



Stephanie A. Cuello
SENIOR COUNSEL

May 1, 2025

VIA ELECTRONIC DELIVERY

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

Re: *2025 Ten-Year Site Plan Data Request #1; Undocketed*

Dear Mr. Teitzman:

Please find enclosed for filing, Duke Energy Florida, LLC's Response to Staff's Data Request #1, questions 3 through 82, issued on February 20, 2025, regarding DEF's 2025 TYSP.

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
Attachments

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

DEF's Response to Staff's Data Request Regarding the 2025 Ten Year Site Plan; Questions 3-77

Instructions: Accompanying this data request is a Microsoft Excel (Excel) document titled “Data Request #1.Excel Tables,” (Excel Tables File). For each question below that references the Excel Tables File, please complete the table and provide, in Excel Format, all data requested for those sheet(s)/tab(s) identified in parenthesis.

General Items

3. Please refer to the Excel Tables File tabs listed below. Complete the tables by providing information on the financial assumptions and financial escalation assumptions used in developing the Company's TYSP. If any of the requested data is already included in the Company's current planning period TYSP, state so on the appropriate form.

- a. Excel Tables File (Financial Assumptions)
- b. Excel Tables File (Financial Escalation)

RESPONSE:

- a. Please see table below and tab *Financial Assumptions* of the attached Excel File *2025 TYSP - Data Request #1.Excel Tables*:

Financial Assumptions			
Base Case			
AFUDC Rate		(%)	8.11
Capitalization Ratios	Debt	(%)	47.00
	Preferred	(%)	
	Equity	(%)	53.00
Rate of Return	Debt	(%)	5.65
	Preferred	(%)	
	Equity	(%)	10.30
Income Tax rate	State	(%)	5.50
	Federal	(%)	21.00
	Effective	(%)	25.32
Other Tax Rate:		(%)	
Discount Rate:		(%)	7.44
Tax - Depreciation Rate:		(%)	

Tax Depreciation Rate

CT	15 Years (MACRS Table)
CC	20 Years (MACRS Table)
Solar and SPS	5 Years (MACRS Table)
Battery	5 Years (MACRS Table)

- b. Please see tables below and tab *Financial Escalation* of the attached Excel File *2025 TYSP - Data Request #1.Excel Tables*:

Financial Escalation Assumptions			
Year	General Inflation	Fixed O&M Cost	Variable O&M Cost
	(%)	(%)	(%)
2025	2.50%	2.50%	2.50%
2026	2.50%	2.50%	2.50%
2027	2.50%	2.50%	2.50%
2028	2.50%	2.50%	2.50%
2029	2.50%	2.50%	2.50%
2030	2.50%	2.50%	2.50%
2031	2.50%	2.50%	2.50%
2032	2.50%	2.50%	2.50%
2033	2.50%	2.50%	2.50%
2034	2.50%	2.50%	2.50%

Year	Plant Construction Cost %				
	CT	CC	Solar	SPS	Battery
2025	0.74%	1.02%	0.94%	0.07%	-1.87%
2026	0.74%	1.02%	0.94%	0.07%	-1.87%
2027	0.74%	1.02%	0.94%	0.07%	-1.87%
2028	0.74%	1.02%	0.94%	0.07%	-1.87%
2029	0.74%	1.02%	0.94%	0.07%	-1.87%
2030	0.74%	1.02%	0.94%	0.07%	-1.87%
2031	0.74%	1.02%	0.94%	0.07%	-1.87%
2032	0.74%	1.02%	0.94%	0.07%	-1.87%
2033	0.74%	1.02%	0.94%	0.07%	-1.87%
2034	0.74%	1.02%	0.94%	0.07%	-1.87%

Load & Demand Forecasting

Historic Load & Demand

4. **[Investor-Owned Utilities Only]** Please refer to the Excel Tables File (Hourly System Load). Complete the table by providing, on a system-wide basis, the hourly system load in megawatts (MW) for the period January 1 through December 31 of the year prior to the current planning period. For leap years, please include load values for February 29. Otherwise, leave that row blank.
- a. Please also describe how loads are calculated for those hours just prior to and following Daylight Savings Time (March 10, 2024, to November 3, 2024).

