a. Book Life (Years): | | 20 | |
| b. Total Installed Cost (In-service year \$/Kw): | | 2,132 | |
| c. Direct Construction Cost (\$/Kw ac): | (\$2025) | | |
| d. AFUDC Amount (\$/Kw): | | | |
| e. Escalation (\$/Kw): | | | |
| f. Fixed O&M (\$/Kw dc-yr): | (\$2025) | 30.00 | |
| g. Variable O&M (\$/MWh): | (\$2025) | 0.00 | |
| h. K Factor: | | NO CALCULATION | |

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

- | | | | |
|--------------------------------------------------|--------------------------------------------|------------|--|
| (1) Plant Name and Unit Number: | TBD | | |
| (2) Capacity | | | |
| a. Nameplate (MWac): | 224.7 | | |
| b. Summer Firm (MWac): | 62 | | |
| c. Winter Firm (MWac): | 9 | | |
| (3) Technology Type: | PHOTOVOLTAIC | | |
| (4) Anticipated Construction Timing | | | |
| a. Field construction start date: | 01/2027 | | |
| b. Commercial in-service date: | 07/2029 | (EXPECTED) | |
| (5) Fuel | | | |
| a. Primary fuel: | SOLAR | | |
| b. Alternate fuel: | N/A | | |
| (6) Air Pollution Control Strategy: | N/A | | |
| (7) Cooling Method: | N/A | | |
| (8) Total Site Area: | ~500-600 ACRES
PER SOLAR SITE (74.9 MW) | | |
| (9) Construction Status: | PLANNED | | |
| (10) Certification Status: | | | |
| (11) Status with Federal Agencies: | | | |
| (12) Projected Unit Performance Data | | | |
| a. Planned Outage Factor (POF): | N/A | % | |
| b. Forced Outage Factor (FOF): | N/A | % | |
| c. Equivalent Availability Factor (EAF): | N/A | % | |
| d. Resulting Capacity Factor (%): | ~26.5 | % | |
| e. Average Net Operating Heat Rate (ANOHR): | N/A | BTU/Kwh | |
| (13) Projected Unit Financial Data | | | |
| a. Book Life (Years): | 35 | | |
| b. Total Installed Cost (In-service year \$/Kw): | 2,178 | | |
| c. Direct Construction Cost (\$/Kw ac): | (\$2025) | | |
| d. AFUDC Amount (\$/Kw): | | | |
| e. Escalation (\$/Kw): | | | |
| f. Fixed O&M (\$/Kw dc-yr): | (\$2025) | 17.31 | |
| g. Variable O&M (\$/MWh): | (\$2025) | 0.00 | |
| h. K Factor: | NO CALCULATION | | |

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

- | | | | |
|--------------------------------------------------|--------------------------------------------|-------------|-------|
| (1) Plant Name and Unit Number: | TBD | | |
| (2) Capacity | Solar | Storage | |
| a. Nameplate (MWac): | 149.8 | 100 | |
| b. Summer Firm (MWac): | 32.2 | 90 | |
| c. Winter Firm (MWac): | 6.1 | 90 | |
| (3) Technology Type: | PHOTOVOLTAIC WITH BATTERY STORAGE | | |
| (4) Anticipated Construction Timing | | | |
| a. Field construction start date: | 01/2027 | | |
| b. Commercial in-service date: | 07/2029 | (EXPECTED) | |
| (5) Fuel | | | |
| a. Primary fuel: | SOLAR | | |
| b. Alternate fuel: | N/A | | |
| (6) Air Pollution Control Strategy: | N/A | | |
| (7) Cooling Method: | N/A | | |
| (8) Total Site Area: | ~500-600 ACRES
PER SOLAR SITE (74.9 MW) | | |
| (9) Construction Status: | PLANNED | | |
| (10) Certification Status: | | | |
| (11) Status with Federal Agencies: | | | |
| (12) Projected Unit Performance Data | | | |
| a. Planned Outage Factor (POF): | | N/A % | |
| b. Forced Outage Factor (FOF): | | N/A % | |
| c. Equivalent Availability Factor (EAF): | | N/A % | |
| d. Resulting Capacity Factor (%): | | ~26.5 % | ~16% |
| e. Average Net Operating Heat Rate (ANOHR): | | N/A BTU/Kwh | |
| (13) Projected Unit Financial Data | | | |
| a. Book Life (Years): | | 35 | |
| b. Total Installed Cost (In-service year \$/Kw): | | 2,178 | 1,556 |
| c. Direct Construction Cost (\$/Kw ac): | (\$2025) | | |
| d. AFUDC Amount (\$/Kw): | | | |
| e. Escalation (\$/Kw): | | | |
| f. Fixed O&M (\$/Kw dc-yr): | (\$2025) | 17.31 | 30.00 |
| g. Variable O&M (\$/MWh): | (\$2025) | 0.00 | 0.00 |
| h. K Factor: | NO CALCULATION | | |

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

- | | | | |
|--------------------------------------------------|--------------------------------------------|----------------|--|
| (1) Plant Name and Unit Number: | TBD | | |
| (2) Capacity | | | |
| a. Nameplate (MWac): | 224.7 | | |
| b. Summer Firm (MWac): | 48 | | |
| c. Winter Firm (MWac): | 9 | | |
| (3) Technology Type: | PHOTOVOLTAIC | | |
| (4) Anticipated Construction Timing | | | |
| a. Field construction start date: | 01/2028 | | |
| b. Commercial in-service date: | 07/2030 | (EXPECTED) | |
| (5) Fuel | | | |
| a. Primary fuel: | SOLAR | | |
| b. Alternate fuel: | N/A | | |
| (6) Air Pollution Control Strategy: | N/A | | |
| (7) Cooling Method: | N/A | | |
| (8) Total Site Area: | ~500-600 ACRES
PER SOLAR SITE (74.9 MW) | | |
| (9) Construction Status: | PLANNED | | |
| (10) Certification Status: | | | |
| (11) Status with Federal Agencies: | | | |
| (12) Projected Unit Performance Data | | | |
| a. Planned Outage Factor (POF): | | N/A % | |
| b. Forced Outage Factor (FOF): | | N/A % | |
| c. Equivalent Availability Factor (EAF): | | N/A % | |
| d. Resulting Capacity Factor (%): | | ~26.5 % | |
| e. Average Net Operating Heat Rate (ANOHR): | | N/A BTU/Kwh | |
| (13) Projected Unit Financial Data | | | |
| a. Book Life (Years): | | 35 | |
| b. Total Installed Cost (In-service year \$/Kw): | | 2,150 | |
| c. Direct Construction Cost (\$/Kw ac): | (\$2025) | | |
| d. AFUDC Amount (\$/Kw): | | | |
| e. Escalation (\$/Kw): | | | |
| f. Fixed O&M (\$/Kw dc-yr): | (\$2025) | 17.31 | |
| g. Variable O&M (\$/MWh): | (\$2025) | 0.00 | |
| h. K Factor: | | NO CALCULATION | |

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

(1) Plant Name and Unit Number:	TBD		
(2) Capacity	Solar	Storage	
a. Nameplate (MWac):	149.8	100	
b. Summer Firm (MWac):	32.2	90	
c. Winter Firm (MWac):	6.1	90	
(3) Technology Type:	PHOTOVOLTAIC WITH BATTERY STORAGE		
(4) Anticipated Construction Timing			
a. Field construction start date:	01/2028		
b. Commercial in-service date:	07/2030	(EXPECTED)	
(5) Fuel			
a. Primary fuel:	SOLAR		
b. Alternate fuel:	N/A		
(6) Air Pollution Control Strategy:	N/A		
(7) Cooling Method:	N/A		
(8) Total Site Area:	~500-600 ACRES PER SOLAR SITE (74.9 MW)		
(9) Construction Status:	PLANNED		
(10) Certification Status:			
(11) Status with Federal Agencies:			
(12) Projected Unit Performance Data			
a. Planned Outage Factor (POF):	N/A %		
b. Forced Outage Factor (FOF):	N/A %		
c. Equivalent Availability Factor (EAF):	N/A %		
d. Resulting Capacity Factor (%):	~26.5 %		~16%
e. Average Net Operating Heat Rate (ANOHR):	N/A BTU/Kwh		
(13) Projected Unit Financial Data			
a. Book Life (Years):	35		
b. Total Installed Cost (In-service year \$/Kw):	2,150	1,516	
c. Direct Construction Cost (\$/Kw ac): (\$2025)			
d. AFUDC Amount (\$/Kw):			
e. Escalation (\$/Kw):			
f. Fixed O&M (\$/Kw dc-yr): (\$2025)	17.31	30.00	
g. Variable O&M (\$/MWh): (\$2025)	0.00	0.00	
h. K Factor:	NO CALCULATION		

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

- | | | | |
|--------------------------------------------------|--------------------------------------------|------------|--|
| (1) Plant Name and Unit Number: | TBD | | |
| (2) Capacity | | | |
| a. Nameplate (MWac): | 74.9 | | |
| b. Summer Firm (MWac): | 16 | | |
| c. Winter Firm (MWac): | 3 | | |
| (3) Technology Type: | PHOTOVOLTAIC | | |
| (4) Anticipated Construction Timing | | | |
| a. Field construction start date: | 01/2029 | | |
| b. Commercial in-service date: | 07/2031 | (EXPECTED) | |
| (5) Fuel | | | |
| a. Primary fuel: | SOLAR | | |
| b. Alternate fuel: | N/A | | |
| (6) Air Pollution Control Strategy: | N/A | | |
| (7) Cooling Method: | N/A | | |
| (8) Total Site Area: | ~500-600 ACRES
PER SOLAR SITE (74.9 MW) | | |
| (9) Construction Status: | PLANNED | | |
| (10) Certification Status: | | | |
| (11) Status with Federal Agencies: | | | |
| (12) Projected Unit Performance Data | | | |
| a. Planned Outage Factor (POF): | N/A | % | |
| b. Forced Outage Factor (FOF): | N/A | % | |
| c. Equivalent Availability Factor (EAF): | N/A | % | |
| d. Resulting Capacity Factor (%): | ~26.5 | % | |
| e. Average Net Operating Heat Rate (ANOHR): | N/A | BTU/Kwh | |
| (13) Projected Unit Financial Data | | | |
| a. Book Life (Years): | 35 | | |
| b. Total Installed Cost (In-service year \$/Kw): | 2,123 | | |
| c. Direct Construction Cost (\$/Kw ac): | (\$2025) | | |
| d. AFUDC Amount (\$/Kw): | | | |
| e. Escalation (\$/Kw): | | | |
| f. Fixed O&M (\$/Kw dc-yr): | (\$2025) | 17.31 | |
| g. Variable O&M (\$/MWh): | (\$2025) | 0.00 | |
| h. K Factor: | NO CALCULATION | | |

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

- | | | | |
|--------------------------------------------------|--------------------------------------------|------------|--|
| (1) Plant Name and Unit Number: | TBD | | |
| (2) Capacity | | | |
| a. Nameplate (MWac): | 374.5 | | |
| b. Summer Firm (MWac): | 58 | | |
| c. Winter Firm (MWac): | 15 | | |
| (3) Technology Type: | PHOTOVOLTAIC | | |
| (4) Anticipated Construction Timing | | | |
| a. Field construction start date: | 01/2029 | | |
| b. Commercial in-service date: | 07/2031 | (EXPECTED) | |
| (5) Fuel | | | |
| a. Primary fuel: | SOLAR | | |
| b. Alternate fuel: | N/A | | |
| (6) Air Pollution Control Strategy: | N/A | | |
| (7) Cooling Method: | N/A | | |
| (8) Total Site Area: | ~500-600 ACRES
PER SOLAR SITE (74.9 MW) | | |
| (9) Construction Status: | PLANNED | | |
| (10) Certification Status: | | | |
| (11) Status with Federal Agencies: | | | |
| (12) Projected Unit Performance Data | | | |
| a. Planned Outage Factor (POF): | N/A | % | |
| b. Forced Outage Factor (FOF): | N/A | % | |
| c. Equivalent Availability Factor (EAF): | N/A | % | |
| d. Resulting Capacity Factor (%): | ~26.5 | % | |
| e. Average Net Operating Heat Rate (ANOHR): | N/A | BTU/Kwh | |
| (13) Projected Unit Financial Data | | | |
| a. Book Life (Years): | 35 | | |
| b. Total Installed Cost (In-service year \$/Kw): | 2,123 | | |
| c. Direct Construction Cost (\$/Kw ac): | (\$2025) | | |
| d. AFUDC Amount (\$/Kw): | | | |
| e. Escalation (\$/Kw): | | | |
| f. Fixed O&M (\$/Kw dc-yr): | (\$2025) | 17.31 | |
| g. Variable O&M (\$/MWh): | (\$2025) | 0.00 | |
| h. K Factor: | NO CALCULATION | | |