RESPONSE:

Please see tab *Hourly System Load* of the attached Excel File *2025 TYSP - Data Request #1.Excel Tables*.

- a. For March DST, there is a zero in hour 3. For November DST, DEF computes the average for hours 2 and hour 3 and places it in hour 2 as hour 3 is shifted back to hour 2.
5. Please refer to the Excel Tables File (Historic Peak Demand). Complete the table by providing information on the monthly peak demand experienced during the three-year period prior to the current planning period, including the actual peak demand experienced, the amount of demand response activated during the peak, and the estimated total peak if demand response had not been activated. Please also provide the day, hour, and system-average temperature at the time of each monthly peak.

RESPONSE:

Please see table below and tab *Historic Peak Demand* of the attached Excel File *2025 TYSP - Data Request #1.Excel Tables*:

Year	Month	Actual Peak Demand	Demand Response Activated	Estimated Peak Demand	Day	Hour	System-Average Temperature
		(MW)	(MW)	(MW)			(Degrees F)
2024	1	7,365	0	7,365	21	9	47.65
	2	6,659	0	6,659	20	8	55.80
	3	6,562	0	6,562	15	18	74.20
	4	7,425	0	7,425	19	18	76.82
	5	9,068	0	9,068	27	19	83.88
	6	9,448	0	9,448	6	18	84.13
	7	9,468	0	9,468	8	16	85.34
	8	9,269	0	9,269	8	18	86.91
	9	8,881	0	8,881	30	18	82.82
	10	8,407	0	8,407	2	17	82.06
	11	7,163	0	7,163	6	17	80.67
	12	6,911	0	6,911	4	8	53.28
2023	1	7,840	0	7,840	16	8	51.04
	2	6,657	0	6,657	23	17	75.15
	3	7,608	0	7,608	27	18	77.93
	4	7,845	0	7,845	4	18	77.68
	5	8,354	0	8,354	11	17	80.62
	6	9,322	0	9,322	27	18	85.00
	7	9,725	0	9,725	21	17	87.03
	8	10,268	0	10,268	11	18	87.56
	9	9,281	0	9,281	11	18	83.71
	10	7,859	0	7,859	13	17	80.98
	11	6,799	0	6,799	11	16	75.53
	12	5,936	0	5,936	3	15	74.28
2022	1	9,240	0	9,240	30	8	45.12
	2	7,539	0	7,539	1	8	57.81
	3	7,003	0	7,003	18	18	73.65
	4	7,905	0	7,905	6	18	79.37
	5	8,743	0	8,743	23	17	81.55
	6	9,977	0	9,977	15	17	84.79
	7	9,799	0	9,799	29	17	83.96
	8	9,848	0	9,848	1	17	84.13
	9	9,306	0	9,306	6	17	84.17
	10	7,956	0	7,956	11	17	78.48
	11	7,811	0	7,811	1	17	77.58
	12	9,157	0	9,157	25	9	38.36
Notes							
(Include Notes Here)							

6. Please identify the weather station(s) used for calculation of the system-wide temperature for the Company's service territory. If more than one weather station is utilized, please describe how a system-wide average is calculated.

RESPONSE:

DEF uses dry bulb temperature readings from three weather stations - St Petersburg (45%), Orlando (45%) and Tallahassee (10%), weight included in parenthesis.

Weather station weightings are developed using "weather-sensitive" energy sales by customer building types reported by eighteen individual Operation Centers located around the service area. Energy sales by Operation Centers are grouped to its closest weather station to determine weather station weights.

7. Please explain, to the extent not addressed in the Company's current planning period TYSP, how the reported forecasts of the number of customers, demand, and total retail energy sales were developed. In your response, please include the following information:
 - a. Methodology.
 - b. Assumptions.
 - c. Data sources.
 - d. Third-party consultant(s) involved.
 - e. Anticipated forecast accuracy.
 - f. Any difference/improvement(s) made compared with those forecasts used in the Company's most recent prior TYSP.

RESPONSE:

- a. Please refer to DEF 2025 TYSP.
- b. Please refer to DEF 2025 TYSP.
- c. Please refer to DEF 2025 TYSP.
- d. No third-party consultants involved.
- e. As in every published DEF Load Forecast, the use of "most recently available" economic projections from a most-reliable source has been employed. Also, every TYSP Base Case planning projection is designed to result in a 50/50 probability of outcome.
- f. N/A

8. Please identify all closed and open Florida Public Service Commission (FPSC) dockets and all non-docketed FPSC matters which were/are based on the same load forecast used in the Company's current planning period TYSP.

RESPONSE:

Docket No. 20250034-EI – Solar Base Rate Adjustment 1.

Docket No. 20250054-EQ – Standard Offer Contract

9. Please explain if your Company evaluates the accuracy of its forecasts of customer growth and annual retail energy sales presented in its past TYSPs by comparing the actual data for a given year to the data forecasted one, two, three, four, five, or six years prior.
- a. If your response is affirmative, please explain the method used in your evaluation, and provide the corresponding results, including work papers, in Excel format for the analysis of each forecast presented in the TYSPs filed with the Commission during the 20-year period prior to the current planning period. If your Company limits its analysis to a period shorter than 20 years prior to the current planning period, please provide what analysis you have and a narrative explaining why your Company limits its analysis period.
- b. If your response is negative, please explain.

RESPONSE:

DEF maintains annual Forecast Evaluation Tables reflecting projection accuracy for all previous TYSP projections from 2004 to 2024 for Net Energy for Load (NEL), System Customers, System MW and Retail MW.

- a. Each previous projection's ten-year forecast horizon is compared to all existing comparable historical data-to date. For NEL and Customer data, reported actual company data is compared to projection. For System and Retail MW, both actual and forecast Summer and Winter MW peaks are evaluated on a comparable basis assuming no activated demand response. See attached file *TYSP Error Fan_2025.xlsx*.
- b. N/A.
10. Please explain if your Company evaluates the accuracy of its forecasts of Summer/Winter Peak Energy Demand presented in its past TYSPs by comparing the actual data for a given year to the data forecasted one, two, three, four, five, or six years prior.
- a. If your response is affirmative, please explain the method used in your evaluation, and provide the corresponding results, including work papers, in Excel format for the analysis of each forecast presented in the TYSPs filed with the Commission during the 20-year period prior to the current planning period. If your Company limits its analysis to a period shorter than 20 years prior to the current planning period, please provide what analysis you have and a narrative explaining why your Company limits its analysis period.

- b. If your response is negative, please explain why.

RESPONSE:

Please refer to response to Q9 and the corresponding Excel file.

- a. DEF prepared a forecast comparison of the past Ten-Year Site Plan forecasts from 2004 to 2024 as compared to the history. Variance calculations of (History / Forecast) are calculated across history and the TYSPs. This is the “TYSP Error Fan” in excel spread sheet form. The calculations compare the forecasts of Net Energy for Load, System Customers, Retail Peak Load and System Peak Load. Annual forecasts are compared for Net Energy for Load and System Customers and season forecasts are compared for Retail Peak Load and System Load.
- b. N/A.

11. Please explain any historic trends or other information as requested below in each of the following components of Summer/Winter Peak Demand:

- a. Demand Reduction due to the Company’s demand-side management program(s) and Self Service, by customer type (residential, commercial, industrial) as well as Total Customers, and identify the major factors that contribute to the growth/decline in the trends.
- b. Demand Reduction due to Demand Response, by customer type (residential, commercial, industrial), and identify the major factors that contribute to the growth/decline of the trends.
- c. Total Demand and identify the major factors that contribute to the growth/decline in the trends.
- d. Net Firm Demand, by the sources of peak demand appearing in Schedule 3.1 and Schedule 3.2 of the current planning period TYSP and identify the major factors that contribute to the growth/decline in the trends.