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

(1) Plant Name and Unit Number:	TBD		
(2) Capacity	Solar	Storage	
a. Nameplate (MWac):	149.8	100	
b. Summer Firm (MWac):	23.2	90	
c. Winter Firm (MWac):	6.1	90	
(3) Technology Type:	PHOTOVOLTAIC WITH BATTERY STORAGE		
(4) Anticipated Construction Timing			
a. Field construction start date:	01/2029		
b. Commercial in-service date:	07/2031	(EXPECTED)	
(5) Fuel			
a. Primary fuel:	SOLAR		
b. Alternate fuel:	N/A		
(6) Air Pollution Control Strategy:	N/A		
(7) Cooling Method:	N/A		
(8) Total Site Area:	~500-600 ACRES PER SOLAR SITE (74.9 MW)		
(9) Construction Status:	PLANNED		
(10) Certification Status:			
(11) Status with Federal Agencies:			
(12) Projected Unit Performance Data			
a. Planned Outage Factor (POF):	N/A %		
b. Forced Outage Factor (FOF):	N/A %		
c. Equivalent Availability Factor (EAF):	N/A %		
d. Resulting Capacity Factor (%):	~26.5 %	~16%	
e. Average Net Operating Heat Rate (ANOHR):	N/A BTU/Kwh		
(13) Projected Unit Financial Data			
a. Book Life (Years):	35		
b. Total Installed Cost (In-service year \$/Kw):	2,123	1,481	
c. Direct Construction Cost (\$/Kw ac): (\$2025)			
d. AFUDC Amount (\$/Kw):			
e. Escalation (\$/Kw):			
f. Fixed O&M (\$/Kw dc-yr): (\$2025)	17.31	30.00	
g. Variable O&M (\$/MWh): (\$2025)	0.00	0.00	
h. K Factor:	NO CALCULATION		
Duke Energy Florida, LLC	3-33	2025 TYSP	

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

- (1) Plant Name and Unit Number: **TBD**
- (2) Capacity
- | | | |
|------------------------|------|--|
| a. Nameplate (MWac): | 74.9 | |
| b. Summer Firm (MWac): | 12 | |
| c. Winter Firm (MWac): | 3 | |
- (3) Technology Type: **PHOTOVOLTAIC**
- (4) Anticipated Construction Timing
- | | | |
|-----------------------------------|---------|------------|
| a. Field construction start date: | 01/2030 | |
| b. Commercial in-service date: | 07/2032 | (EXPECTED) |
- (5) Fuel
- | | | |
|--------------------|-------|--|
| a. Primary fuel: | SOLAR | |
| b. Alternate fuel: | N/A | |
- (6) Air Pollution Control Strategy: **N/A**
- (7) Cooling Method: **N/A**
- (8) Total Site Area: **~500-600 ACRES
PER SOLAR SITE (74.9 MW)**
- (9) Construction Status: **PLANNED**
- (10) Certification Status:
- (11) Status with Federal Agencies:
- (12) Projected Unit Performance Data
- | | |
|---------------------------------------------|-------------|
| a. Planned Outage Factor (POF): | N/A % |
| b. Forced Outage Factor (FOF): | N/A % |
| c. Equivalent Availability Factor (EAF): | N/A % |
| d. Resulting Capacity Factor (%): | ~26.5 % |
| e. Average Net Operating Heat Rate (ANOHR): | N/A BTU/Kwh |
- (13) Projected Unit Financial Data
- | | |
|--------------------------------------------------|----------------|
| a. Book Life (Years): | 35 |
| b. Total Installed Cost (In-service year \$/Kw): | 2,111 |
| c. Direct Construction Cost (\$/Kw ac): | (\$2025) |
| d. AFUDC Amount (\$/Kw): | |
| e. Escalation (\$/Kw): | |
| f. Fixed O&M (\$/Kw dc-yr): | (\$2025) 17.31 |
| g. Variable O&M (\$/MWh): | (\$2025) 0.00 |
| h. K Factor: | NO CALCULATION |

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

- | | | | |
|--------------------------------------------------|--------------------------------------------|------------|--|
| (1) Plant Name and Unit Number: | TBD | | |
| (2) Capacity | | | |
| a. Nameplate (MWac): | 374.5 | | |
| b. Summer Firm (MWac): | 36 | | |
| c. Winter Firm (MWac): | 15 | | |
| (3) Technology Type: | PHOTOVOLTAIC | | |
| (4) Anticipated Construction Timing | | | |
| a. Field construction start date: | 01/2030 | | |
| b. Commercial in-service date: | 07/2032 | (EXPECTED) | |
| (5) Fuel | | | |
| a. Primary fuel: | SOLAR | | |
| b. Alternate fuel: | N/A | | |
| (6) Air Pollution Control Strategy: | N/A | | |
| (7) Cooling Method: | N/A | | |
| (8) Total Site Area: | ~500-600 ACRES
PER SOLAR SITE (74.9 MW) | | |
| (9) Construction Status: | PLANNED | | |
| (10) Certification Status: | | | |
| (11) Status with Federal Agencies: | | | |
| (12) Projected Unit Performance Data | | | |
| a. Planned Outage Factor (POF): | N/A | % | |
| b. Forced Outage Factor (FOF): | N/A | % | |
| c. Equivalent Availability Factor (EAF): | N/A | % | |
| d. Resulting Capacity Factor (%): | ~26.5 | % | |
| e. Average Net Operating Heat Rate (ANOHR): | N/A | BTU/Kwh | |
| (13) Projected Unit Financial Data | | | |
| a. Book Life (Years): | 35 | | |
| b. Total Installed Cost (In-service year \$/Kw): | 2,111 | | |
| c. Direct Construction Cost (\$/Kw ac): | (\$2025) | | |
| d. AFUDC Amount (\$/Kw): | | | |
| e. Escalation (\$/Kw): | | | |
| f. Fixed O&M (\$/Kw dc-yr): | (\$2025) | 17.31 | |
| g. Variable O&M (\$/MWh): | (\$2025) | 0.00 | |
| h. K Factor: | NO CALCULATION | | |

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

(1) Plant Name and Unit Number:	TBD		
(2) Capacity	Solar	Storage	
a. Nameplate (MWac):	149.8	100	
b. Summer Firm (MWac):	14.2	85	
c. Winter Firm (MWac):	6.1	85	
(3) Technology Type:	PHOTOVOLTAIC WITH BATTERY STORAGE		
(4) Anticipated Construction Timing			
a. Field construction start date:	01/2030		
b. Commercial in-service date:	07/2032	(EXPECTED)	
(5) Fuel			
a. Primary fuel:	SOLAR		
b. Alternate fuel:	N/A		
(6) Air Pollution Control Strategy:	N/A		
(7) Cooling Method:	N/A		
(8) Total Site Area:	~500-600 ACRES PER SOLAR SITE (74.9 MW)		
(9) Construction Status:	PLANNED		
(10) Certification Status:			
(11) Status with Federal Agencies:			
(12) Projected Unit Performance Data			
a. Planned Outage Factor (POF):	N/A %		
b. Forced Outage Factor (FOF):	N/A %		
c. Equivalent Availability Factor (EAF):	N/A %		
d. Resulting Capacity Factor (%):	~26.5 %		~16%
e. Average Net Operating Heat Rate (ANOHR):	N/A BTU/Kwh		
(13) Projected Unit Financial Data			
a. Book Life (Years):	35		
b. Total Installed Cost (In-service year \$/Kw):	2,111		1,453
c. Direct Construction Cost (\$/Kw ac):	(\$2025)		
d. AFUDC Amount (\$/Kw):			
e. Escalation (\$/Kw):			
f. Fixed O&M (\$/Kw dc-yr):	(\$2025)	17.31	30.00
g. Variable O&M (\$/MWh):	(\$2025)	0.00	0.00
h. K Factor:	NO CALCULATION		

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

(1) Plant Name and Unit Number:	Undesignated CTs P1-P2		
(2) Capacity			
a. Summer (MWs):		245	
b. Winter (MWs):		264	
(3) Technology Type:	COMBUSTION TURBINE		
(4) Anticipated Construction Timing			
a. Field construction start date:		01/2031	
b. Commercial in-service date:		06/2033	(EXPECTED)
(5) Fuel			
a. Primary fuel:	NATURAL GAS		
b. Alternate fuel:	DISTILLATE FUEL OIL		
(6) Air Pollution Control Strategy:	Dry Low Nox Combustion		
(7) Cooling Method:	N/A		
(8) Total Site Area:	UNKNOWN		
(9) Construction Status:	PLANNED		
(10) Certification Status:	PLANNED		
(11) Status with Federal Agencies:	PLANNED		
(12) Projected Unit Performance Data			
a. Planned Outage Factor (POF):		3.00	%
b. Forced Outage Factor (FOF):		2.00	%
c. Equivalent Availability Factor (EAF):		95.06	%
d. Resulting Capacity Factor (%):		1.5	%
e. Average Net Operating Heat Rate (ANOHR):		10,311	BTU/kWh
(13) Projected Unit Financial Data			
a. Book Life (Years):		35	
b. Total Installed Cost (In-service year \$/kW):		2,504	
c. Direct Construction Cost (\$/kW):	(\$2025)	2,032	
d. AFUDC Amount (\$/kW):		256	
e. Escalation (\$/kW):		216	
f. Fixed O&M (\$/kW-yr):	(\$2025)	2.74	
g. Variable O&M (\$/MWh):	(\$2025)	9.20	
h. K Factor:		NO CALCULATION	

NOTES

Total Installed Cost includes gas expansion, transmission interconnection and integration
\$/kW values are based on Summer capacity
Fixed O&M cost does not include firm gas transportation costs

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

- | | | | |
|--------------------------------------------------|--------------------------------------------|----------------|--|
| (1) Plant Name and Unit Number: | TBD | | |
| (2) Capacity | | | |
| a. Nameplate (MWac): | 449.4 | | |
| b. Summer Firm (MWac): | 43 | | |
| c. Winter Firm (MWac): | 18 | | |
| (3) Technology Type: | PHOTOVOLTAIC | | |
| (4) Anticipated Construction Timing | | | |
| a. Field construction start date: | 01/2031 | | |
| b. Commercial in-service date: | 07/2033 | (EXPECTED) | |
| (5) Fuel | | | |
| a. Primary fuel: | SOLAR | | |
| b. Alternate fuel: | N/A | | |
| (6) Air Pollution Control Strategy: | N/A | | |
| (7) Cooling Method: | N/A | | |
| (8) Total Site Area: | ~500-600 ACRES
PER SOLAR SITE (74.9 MW) | | |
| (9) Construction Status: | PLANNED | | |
| (10) Certification Status: | | | |
| (11) Status with Federal Agencies: | | | |
| (12) Projected Unit Performance Data | | | |
| a. Planned Outage Factor (POF): | N/A | % | |
| b. Forced Outage Factor (FOF): | N/A | % | |
| c. Equivalent Availability Factor (EAF): | N/A | % | |
| d. Resulting Capacity Factor (%): | ~26.5 | % | |
| e. Average Net Operating Heat Rate (ANOHR): | N/A | BTU/Kwh | |
| (13) Projected Unit Financial Data | | | |
| a. Book Life (Years): | | 35 | |
| b. Total Installed Cost (In-service year \$/Kw): | | 2,116 | |
| c. Direct Construction Cost (\$/Kw ac): | (\$2025) | | |
| d. AFUDC Amount (\$/Kw): | | | |
| e. Escalation (\$/Kw): | | | |
| f. Fixed O&M (\$/Kw dc-yr): | (\$2025) | 17.31 | |
| g. Variable O&M (\$/MWh): | (\$2025) | 0.00 | |
| h. K Factor: | | NO CALCULATION | |