RESPONSE:

- a. DEF customer growth has always been dominated by the Residential and Commercial customer classes. Customer growth trends are driven by broad economic and demographic trends. These generic trends are typically covered in each year’s assumptions section of the DEF’s TYSP. Items such as population growth, population migration, and retirement demographic trends determine customer growth. Housing market issues such as affordability, mortgage rates, and job growth have always applied a significant influence on customer growth dynamics as well. More recent site plans reflect a return to the long-term trend of population migration into Florida. Commercial customer growth typically tracks residential growth, supplying needed services.

One anomalous period of importance now buried in the middle of the error fan time horizon

was the U.S. financial crisis. The severe financial crisis in the 2008-2010 timeframe caused many homeowners to lose substantial equity and in some cases their homes. This severely limited both retirees and other movers from migrating to Florida for a period. Negative forecast variances can be seen in the “System Customers” tab of the “error fan” all the way through projections made between 2004-2009 for the years 2009-2017.

There are no projections of future wars, pandemics, or abnormal weather events embedded in the customer growth forecast.

- b. Residential and commercial class per customer usage are driven, primarily, by fluctuations in electric price, end use appliance saturation, changing (improving) end use appliance efficiency, improved building codes, housing type/building size, and space conditioning equipment fuel type. More recently, the ability to self-generate has begun to make an impact. A small percentage of industrial/commercial customers have chosen to install their own natural gas generation, reducing kWh consumption from the power grid. Similarly, residential and some commercial accounts have reduced their utility requirements by installing solar panels behind their meter. Contrarily, the penetration of plug-in electric vehicles has grown, working to increase residential use per customer, however, rooftop solar generation continues to outweigh consumption from electric vehicles. Each of these stated items are handled either implicitly in the economic scenario presented by Moody’s Analytics or explicitly in the internal DEF projections of UEE, Solar PV and plug-in Electric Vehicles.
- c. Total Sales to Ultimate Customers GWh are made up of retail sales which include residential, commercial, industrial, street lighting, and other sales to public authorities. Trends impacting the customer classes that make up retail sales are typically covered in each year’s assumptions section of DEF’s TYSP.

Major historical factors that impacted total retail sales include the Great Recession and the Covid Pandemic as well as drivers such as population growth, home construction, employment, income, GDP, electric prices, energy efficiency, and demand side management programs.

Currently, along with the aforementioned drivers, the ability to self-generate has begun to make an impact. There is increasing adoption of plug-in Electric Vehicles. High inflation and the resulting rise of the federal funds rate are also impacting economic drivers. Each of these stated items are handled either implicitly in the economic scenario presented by Moody’s Analytics or explicitly in the internal DEF projections of UEE, Solar PV and plug-in Electric Vehicles.

For the forecast period, behind the meter generation is expected to continue to increase along with a smaller near-term rate of electric vehicle adoption. Expectations of lower economic growth due to lagged effects from monetary and fiscal policy updates impact the forecast in the short term however, there are no predictions for a recession.

- d. Demand-side management program(s) and conservation/energy-efficiency program(s) continue to contribute to load reductions in the forecast period. As customers adopt these programs it is assumed that adoption will eventually plateau. This can be observed in the general service/industrial classes. Residential conservation continues to grow during the forecast period albeit at a lower rate than the previous 10 years.

12. Please explain any current and forecasted trends or other information as requested below in each of the following components of Summer/Winter Peak Demand:

- a. Demand Reduction due to the Company's demand-side management program(s) and Self Service, by customer type (residential, commercial, industrial) as well as Total Customers, and identify the major factors that contribute to the growth/decline in the trends.
- b. Demand Reduction due to Demand Response, by customer type (residential, commercial, industrial), and identify the major factors that contribute to the growth/decline of the trends.
- c. Total Demand and identify the major factors that contribute to the growth/decline in the trends.
- d. Net Firm Demand, by the sources of peak demand appearing in Schedule 3.1 and Schedule 3.2 of the current planning period TYSP and identify the major factors that contribute to the growth/decline in the trends.

RESPONSE:

- a. Conservation (utility-sponsored and "naturally occurring" appliance efficiency & building code improvements) and self-generation are primary contributors to the long-term trends in lower energy use per customer and resulting reductions in the growth of the peak demand. Stricter building codes and improved heating/cooling (as well as other) equipment efficiencies have been a steady and effective way to reduce the growth in Summer/Winter peak for all classes of customers. The forecast projects continuing improvement as newer homes and newer appliances replace older, less efficient homes and appliances. DEF's conservation programs incentivize customers to purchase heating/cooling equipment at a level just above the required Federal Standards. In addition to conservation measures, customers in several different customer classes have installed "behind-the-meter" solar generation and more are projected to in the forecast. DEF has experienced a slight increase in installations of small gas turbines on-site of a paper manufacturer and a large hospital. If natural gas remains cheap and plentiful, we can expect to see more.
- b. DEF commercial/industrial Demand Response program interest continues to increase due to observed customer load levels and economic conditions. This trend is expected to follow forecasted load growth.

Residential capability growth has largely followed commission approved plans with the exception of during the COVID 19 pandemic when DEF temporarily suspended entering

customer homes and when load control device deliveries were interrupted by supply chain constraints.

- c. Please see response to Q11. Most factors that impact levels of “energy” have similar effects for energy at time of peak.
- d. Please see response to Q11. Most factors that impact levels of “energy” have similar effects for energy at time of peak.

13. **[FEECA Utilities Only]** Do the Company’s energy and demand savings amounts reflected on the DSM and Conservation-related portions of all energy and demand savings schedules (Schedules 2.1, 2.2, and 2.3 for energy savings and Schedules 3.1, 3.2, and 3.3 for demand savings) reflect the Company’s goals that were approved by the Commission in the 2024 FEECA Goalsetting dockets? If not, please explain what assumptions are incorporated within those amounts, and why.

RESPONSE:

The Company’s energy and demand savings amounts reflected on Conservation-related portions of all energy and demand savings schedules (Schedules 2.1, 2.2, and 2.3 for energy savings and Schedules 3.1, 3.2, and 3.3 for demand savings) reflect the Company’s goals that were approved by the Commission in the 2024 FEECA Goal setting dockets. However, the energy and demand savings associated with Demand Response (Residential and Commercial / Industrial Load Management) included in Schedules 2 and 3 are based on an extension of the 2019 FEECA Goal setting dockets. At the time that the 2025 TYSP load forecast was developed, the information related to Demand Response programs needed to meet the 2024 DSM Goals was not available yet.

14. Please explain any anomalies caused by non-weather events with regard to annual historical data points for the period 10 years prior to the current planning period that have contributed to the following, respectively:
- a. Summer Peak Demand.
 - b. Winter Peak Demand.
 - c. Annual Retail Energy Sales.

RESPONSE:

In the ten-year period beginning in 2014 there have been no significant non-weather changes or anomalies impacting DEF’s Summer/Winter Peak MW demand. General trends impacting the demand have continued over the ten-year period. DEF’s service to wholesale jurisdictional demand and energy continues to be a declining share of total company Summer Peak, Winter Peak, and NEL. Secondly, seasonal peak demand continues to be affected by more efficient end-use appliances and lighting.

The most significant non-weather impact on DEF load and demand is only beginning to be felt and is reflected more in the forecast than the historic trend data and that is the broader saturation of self-generation particularly rooftop solar PV. Impacts of customer owned generation have been modest thus far, but the trend of increasing adoption indicates that there will be significant and growing impacts especially to the annual energy sales in the near future.

15. Please provide responses to the following questions regarding the weather factors considered in the Company's retail energy sales and peak demand forecasts:
- a. Please identify, with corresponding explanations, all the weather-related input variables that were used in the respective Retail Energy Sales, Winter Peak Demand, and Summer Peak Demand models.
 - b. Please specify the source(s) of the weather data used in the aforementioned forecasting models.
 - c. Please explain in detail the process/procedure/method, if any, the Company utilized to convert the raw weather data into the values of the model input variables.
 - d. Please specify with corresponding explanations:
 - (1) How many years' historical weather data was used in developing each retail energy sales and peak demand model.
 - (2) How many years' historical weather data was used in the process of these models' calibration and/or validation.
 - e. Please explain how the projected values of the input weather variables (that were used to forecast the future retail energy sales or demand outputs for each planning years 2025–2034) were derived/obtained for the respective retail energy sales and peak demand models.