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

(1) Plant Name and Unit Number:	TBD		
(2) Capacity	Solar	Storage	
a. Nameplate (MWac):	149.8	100	
b. Summer Firm (MWac):	14.2	70	
c. Winter Firm (MWac):	6.1	70	
(3) Technology Type:	PHOTOVOLTAIC WITH BATTERY STORAGE		
(4) Anticipated Construction Timing			
a. Field construction start date:	01/2031		
b. Commercial in-service date:	07/2033	(EXPECTED)	
(5) Fuel			
a. Primary fuel:	SOLAR		
b. Alternate fuel:	N/A		
(6) Air Pollution Control Strategy:	N/A		
(7) Cooling Method:	N/A		
(8) Total Site Area:	~500-600 ACRES PER SOLAR SITE (74.9 MW)		
(9) Construction Status:	PLANNED		
(10) Certification Status:			
(11) Status with Federal Agencies:			
(12) Projected Unit Performance Data			
a. Planned Outage Factor (POF):	N/A %		
b. Forced Outage Factor (FOF):	N/A %		
c. Equivalent Availability Factor (EAF):	N/A %		
d. Resulting Capacity Factor (%):	~26.5 %	~16%	
e. Average Net Operating Heat Rate (ANOHR):	N/A BTU/Kwh		
(13) Projected Unit Financial Data			
a. Book Life (Years):	35		
b. Total Installed Cost (In-service year \$/Kw):	2,116	1,431	
c. Direct Construction Cost (\$/Kw ac): (\$2025)			
d. AFUDC Amount (\$/Kw):			
e. Escalation (\$/Kw):			
f. Fixed O&M (\$/Kw dc-yr): (\$2025)	17.31	30.00	
g. Variable O&M (\$/MWh): (\$2025)	0.00	0.00	
h. K Factor:	NO CALCULATION		
Duke Energy Florida, LLC	3-39	2025 TYSP	

DUKE ENERGY FLORIDA

SCHEDULE 9

**STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES
AS OF JANUARY 1, 2025**

(1) Plant Name and Unit Number:	Undesignated CTs P3-P4		
(2) Capacity			
a. Summer (MWs):		224	
b. Winter (MWs):		233	
(3) Technology Type:	COMBUSTION TURBINE		
(4) Anticipated Construction Timing			
a. Field construction start date:		01/2030	
b. Commercial in-service date:		06/2034	(EXPECTED)
(5) Fuel			
a. Primary fuel:	NATURAL GAS		
b. Alternate fuel:	DISTILLATE FUEL OIL		
(6) Air Pollution Control Strategy:	Dry Low Nox Combustion		
(7) Cooling Method:	N/A		
(8) Total Site Area:	UNKNOWN		
(9) Construction Status:	PLANNED		
(10) Certification Status:	PLANNED		
(11) Status with Federal Agencies:	PLANNED		
(12) Projected Unit Performance Data			
a. Planned Outage Factor (POF):		3.00	%
b. Forced Outage Factor (FOF):		2.00	%
c. Equivalent Availability Factor (EAF):		95.06	%
d. Resulting Capacity Factor (%):		0.5	%
e. Average Net Operating Heat Rate (ANOHR):		10,344	BTU/kWh
(13) Projected Unit Financial Data			
a. Book Life (Years):		35	
b. Total Installed Cost (In-service year \$/kW):		2,667	
c. Direct Construction Cost (\$/kW):	(\$2025)	2,109	
d. AFUDC Amount (\$/kW):		273	
e. Escalation (\$/kW):		285	
f. Fixed O&M (\$/kW-yr):	(\$2025)	2.74	
g. Variable O&M (\$/MWh):	(\$2025)	7.98	
h. K Factor:		NO CALCULATION	

NOTES

Total Installed Cost includes gas expansion, transmission interconnection and integration
\$/kW values are based on Summer capacity
Fixed O&M cost does not include firm gas transportation costs

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

- (1) Plant Name and Unit Number: **TBD**
- (2) Capacity
- | | | |
|------------------------|-----|--|
| a. Nameplate (MWac): | 300 | |
| b. Summer Firm (MWac): | 210 | |
| c. Winter Firm (MWac): | 210 | |
- (3) Technology Type: **BATTERY STORAGE**
- (4) Anticipated Construction Timing
- | | | |
|-----------------------------------|---------|------------|
| a. Field construction start date: | 01/2032 | |
| b. Commercial in-service date: | 06/2034 | (EXPECTED) |
- (5) Fuel
- | | |
|--------------------|-----|
| a. Primary fuel: | N/A |
| b. Alternate fuel: | N/A |
- (6) Air Pollution Control Strategy: **N/A**
- (7) Cooling Method: **N/A**
- (8) Total Site Area: **~1 ACRE / 10 MW**
- (9) Construction Status: **PLANNED**
- (10) Certification Status:
- (11) Status with Federal Agencies:
- (12) Projected Unit Performance Data
- | | |
|---------------------------------------------|-------------|
| a. Planned Outage Factor (POF): | N/A % |
| b. Forced Outage Factor (FOF): | N/A % |
| c. Equivalent Availability Factor (EAF): | N/A % |
| d. Resulting Capacity Factor (%): | ~16 % |
| e. Average Net Operating Heat Rate (ANOHR): | N/A BTU/Kwh |
- (13) Projected Unit Financial Data
- | | |
|--------------------------------------------------|----------------|
| a. Book Life (Years): | 20 |
| b. Total Installed Cost (In-service year \$/Kw): | 1,659 |
| c. Direct Construction Cost (\$/Kw ac): | (\$2025) |
| d. AFUDC Amount (\$/Kw): | |
| e. Escalation (\$/Kw): | |
| f. Fixed O&M (\$/Kw dc-yr): | (\$2025) 30.00 |
| g. Variable O&M (\$/MWh): | (\$2025) |
| h. K Factor: | NO CALCULATION |

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

- | | | | |
|--------------------------------------------------|--------------------------------------------|----------------|--|
| (1) Plant Name and Unit Number: | TBD | | |
| (2) Capacity | | | |
| a. Nameplate (MWac): | 449.4 | | |
| b. Summer Firm (MWac): | 43 | | |
| c. Winter Firm (MWac): | 18 | | |
| (3) Technology Type: | PHOTOVOLTAIC | | |
| (4) Anticipated Construction Timing | | | |
| a. Field construction start date: | 01/2032 | | |
| b. Commercial in-service date: | 07/2034 | (EXPECTED) | |
| (5) Fuel | | | |
| a. Primary fuel: | SOLAR | | |
| b. Alternate fuel: | N/A | | |
| (6) Air Pollution Control Strategy: | N/A | | |
| (7) Cooling Method: | N/A | | |
| (8) Total Site Area: | ~500-600 ACRES
PER SOLAR SITE (74.9 MW) | | |
| (9) Construction Status: | PLANNED | | |
| (10) Certification Status: | | | |
| (11) Status with Federal Agencies: | | | |
| (12) Projected Unit Performance Data | | | |
| a. Planned Outage Factor (POF): | | N/A % | |
| b. Forced Outage Factor (FOF): | | N/A % | |
| c. Equivalent Availability Factor (EAF): | | N/A % | |
| d. Resulting Capacity Factor (%): | | ~26.5 % | |
| e. Average Net Operating Heat Rate (ANOHR): | | N/A BTU/Kwh | |
| (13) Projected Unit Financial Data | | | |
| a. Book Life (Years): | | 35 | |
| b. Total Installed Cost (In-service year \$/Kw): | | 2,145 | |
| c. Direct Construction Cost (\$/Kw ac): | (\$2025) | | |
| d. AFUDC Amount (\$/Kw): | | | |
| e. Escalation (\$/Kw): | | | |
| f. Fixed O&M (\$/Kw dc-yr): | (\$2025) | 17.31 | |
| g. Variable O&M (\$/MWh): | (\$2025) | 0.00 | |
| h. K Factor: | | NO CALCULATION | |

DUKE ENERGY FLORIDA

SCHEDULE 9

STATUS REPORT AND SPECIFICATIONS OF PROPOSED GENERATING FACILITIES AS OF JANUARY 1, 2025

(1) Plant Name and Unit Number:	TBD		
(2) Capacity	Solar	Storage	
a. Nameplate (MWac):	149.8	100	
b. Summer Firm (MWac):	14.2	70	
c. Winter Firm (MWac):	6.1	70	
(3) Technology Type:	PHOTOVOLTAIC WITH BATTERY STORAGE		
(4) Anticipated Construction Timing			
a. Field construction start date:	01/2032		
b. Commercial in-service date:	07/2034	(EXPECTED)	
(5) Fuel			
a. Primary fuel:	SOLAR		
b. Alternate fuel:	N/A		
(6) Air Pollution Control Strategy:	N/A		
(7) Cooling Method:	N/A		
(8) Total Site Area:	~500-600 ACRES PER SOLAR SITE (74.9 MW)		
(9) Construction Status:	PLANNED		
(10) Certification Status:			
(11) Status with Federal Agencies:			
(12) Projected Unit Performance Data			
a. Planned Outage Factor (POF):	N/A %		
b. Forced Outage Factor (FOF):	N/A %		
c. Equivalent Availability Factor (EAF):	N/A %		
d. Resulting Capacity Factor (%):	~26.5 %		~16%
e. Average Net Operating Heat Rate (ANOHR):	N/A BTU/Kwh		
(13) Projected Unit Financial Data			
a. Book Life (Years):	35		
b. Total Installed Cost (In-service year \$/Kw):	2,145		1,442
c. Direct Construction Cost (\$/Kw ac):	(\$2025)		
d. AFUDC Amount (\$/Kw):			
e. Escalation (\$/Kw):			
f. Fixed O&M (\$/Kw dc-yr):	(\$2025)	17.31	30.00
g. Variable O&M (\$/MWh):	(\$2025)	0.00	0.00
h. K Factor:	NO CALCULATION		

DUKE ENERGY FLORIDA

SCHEDULE 10

STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

OSPREY

- (1) POINT OF ORIGIN AND TERMINATION: Kathleen - Osprey
- (2) NUMBER OF LINES: 1
- (3) RIGHT-OF-WAY: New transmission line right-of-way
- (4) LINE LENGTH: 26.5 miles
- (5) VOLTAGE: 230 kV
- (6) ANTICIPATED CONSTRUCTION TIMING: 5/1/2025
- (7) ANTICIPATED CAPITAL INVESTMENT: \$150,000,000
- (8) SUBSTATIONS: Kathleen, Osprey
- (9) PARTICIPATION WITH OTHER UTILITIES: N/A

DUKE ENERGY FLORIDA

SCHEDULE 10

STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

SUNDANCE SOLAR

- | | |
|-----------------------------------------|------------------------------------|
| (1) POINT OF ORIGIN AND TERMINATION: | Birch Switching Station |
| (2) NUMBER OF LINES: | 1 |
| (3) RIGHT-OF-WAY: | New transmission line right-of-way |
| (4) LINE LENGTH: | 0.5 mile |
| (5) VOLTAGE: | 230 kV |
| (6) ANTICIPATED CONSTRUCTION TIMING: | 5/15/2025 |
| (7) ANTICIPATED CAPITAL INVESTMENT: | \$4,219,433 |
| (8) SUBSTATIONS: | Birch Switching Station |
| (9) PARTICIPATION WITH OTHER UTILITIES: | N/A |

DUKE ENERGY FLORIDA

SCHEDULE 10

STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

RATTLER SOLAR

- | | |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| (1) POINT OF ORIGIN AND TERMINATION: | A greenfield four (4) position ring bus substation along the DEF Brooksville to Inverness 69 kV transmission line, proximate to the existing Nobleton Tap |
| (2) NUMBER OF LINES: | 1 |
| (3) RIGHT-OF-WAY: | New transmission line right-of-way |
| (4) LINE LENGTH: | 0.5 mile |
| (5) VOLTAGE: | 69 kV |
| (6) ANTICIPATED CONSTRUCTION TIMING: | 10/14/2025 |
| (7) ANTICIPATED CAPITAL INVESTMENT: | \$22,337,000 |
| (8) SUBSTATIONS: | A greenfield four (4) position ring bus substation along the DEF Brooksville to Inverness 69 kV transmission line, proximate to the existing Nobleton Tap |
| (9) PARTICIPATION WITH OTHER UTILITIES: | N/A |

DUKE ENERGY FLORIDA

SCHEDULE 10

STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

HALF MOON SOLAR

- | | |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| (1) POINT OF ORIGIN AND TERMINATION: | A new 230 kV Switching Station on the Central Florida to Holder 230 kV line, approximately 18 miles from Holder substation |
| (2) NUMBER OF LINES: | 1 |
| (3) RIGHT-OF-WAY: | Existing transmission line right-of-way |
| (4) LINE LENGTH: | 0.1 miles |
| (5) VOLTAGE: | 230 kV |
| (6) ANTICIPATED CONSTRUCTION TIMING: | 12/1/2025 |
| (7) ANTICIPATED CAPITAL INVESTMENT: | \$28,167,740 |
| (8) SUBSTATIONS: | A new 230 kV Switching Station on the Central Florida to Holder 230 kV line, approximately 18 miles from Holder substation |
| (9) PARTICIPATION WITH OTHER UTILITIES: | N/A |

DUKE ENERGY FLORIDA

SCHEDULE 10

STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

BAILEY MILL SOLAR

- (1) POINT OF ORIGIN AND TERMINATION: A new 115 kV, two (2) position, single breaker tap station along the Drifton to Waukeelah 115 kV line, proximate to Waukeelah substation
- (2) NUMBER OF LINES: 1
- (3) RIGHT-OF-WAY: Existing transmission line right-of-way
- (4) LINE LENGTH: 0.1 mile
- (5) VOLTAGE: 115 kV
- (6) ANTICIPATED CONSTRUCTION TIMING: 10/24/2025
- (7) ANTICIPATED CAPITAL INVESTMENT: \$10,166,000
- (8) SUBSTATIONS: A new 115 kV, two position, single breaker tap station along the Drifton to Waukeelah 115 kV line, proximate to Waukeelah substation
- (9) PARTICIPATION WITH OTHER UTILITIES: N/A

DUKE ENERGY FLORIDA

SCHEDULE 10

STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

JUMPER CREEK SOLAR

- (1) POINT OF ORIGIN AND TERMINATION: A new 230 kV switching station on the Central Florida to Holder 230 kV line, approximately 18 miles from Holder substation
- (2) NUMBER OF LINES: 1
- (3) RIGHT-OF-WAY: Existing transmission line right-of-way
- (4) LINE LENGTH: 0.1 mile
- (5) VOLTAGE: 230 kV
- (6) ANTICIPATED CONSTRUCTION TIMING: 6/1/2026
- (7) ANTICIPATED CAPITAL INVESTMENT: \$3,372,620
- (8) SUBSTATIONS: A new 230 kV switching station on the Central Florida to Holder 230 kV line, approximately 18 miles from Holder substation
- (9) PARTICIPATION WITH OTHER UTILITIES: N/A

DUKE ENERGY FLORIDA

SCHEDULE 10

STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

POWERLINE ENERGY STORAGE

- | | |
|-----------------------------------------|-----------------------------------------|
| (1) POINT OF ORIGIN AND TERMINATION: | Powerline Substation |
| (2) NUMBER OF LINES: | 1 |
| (3) RIGHT-OF-WAY: | Existing transmission line right-of-way |
| (4) LINE LENGTH: | 0.1 mile |
| (5) VOLTAGE: | 115 kV |
| (6) ANTICIPATED CONSTRUCTION TIMING: | 10/26/2026 |
| (7) ANTICIPATED CAPITAL INVESTMENT: | \$5,588,130 |
| (8) SUBSTATIONS: | Powerline Substation |
| (9) PARTICIPATION WITH OTHER UTILITIES: | N/A |

DUKE ENERGY FLORIDA

SCHEDULE 10

STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

LONESOME CAMP SOLAR

- | | |
|-----------------------------------------|---------------------------------------------------------------------------------|
| (1) POINT OF ORIGIN AND TERMINATION: | A new 230 kV switching station along the DEF Holopaw to Canoe Creek 230 kV line |
| (2) NUMBER OF LINES: | 1 |
| (3) RIGHT-OF-WAY: | Existing transmission line right-of-way |
| (4) LINE LENGTH: | 0.1 mile |
| (5) VOLTAGE: | 230 kV |
| (6) ANTICIPATED CONSTRUCTION TIMING: | 12/1/2026 |
| (7) ANTICIPATED CAPITAL INVESTMENT: | \$5,288,000 |
| (8) SUBSTATIONS: | A new 230 kV switching station along the DEF Holopaw to Canoe Creek 230 kV line |
| (9) PARTICIPATION WITH OTHER UTILITIES: | N/A |

DUKE ENERGY FLORIDA

SCHEDULE 10

STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

TURNPIKE SOLAR

- | | |
|-----------------------------------------|---------------------------------------------------------------------------------|
| (1) POINT OF ORIGIN AND TERMINATION: | A new 230 kV switching station along the DEF Holopaw to Canoe Creek 230 kV line |
| (2) NUMBER OF LINES: | 1 |
| (3) RIGHT-OF-WAY: | Existing transmission line right-of-way |
| (4) LINE LENGTH: | 0.1 mile |
| (5) VOLTAGE: | 230 kV |
| (6) ANTICIPATED CONSTRUCTION TIMING: | 12/1/2026 |
| (7) ANTICIPATED CAPITAL INVESTMENT: | \$3,840,000 |
| (8) SUBSTATIONS: | A new 230 kV switching station along the DEF Holopaw to Canoe Creek 230 kV line |
| (9) PARTICIPATION WITH OTHER UTILITIES: | N/A |

DUKE ENERGY FLORIDA

SCHEDULE 10

STATUS REPORT AND SPECIFICATIONS OF PROPOSED DIRECTLY ASSOCIATED TRANSMISSION LINES

BANNER SOLAR

- (1) POINT OF ORIGIN AND TERMINATION: Radiant Substation
- (2) NUMBER OF LINES: 1
- (3) RIGHT-OF-WAY: Existing transmission line right-of-way
- (4) LINE LENGTH: 0.2 mile
- (5) VOLTAGE: 230 kV
- (6) ANTICIPATED CONSTRUCTION TIMING: 12/1/2026
- (7) ANTICIPATED CAPITAL INVESTMENT: \$4,820,000
- (8) SUBSTATIONS: Radiant Substation
- (9) PARTICIPATION WITH OTHER UTILITIES: N/A

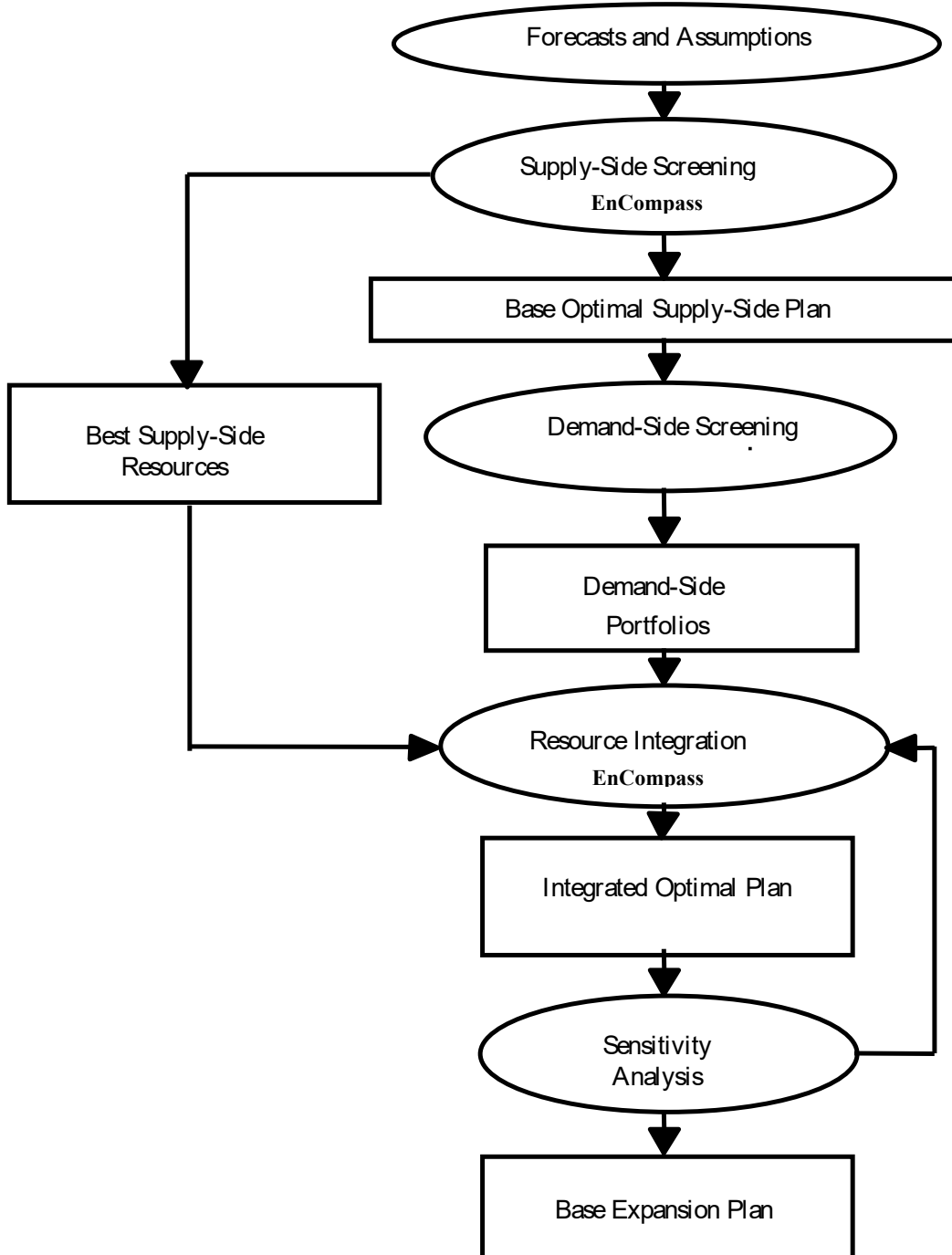
INTEGRATED RESOURCE PLANNING OVERVIEW

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

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

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

FIGURE 3.1
Integrated Resource Planning (IRP) Process Overview



THE INTEGRATED RESOURCE PLANNING (IRP) PROCESS

Forecasts and Assumptions

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

Reliability Criteria

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

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

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

standard probabilistic reliability threshold commonly used in the electric utility industry, and the criterion employed by DEF, is a maximum of one day in ten years loss of load probability.

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

Supply-Side Screening

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

Economic evaluation of generation alternatives is performed using the Capacity Expansion module of the EnCompass Power Planning Software licensed from Anchor Power Solutions, now part of YES Energy. This optimization tool evaluates revenue requirements for specific resource plans generated from multiple combinations of future resource additions that meet system reliability criteria and other system constraints. Capacity expansion models are used to identify cost-effective system resources. However, additional modeling in a detailed production cost model is necessary to verify the resource selections with respect to cost, reliability, and environmental compliance as well as to conduct an overall assessment of the performance of the portfolio.