RESPONSE:

Please refer to DEF 2025 TYSP.

16. **[Investor-Owned Utilities Only]** If not included in the Company's current planning period TYSP, please provide load forecast sensitivities (high band, low band) to account for the uncertainty inherent in the base case forecasts in the following TYSP schedules, as well as the methodology used to prepare each forecast:
- a. Schedule 2.1 – History and Forecast of Energy Consumption and Number of Customers by Customer Class.

- b. Schedule 2.2 - History and Forecast of Energy Consumption and Number of Customers by Customer Class.
- c. Schedule 2.3 - History and Forecast of Energy Consumption and Number of Customers by Customer Class.
- d. Schedule 3.1 - History and Forecast of Summer Peak Demand.
- e. Schedule 3.2 - History and Forecast of Winter Peak Demand.
- f. Schedule 3.3 - History and Forecast of Annual Net Energy for Load.
- g. Schedule 4 - Previous Year and 2-Year Forecast of Peak Demand and Net Energy for Load by Month.

RESPONSE:

Please refer to DEF 2025 TYSP.

17. Please address the following questions regarding the impact of all customer-owned/leased renewable generation (solar and otherwise) and/or energy storage devices on the Utility's forecasts.
- a. Please explain in detail how the Utility's load forecast accounts for the impact of customer's renewables and/or storage.
 - b. Please provide the annual impact, if any, of customer's renewables and/or storage on the Utility's retail demand and energy forecasts, by class and in total, for 2025 through 2034.
 - c. If the Utility maintains a forecast for the planning horizon (2025-2034) of the number of customers with renewables and/or storage, by customer class, please provide.

RESPONSE:

- a. Existing customer-owned renewable generation is captured in the historical dataset used for load forecast modeling. The projected impact of future customer owned renewable generation is added to the base load forecast as a reduction to load.
- b. Annual impact, if any, of customer-owned/leased renewable generation (solar and otherwise) on the Utility's retail demand and energy forecasts, by class and in total, for 2025 through 2034. The "existing customer owned renewable generation is captured in the historical dataset used for load forecast modeling" – as such, the energy and demand data as presented represents "net new" as of 1/1/2025 and is a cumulative view from that point.

Please see table below and tab *Customer Own-Leased Renew Gen* of the attached Excel File *2025 TYSP Data Request #1 – Excel Tables_Q17*.

Year	Cumulative Customer Owned/Leased Renewable Generation							
	Residential Summer Demand (MW)	Residential Winter Demand (MW)	Commercial Summer Demand (MW)	Commercial Winter Demand (MW)	Industrial Summer Demand (MW)	Industrial Winter Demand (MW)	Total Summer Demand (MW)	Total Winter Demand (MW)
2025	(38.9)	(0.4)	(2.0)	(0.0)	(0.1)	0.0	(41.0)	(0.4)
2026	(97.6)	(4.7)	(5.0)	(0.3)	(0.2)	(0.0)	(102.8)	(5.0)
2027	(96.2)	(9.1)	(5.1)	(0.5)	(0.2)	(0.0)	(101.5)	(9.7)
2028	(130.1)	(13.5)	(7.0)	(0.8)	(0.3)	(0.0)	(137.4)	(14.4)
2029	(161.3)	(17.4)	(8.9)	(1.0)	(0.4)	(0.1)	(170.6)	(18.5)
2030	(192.7)	(21.2)	(10.6)	(1.3)	(0.5)	(0.1)	(203.8)	(22.6)
2031	(224.2)	(25.0)	(12.2)	(1.5)	(0.6)	(0.1)	(237.0)	(26.6)
2032	(256.0)	(28.9)	(13.8)	(1.7)	(0.7)	(0.1)	(270.5)	(30.7)
2033	(287.7)	(32.8)	(15.4)	(1.9)	(0.8)	(0.1)	(304.0)	(34.8)
2034	(318.9)	(36.6)	(17.0)	(2.2)	(0.9)	(0.1)	(336.8)	(38.9)
Notes								
The negative values indicate that customer owned PV is a reduction to projected load								