Demand-Side Screening

Like supply-side resources, the impacts of potential demand-side resources are also factored into the integrated resource plan. The projected MW and MWH impacts for demand-side management

resources are based on the energy efficiency measures and energy management programs included in DEF's 2025 DSM Plan and meet the goals established by the FPSC in September 2024 (Docket 20240013-EG).

Resource Integration and the Integrated Optimal Plan

The cost-effective generation alternatives can then be optimized together with the demand-side portfolios developed in the screening process to formulate integrated optimal plans. The optimization program considers all possible future combinations of supply- and demand-side alternatives that meet the Company's reliability criteria in each year of the ten-year study period and reports those that provide both flexibility and reasonable revenue requirements (rates) for DEF's customers. Candidate base plans are then evaluated using the production cost module of EnCompass. Production cost models maintain full chronology and load requirements in all hours simulating the hour-to-hour operation of the system. This provides hourly modeling of the portfolio dispatch and provides insights into the detailed energy production cost of a given portfolio, the emissions profile and helps to identify potential issues with unit operation and reliability.

Developing the Base Expansion Plan

The integrated optimized plan that provides the lowest revenue requirements may then be further tested using sensitivity analysis, including High and Low Demand and Energy Forecasts (see Schedules 2 and 3). The economics of the plan may be evaluated under high and low forecast scenarios for fuel, load and financial assumptions, or any other sensitivities which the planner deems relevant. From the sensitivity assessment, the plan that is identified as achieving the best balance of flexibility and cost is then reviewed within the corporate framework to determine how the plan potentially impacts or is impacted by many other factors. If the plan is judged robust under this review, it would then be considered the Base Expansion Plan.

KEY CORPORATE FORECASTS

Load Forecast

The assumptions and methodology used to develop the base case load and energy forecast are described in Chapter 2 of this TYSP. The High and Low forecasts of load and energy were provided to Resource Planning to test the robustness of the base plan.

Fuel Price Forecast

The base case fuel price forecast was developed using observable short-term market-based price forecasts and longer-term fundamentals-based price forecasts, with a transition period from market-based pricing to fundamental based pricing. The market-based price forecasts incorporate data from third-party market sources along with public exchanges including New York Mercantile Exchange (“NYMEX”) and price quotes from fuel providers in response to regular Duke Energy fuel supply requests for proposals. The long-term fundamental forecast is created as a composite of several nationally recognized fuel forecasts including both publicly available data (e.g., United States Energy Information Administration (“EIA”)) and third-party proprietary forecasts from multiple industry-recognized fundamental forecast providers. The base cost for coal is based on the observable third-party short-term market coal prices and existing transportation arrangements between DEF and its various suppliers blended with longer-term fundamental based pricing reflective of expected market conditions. Oil and natural gas prices are estimated based on current and expected contracts and spot purchase arrangements as well as short-term and long-term market forecasts. Oil and natural gas commodity prices are driven primarily by open market forces of supply and demand. Natural gas firm transportation cost is determined primarily by pipeline tariff rates.

Financial Forecast

The key financial assumptions used in DEF’s most recent planning studies were 47% debt and 53% equity capital structure, projected cost of debt of 5.65 %, and an equity return of 10.3 %. The assumptions resulted in a weighted average cost of capital of 8.11% and an after-tax discount rate of 7.44%.

TEN-YEAR SITE PLAN (TYSP) RESOURCE ADDITIONS

DEF’s planned supply resource additions and changes are shown in Schedule 8 and are referred to as DEF’s Base Expansion Plan. This plan includes a net addition of over 4,400 MW of solar PV generation with an expected equivalent summer firm capacity contribution of approximately 860 MW and winter firm capacity contribution of approximately 184 MW. It also includes an addition of 1,325 MWs of storage capacity with a firm capacity of approximately 1,080 MW; and 940 MW of combustion turbine firm capacity added in years 2033 and 2034. The incorporation of the full firm capacity of the Osprey Energy Center takes place in June 2025. Between 2025 and 2026, DEF

will add the last 200 MW of combined cycle capacity that results from projects focusing on increasing the fuel efficiency of the combined cycle generating units. DEF continues to consider market supply-side resource alternatives to enhance DEF's resource plan.

The incorporation of the IRA tax credits has helped offset projected cost increases for solar, batteries, and solar plus storage units. In DEF's approved rate settlement (FPSC Docket No. 20210016-EI), DEF anticipates the retirement of the two remaining coal units at Crystal River units 4 and 5 in 2034. Solar PV and a mix of batteries and CTs will be the cost-effective generation to replace most of that energy in the 2034 timeframe. DEF's plan to construct Solar Plants continues following a steady path, including a total of 3,370 MW in the years 2025 through 2034. From 2028 through 2034 two collocated Storage and Solar units will be added per year, totaling an additional 1,048 MW of solar additions over those 7 years. This provides a path to meeting this goal through a measured and paced approach to bringing the solar onto the system which recognizes the challenges of building and interconnecting solar projects, helps maintain reliability as solar penetration increases and maintains affordability in customer rates. As with other elements of the plan, DEF will update these projections as decision dates approach. DEF also continues to consider market supply-side resource alternatives to enhance DEF's resource plan.

DEF recognizes that, as solar penetration increases, including both DEF and customer-owned solar PV, the total dependable solar resource capability is influencing or shifting DEF's reserve planning focus later beyond the on-peak period. DEF is accounting for this planning shift by deriving reduced summer capacity values of planned PV installations starting in 2025. Refer to Page 3-2 for additional solar resource capacity values that are accounting for this change.

DEF's Base Expansion Plan projects the need for additional capacity with estimated in-service dates during the ten-year period from 2025 through 2034. The planned capacity additions, together with purchases from QFs, IOUs, and IPPs help the DEF system meet the energy requirements of its customer base. The capacity needs identified in this plan may be impacted by DEF's ability to extend or replace existing purchase power and QF contracts and to secure new renewable purchased power resources in their respective projected timeframes. The additions in the Base Expansion Plan depend, in part, on projected load growth, and obtaining all necessary state and

federal permits under current schedules. Changes in these or other factors could impact DEF's Base Expansion Plan.

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

RENEWABLE ENERGY

DEF continues to secure renewable energy from the following facilities listed by fuel type:

Purchases from Municipal Solid Waste Facilities:

- Pasco County Resource Recovery (As Available)
- Pinellas County Resource Recovery (As Available)
- Dade County Resource Recovery (upon return to service)
- Lake County Resource Recovery (As Available)
- Lee County Resource Recovery (As Available)

Purchases from Waste Heat from Exothermic Processes:

- PCS Phosphate (As Available)
- Citrus World (As Available)

Solar Photovoltaic Facilities

- DEF-owned Solar Generation (1485.35 MW)
 - Osceola Solar Facility 3.8 MW
 - Perry Solar Facility 5.1 MW
 - Suwannee Solar Facility 8.8 MW

Hamilton Solar Power Plant 74.9 MW
Trenton Solar Power Plant 74.9 MW
Lake Placid Solar Power Plant 45.0 MW
St. Petersburg Pier Solar Power Plant 0.35 MW
DeBary Solar Power Plant 74.5 MW
Columbia Solar Power Plant 74.9 MW
Twin Rivers Solar Power Plant 74.9 MW
Santa Fe Solar Power Plant 74.9 MW
Duette Solar Power Plant 74.5 MW
Sandy Creek Solar Power Plant 74.9 MW
Fort Green Solar Power Plant 74.9 MW
Charlie Creek Solar Power Plant 74.9 MW
Bay Trail Solar Power Plant 74.9 MW
Bay Ranch Solar Power Plant 74.9 MW
Hardeetown Solar Power Plant 74.9 MW
High Springs Solar Power Plant 74.9 MW
Hildreth Solar Power Plant 74.9 MW
Winquepin Renewable Energy Center 74.9 MW
Falmouth Renewable Energy Center 74.9 MW
Mule Creek Renewable Energy Center 74.9 MW
County Line Renewable Energy Center 74.9 MW

Customer-owned renewable generation under DEF's Net Metering Tariff (about 890 MW as of 12/31/24)

At this time, DEF is reviewing the potential for as-available purchased power contracts with third-party solar companies. In-service dates, however, are generally projected to be beyond 2025. As of December 31, 2024, DEF had over 3,940 MW of FERC jurisdictional solar projects in the DEF grid interconnection queue, representing over 53 active projects and 17 of those projects included DEF as the noted developer. DEF anticipates that additional projects developed by DEF as well as third parties will be incorporated on the DEF system through the decade. Project ownership

proportions may change over time based on specific project economics, development details, renewable energy incentives and other factors.

DEF continues to field inquiries and contract negotiations from potential renewable generating facilities and explore whether these potential QFs can provide project commitments and reliable capacity or energy consistent with FERC Rules and the FPSC Rules, 25-17.080 through 25-17.310. DEF will continue to submit renewable contracts in compliance with all policies as appropriate.

The development, construction, commissioning and initial operation of the solar projects at Perry, Osceola, Suwannee, Hamilton, Lake Placid, Trenton, DeBary, Columbia, Twin Rivers, Santa Fe, Duette, Bay Trail, Sandy Creek, Fort Green, Charlie Creek, Bay Ranch, Hildreth, Hardeetown, High Springs, the now commercial Mule Creek, Winquepin, Falmouth and County Line plants and under construction Sundance, Bailey Mill, Half Moon, and Rattler have provided DEF with valuable experience in siting, community engagement, contracting, constructing, operating, and integrating solar photovoltaic technology facilities on the power grid. DEF has worked with our communities on renewable and solar energy technology education, and our contractors to establish necessary standards for the construction and upkeep of utility grade facilities and to develop standards necessary to ensure the reliability of local distribution systems.

DEF is integrating voltage control in the transmission connected solar projects to enhance operational reliability and local transmission resiliency. In addition, DEF is incorporating the ability to place the solar facilities on Automatic Generation Control (AGC). This capability is preparing DEF for future scenarios where there is an excess of generation on the system and a need to utilize the solar resources to balance generation with demand. DEF is utilizing its operational experience and historic data from these solar resources to optimize the daily economic system dispatch, to quantify additional system flexibility needs to counteract the variability of solar generation and investigate potential fuel diversity contributions. The arrays for the solar plants that went in-service in 2024, Mule Creek, Winquepin, Falmouth, and County Line, are shown in Figures 3.2, 3.3, 3.4, and 3.5 below.

FIGURE 3.2
Mule Creek Solar Power Plant



FIGURE 3.3
Winquepin Solar Power Plant



FIGURE 3.4
Falmouth Solar Power Plant



FIGURE 3.5
County Line Power Plant



DEF's current forecast, supporting the Base Expansion Plan includes approximately 900 MW of DEF-owned solar PV to be under development over the three years, which will be subject to approval by the FPSC according to the most current rate settlement (FPSC Docket No. 20240025-EI), and approximately 4,400 MW over the ten-year planning horizon. As with all forecasts included here, the forecast relies heavily on the forward-looking price for this technology, the value rendered by this technology, and considerations to other emerging and conventional cost-effective alternatives, including the use of emerging battery storage technology.

BATTERY ENERGY STORAGE SYSTEMS

The Battery Energy Storage Systems (BESS) from DEF's 50 MW battery storage pilot program were placed in-service in 2023. These projects are being used to test a variety of energy storage use cases including substation upgrade deferral, distribution line reconducting deferral, backup power, peak load shaving, and energy arbitrage. The projects, max power output, and guaranteed energy storage for a minimum of ten years are provided in Table 3.3. Going forward, DEF will use the data gathered from the operation of these Pilot Program sites to evaluate the opportunities and uses of future DEF battery development. Integration and information sharing with the Duke Energy enterprise Emerging Technology Office will also allow real-world comparison with alternative technologies that may be available for commercial use in coming years.

DEF is currently under construction for a 5 MW / 40 MWH non-lithium electrochemical battery located at our existing Suwannee Combustion Turbine generating site. The project is expected to be placed in service in 2025. This asset will deploy a Sodium Sulfur ("NaS") technology to create a long-duration (8 hour) energy storage asset. The Suwannee Project will test the capability for battery technology to provide energy storage at durations above the 2 hour and 4-hour durations common in the industry today. This asset will allow DEF to test the ability for long duration storage to enable increasing levels of solar energy into the grid.

DEF is also developing much larger Transmission tied BESS utilizing lithium-ion energy storage technology. Existing utility land, existing solar sites, planned solar sites, and land acquisitions are

all being considered for BESS siting. These assets are designed to provide capacity during peak hours, arbitrage lower cost energy to periods of higher system value, provide real time system balancing and contingency reserves, and provide highly flexible asset to system operations. The expected increase of solar energy generation also provides a unique opportunity for energy storage assets to assist in the integration of these intermittent resources.

Table 3.3
DEF Battery Energy Storage Pilot Program Projects Summary

Name	Max Power Output (MW)	Guaranteed Energy Storage (MWh)
Cape San Blas	5.5	14.3
Trenton	11.0	10.1
Micanopy	8.25	11.7
Jennings	5.5	5.5
John Hopkins Middle School	2.475	18.0
Lake Placid	17.275	34.0

TECHNOLOGY AND INNOVATION

Duke Energy continues to evaluate new technology and innovations for potential application both in and beyond the ten-year plan window. Technologies under evaluation, but not yet included in the base expansion plan may be commercially or economically unproven, but Duke Energy and DEF are active in investigation and development of these technologies. At the Duke Energy enterprise level, engineers and specialists are involved in cooperative work with vendors and industry groups on supply-side technologies including wind generation, advanced battery development, hydrogen generation and combustion, and advanced nuclear. On the demand side, technologies including advanced demand response technologies such as commercial building pre-cooling, two-way water heater control, and smart appliance applications are being explored and evaluated. In addition, the company continues to explore intersections of grid and system operations with alternative generating technologies including distributed solar and storage and microgrid applications.

PLAN CONSIDERATIONS

Load Forecast

In general, higher-than-projected load growth would shift the need for new capacity to an earlier year and lower-than-projected load growth would delay the need for new resources. The Company's resource plan provides the flexibility to shift certain resources to earlier or later in-service dates should a significant change in projected customer demand begin to materialize. A specific discussion of DEF's review of load growth forecasts higher and lower than the base forecast can be found in the previous sections.

TRANSMISSION PLANNING

DEF's transmission planning assessment practices are developed to test the ability of the planned system to meet the reliability criteria as outlined in the FERC Form No. 715 filing, and to assure the system meets DEF, Florida Reliability Coordinating Council, Inc. (FRCC), and North American Electric Reliability Corporation (NERC) criteria. This involves the use of load flow and transient stability programs to model various contingency situations that may occur, and in determining if the system response meets the reliability criteria. In general, this involves running simulations for the loss of any single line, generator, or transformer. DEF runs this analysis for contingencies that may occur at system peak and off-peak load levels, under both summer and winter conditions. Additional studies are performed to determine the system response to credible, but less probable criteria. These studies include the loss of multiple generators, transmission lines, or combinations of each (some load loss is permissible under the more severe disturbances). These credible, but less probable scenarios are also evaluated at various load levels since some of the more severe situations occur at average or minimum load conditions. In particular, critical fault clearing times are typically the shortest (most severe) at minimum load conditions, with just a few large base load units supplying the system needs. As noted in the DEF reliability criteria, some remedial actions are allowed to reduce system loadings; in particular, sectionalizing is allowed to reduce loading on lower voltage lines for bulk system contingencies, but the risk to load on the sectionalized system must be reasonable (it would not be considered prudent to operate for long periods with a sectionalized system). In addition, the number of remedial action steps and the overall complexity of the scheme are evaluated to determine overall acceptability.

DEF presently uses the following reference documents to calculate and manage Available Transfer Capability (ATC), Total Transfer Capability (TTC) and Transmission Reliability Margin (TRM) for required transmission path postings on the Florida Open Access Same Time Information System (OASIS):

- * http://www.oatioasis.com/FPC/FPCdocs/ATCID_Posted_Rev4.pdf
- * http://www.oatioasis.com/FPC/FPCdocs/TRMID_4.pdf

DEF uses the following reference document to calculate and manage Capacity Benefit Margin (CBM):

- http://www.oatioasis.com/FPC/FPCdocs/CBMID_rev3.pdf

CHAPTER 4

ENVIRONMENTAL AND LAND USE INFORMATION



CHAPTER 4

ENVIRONMENTAL AND LAND USE INFORMATION

PREFERRED SITES

DEF's 2025 TYSP Preferred Sites include eight solar generations sites and one energy storage site:

1. the Sundance Solar Site;
2. the Half Moon Solar Site;
3. the Rattler Solar Site;
4. the Bailey Mill Solar Site;
5. the Jumper Creek Solar Site;
6. the Lonesome Camp Solar Site;
7. the Turnpike Solar Site;
8. the Banner Solar Site; and
9. the Powerline Energy Storage Site.

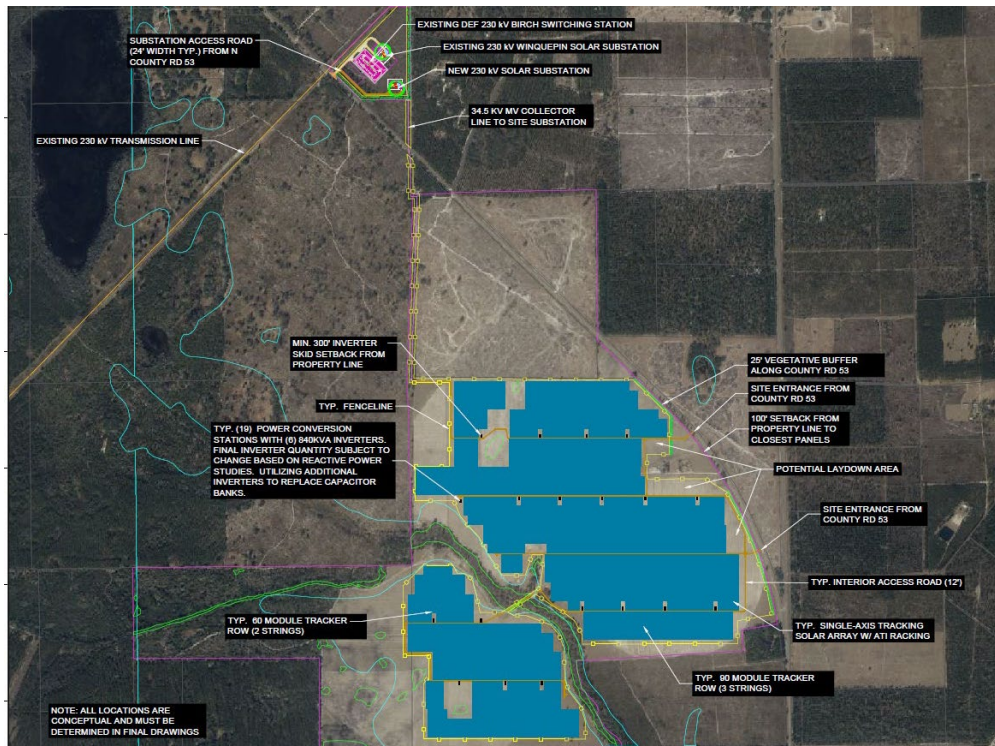
These Preferred Sites are discussed below.

SUNDANCE SOLAR SITE

Sundance Solar Center, a 74.9 MWac solar single-axis tracking PV project located in Madison County, Florida. The site is located on former agricultural lands and is relatively flat with minimal sloping that will allow for the use of a tracking system. The point of interconnection is a new breakered terminal in the 230 kV Birch switching station that will be connected via a mile generation tie-line. All environmental surveys are complete. Madison County Board of County Commissioners (BOCC) approved the site plan in May 2024. An Environmental Resource Permit (ERP) from the Florida Department of Environmental Protection (FDEP) was received on May 13, 2024. State listed gopher tortoises were present onsite and a Relocation Permit from the Florida Fish and Wildlife Conservation Commission (FWC) was secured prior to construction. No additional listed species of concern were present. The project started construction in May 2024, with an expected in-service date of July 2025.

FIGURE 4.1

Sundance Solar Project

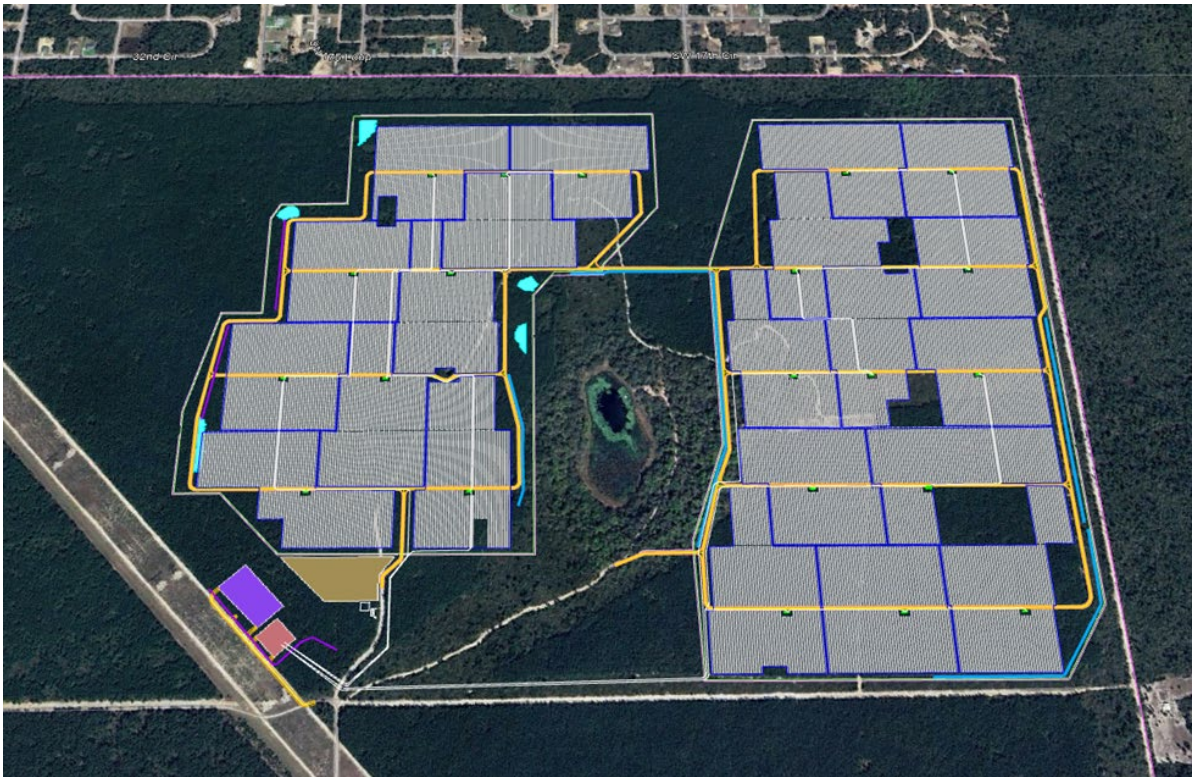


Sundance	16606 County Rd. 53
	Madison, FL 32059

HALF MOON SOLAR SITE

The Half Moon Solar Center, a 74.9 MWac solar single-axis tracking PV project located in Sumter County, Florida. The site is located on merchantable timber lands and is relatively flat with minimal sloping that will allow for the use of a tracking system. The point of interconnection is a new 230 kV, three terminal, three breaker switching station that is connected via a short generation tie-line. All environmental surveys are complete. A Site Plan approval from Sumter County and an ERP from FDEP have been received. A gopher tortoise Relocation Permit was secured from the FWC. The Florida scrub-jay was shown in the area but are not present on site. The project started construction in January 2025 and is expected to be placed in-service January 2026.

FIGURE 4.2
Half Moon Solar Project

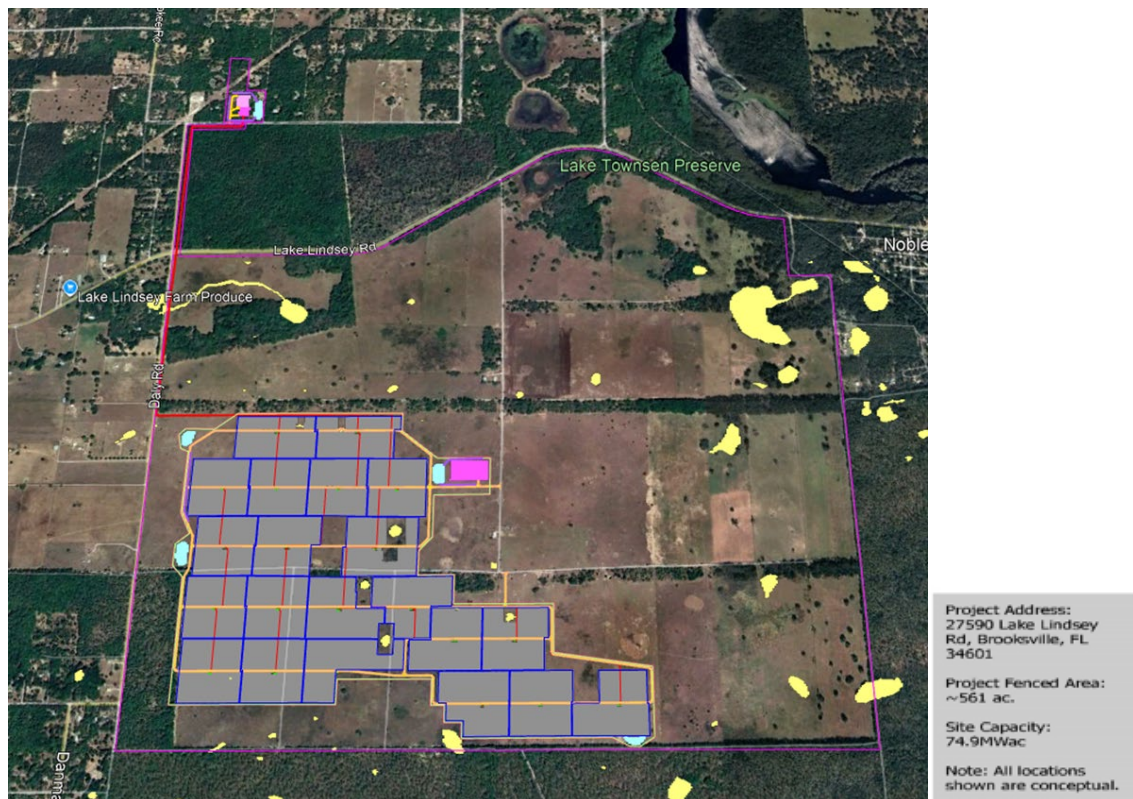


<u>Half Moon</u>	County:	Sumter	Latitude:	28.955619	Longitude:	-82.159585
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RATTLER SOLAR SITE

The Rattler Solar Center, is a 74.9 MWac solar single-axis tracking PV project located in Hernando County, Florida. The site is located on agricultural lands and is relatively flat with minimal sloping that will allow for the use of a tracking system. The point of interconnection is a new 69 kV, four breaker switching station and is connected via a ~2-mile generation tie-line. All environmental surveys are complete. A Site Plan approval from Hernando County and an ERP from FDEP were secured by the project. A Gopher Tortoise Relocation Permit from the FWC was secured prior to construction. The site contained suitable habitat for the state-listed Southeastern American kestrel and presence was also documented. An Incidental Take Permit (ITP) was secured from FWC for impacts to suitable foraging habitat. The project started construction in February 2025 and is expected to be placed in-service January 2026.

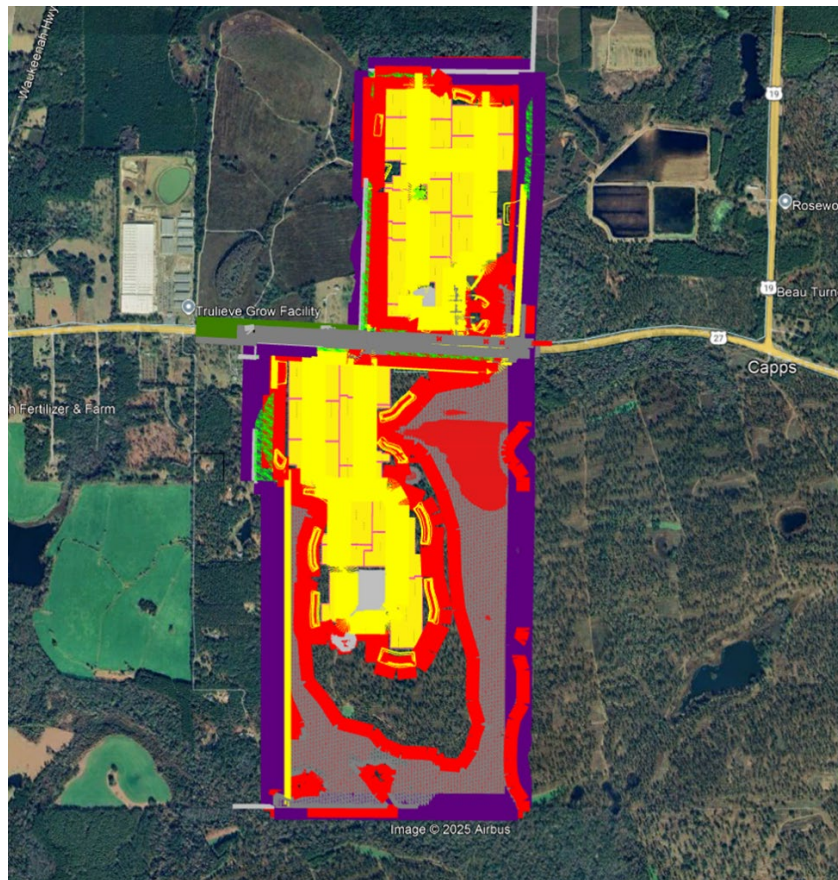
FIGURE 4.3
Rattler Solar Project



BAILEY MILL SOLAR SITE

The Bailey Mill Solar Center, a 74.9 MWac solar Fixed tilt PV project located in Jefferson County, Florida. The site is located on timber and agricultural lands with some sloping that limits the use of a tracking system. The point of interconnection will be a new line tap on the Drifton to Waukeenah 115 kV line. All environmental surveys are complete. Solar is a permitted use on agriculturally zoned land in a local government comprehensive plan in the State of Florida. DEF has filed for both a Site Plan approval from Jefferson County and an ERP from FDEP due to the presence of gopher tortoise on site, a Relocation Permit from the FWC was secured prior to construction. No additional listed species of concern were present. The project is expected to start construction in 2Q2025, with an expected in-service date of May 2026.

FIGURE 4.4
Bailey Mill Solar Project

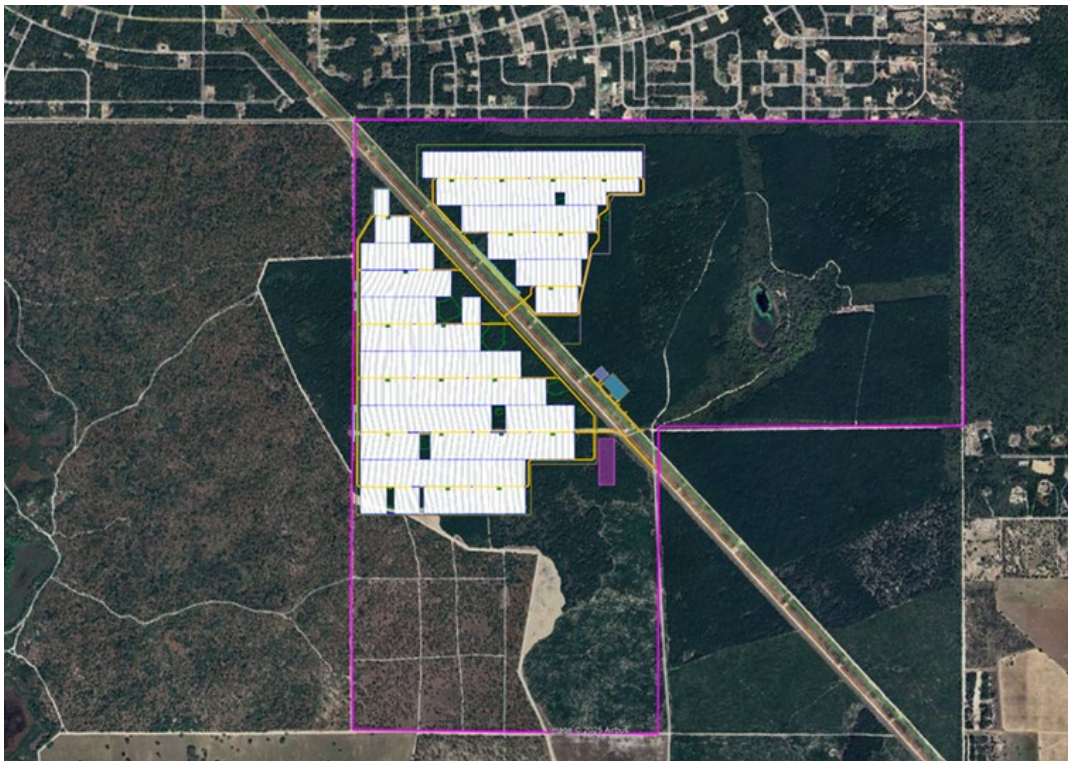


Bailey Mill	Jefferson County
	Zip Code 32344

JUMPER CREEK SOLAR SITE

DEF has identified the Jumper Creek Solar Center, a 74.9 MWac solar single-axis tracking PV project located in Sumter County, Florida. The site is located on merchantable timber lands and is relatively flat with minimal sloping that will allow for the use of a tracking system. The point of interconnection is a new 230 kV terminal in the Crescent switching station that is connected via a short generation tie-line. All environmental surveys are complete. Solar is a permitted use on agriculturally zoned land in a local government comprehensive plan in the State of Florida. However, DEF will obtain a Special Use Permit from the Sumter County Magistrate and will be required to submit a Final Site Plan to Sumter County for approval by staff prior to site mobilization. An ERP from FDEP will also be required. DEF submitted the ERP in December 2024 and expects to receive it summer 2025. The site has gopher tortoises and the appropriate Relocation Permit from the FWC will be secured prior to construction. There is also documented Florida scrub-jay located in the area. The site was surveyed for Florida scrub-jays and none were documented. The project is expected to start construction in the summer of 2025, with an expected in-service date of June 2026.

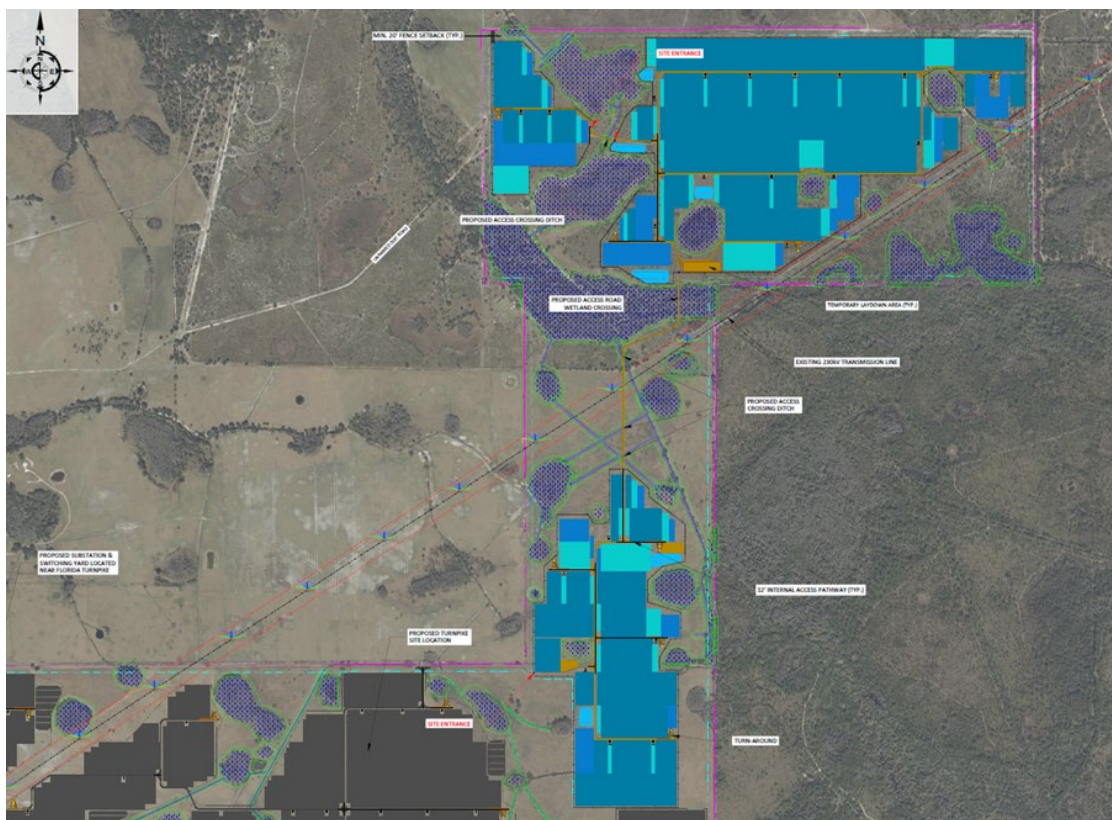
FIGURE 4.5
Jumper Creek Solar Project



LONESOME CAMP SOLAR SITE

DEF has identified the Lonesome Camp Solar Center, a 74.9 MWac solar single-axis tracking PV project located in Osceola County, Florida. The site is located on cattle and agricultural lands with minimal sloping that allows the use of a tracking system. The point of interconnection will be new terminal, at the 230kV Whippoorwill switching station via a short generation tie-line. All environmental surveys are complete. Solar is a permitted use on agriculturally zoned land in a local government comprehensive plan in the State of Florida. Special or Conditional use permits are not required. However, a Site Plan approval is required from Osceola County. An ERP from FDEP will also be required. DEF intends to submit the ERP summer of 2025 and expects to receive it in late 2025. There are several wetlands on site that will be avoided. State listed gopher tortoises were present onsite. The appropriate Relocation Permit from the FWC will be secured prior to construction. The site does show acceptable habitat for crested caracara which is currently being survey and will be completed by May 2025, at which time DEF will consult with FWS if presence is documented. The project is expected to start construction in the late winter of 2025, with an expected in-service date of December 2026.

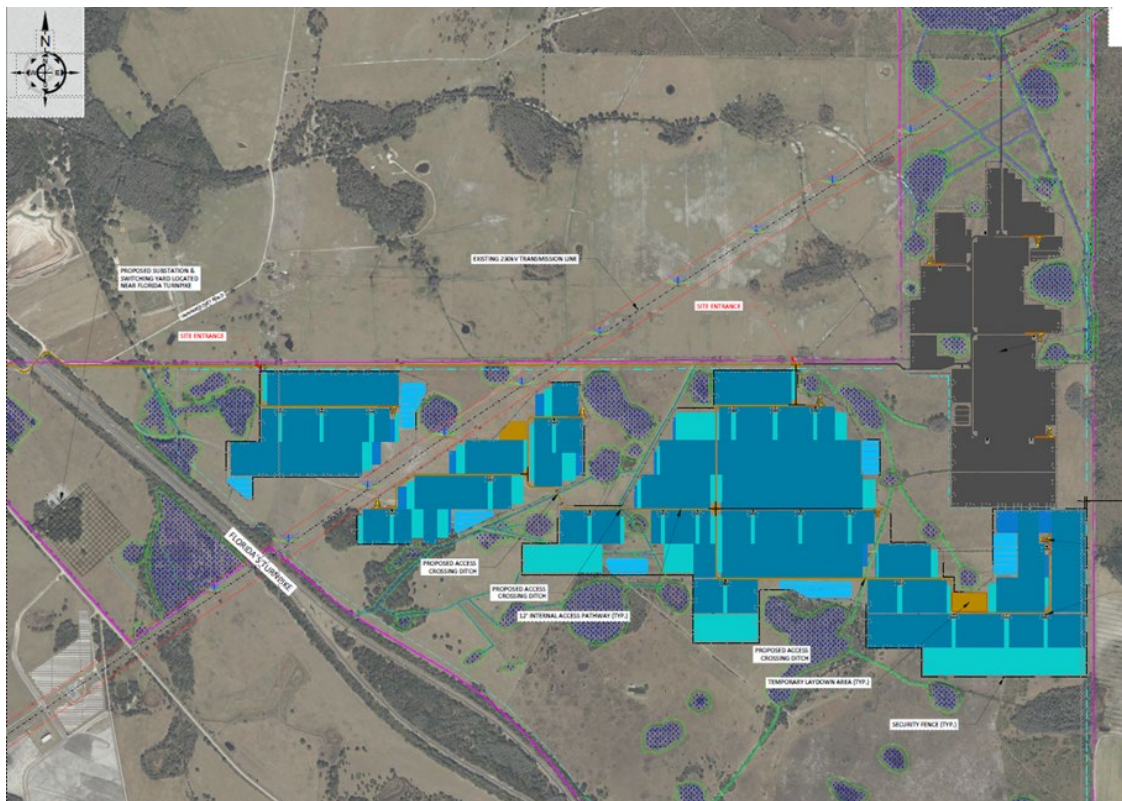
FIGURE 4.6
Lonesome Camp Solar Project



TURNPIKE SOLAR SITE

DEF has identified the Turnpike Solar Center, a 74.9 MWac solar single-axis tracking PV project located in Osceola County, Florida. The site is located on cattle and agricultural lands with limited sloping that allows the use of a tracking system. The point of interconnection will be new 230 kV, three terminal, three breaker switching station via a short generation tie-line. All environmental surveys are complete. Solar is a permitted use on agriculturally zoned land in a local government comprehensive plan in the State of Florida. Special or Conditional use permits are not required. However, a Site Plan approval is required from Osceola County. An ERP from FDEP will also be required. DEF intends to submit the ERP summer of 2025 and expects to receive it in late 2025. There are several wetlands on site that will be avoided. State listed gopher tortoises were present onsite. The appropriate Relocation Permit from the FWC will be secured prior to construction. The site does show acceptable habitat for crested caracara which is currently being survey and will be completed by May 2025, at which time DEF will consult with FWS presence is documented. The project is expected to start construction in the late winter of 2025, with an expected in-service date of December 2026.

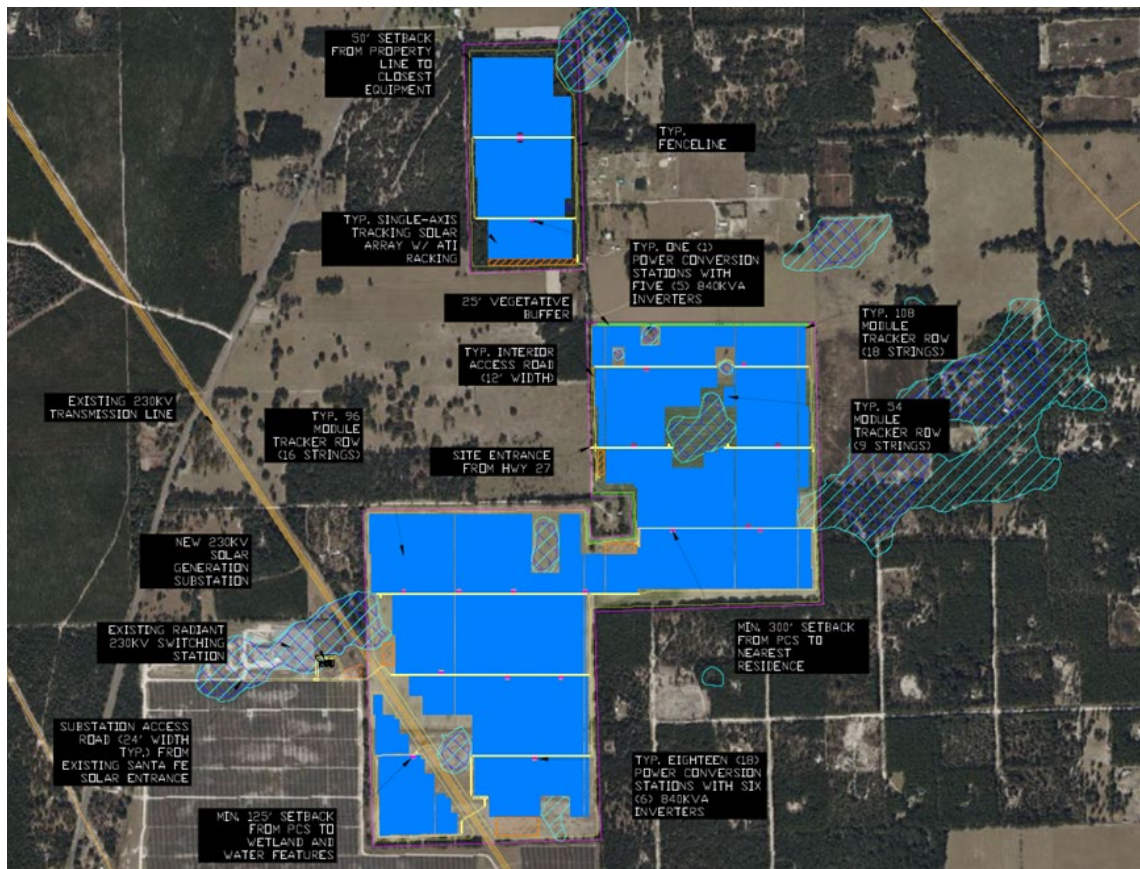
FIGURE 4.7
Turnpike Solar Project



BANNER SOLAR SITE

DEF has identified the Banner Center, a 74.5 MWac solar Fixed tilt PV project located in Columbia County, Florida. The site is located on timber and agricultural lands. The point of interconnection will be a new terminal in the existing 230k Radiant switching station. All environmental surveys are complete. Solar is a permitted use on agriculturally zoned land in a local government comprehensive plan in the State of Florida. Special or Conditional use permits are not required. However, a Site Plan approval is required from Columbia County. An ERP from FDEP has already been approved. The ERP may need to be modified if there are substantial changes to the currently approved plan. There are limited wetlands on site that will be avoided. State listed gopher tortoises were present onsite. The appropriate Relocation Permit from the FWC will be secured prior to construction. No additional listed species of concern were present. The project is expected to start construction in later winter of 2025, with an expected in-service date of December 2026.

FIGURE 4.8
Banner Solar Project



POWERLINE ENERGY STORAGE SITE

DEF has identified the Powerline Energy Storage Site, a 100 MW / 200 MWh battery energy storage system located in Citrus County, Florida. The site is located on a low-lying parcel which will require civil work to raise and level the site. The point of interconnection will be a new 115 kV terminal position at the Powerline 230 kV substation via a generation tie line. The land use designation for the site is Transportation, Communication, Utilities. The Citrus County Land Development Division advised the battery can be located within this district. The project is sited on existing DEF owned land with an existing ERP. DEF intends to submit the ERP modification summer of 2025. The site does show acceptable habitat for gopher tortoises. DEF plans to survey the site for gopher tortoises summer 2025. If required, the appropriate Relocation Permit from the FWC will be secured prior to construction. The project is expected to start construction winter of 2026 and is expected to be placed in service March 2027.

FIGURE 4.9
Powerline Storage Project