- c. Forecast for the planning horizon (2025-2034) of the number of customers with customer-owned/leased renewable generation (solar and otherwise), by customer class, please provide. The data represents a cumulative view of all customers, including those that added renewable generation prior to 1/1/2025.

Please see table below and tab Customer Own-Leased Renew Cust of the attached Excel File 2025 TYSP Data Request #1 – Excel Tables_Q17.

Year	Cumulative Customer Owned/Leased Renewable Generation Counts			
	Residential Customers	Commercial Customers	Industrial Customers	Total Customers
2025	115,187	883	3	116,073
2026	133,238	979	5	134,222
2027	151,454	1,075	7	152,536
2028	167,722	1,171	9	168,902
2029	183,680	1,267	11	184,958
2030	199,658	1,351	13	201,022
2031	215,874	1,435	15	217,324
2032	232,311	1,519	17	233,847
2033	248,688	1,603	19	250,310
2034	264,672	1,687	21	266,380
Notes				

18. Please refer to the Excel Tables File (PEV Charging). Complete the table by providing estimates of the requested information within the Company's service territory for the current planning period. Direct current fast charger (DCFC) PEV charging stations are those that require a service drop greater than 240 volts and/or use three-phase power.

RESPONSE:

Please see table below and tab *EV Charging* of the attached Excel File *2025 TYSP - Data Request #1.Excel Tables*:

Year	Number of PEVs	Number of Public PEV Charging Stations	Number of Public DCFC PEV Charging Stations	Cumulative Impact of PEVs		
				Summer Demand	Winter Demand	Annual Energy
				(MW)	(MW)	(GWh)
2025	82,431	3,282	752	13.8	0.8	52
2026	112,917	4,933	829	29.6	3.9	129
2027	152,824	7,162	864	55.9	9.9	231
2028	205,171	10,189	938	81.9	17.1	358
2029	272,878	14,154	1,062	113.3	25.9	516
2030	357,871	19,139	1,238	152.2	37.3	714
2031	461,273	25,180	1,465	207.9	54.2	988
2032	582,663	32,234	1,739	273.1	75.5	1,314
2033	714,221	39,844	2,042	344.9	100.8	1,682
2034	857,869	48,108	2,380	423.1	128.4	2,085
Notes						
1. Source: Fall 2024 EV Forecast						
2. "Number of PEVs" total cumulative PEV vehicles which includes includes Light, Medium, and Heavy Duty Vehicles.						
3. "Cumulative Impact of PEVs" includes only net-new vehicles beginning January 2025 as used and provided to load forecasting. This includes energy impacts from light, medium, and heavy duty vehicles (energy is from 1/1/2025).						
4. "Number of Public PEV charging stations" includes both L2 and DC charging stations						
5. "Cumulative Impact of PEVs" at the system's coincident peak for Summer and Winter.						

19. Please describe what method(s) the Utility has used, if any, to address the impact of PEVs charging on seasonal peak demand, including any special rates or tariffs, demand-side management programs (including PEV-centric demand response), customer education, or other means. As part of your response, identify each and provide the estimated impact on seasonal peak demand.

RESPONSE:

The Company's Off-Peak Credit program, which was recently expanded beyond pilot stage and now operates without annual enrollment caps is specifically designed to help EV-driving customers avoid system peaks when charging their EV at home. The program provides monthly bill credits to customers that avoid charging during system peaks. Inherently, these participating customers are educated about the timing of system peaks and rewarded for avoiding them. The Company's analytics currently suggest that winter morning peak demand is reduced up to 0.04 kW per EV with the relatively small amount attributed to the fact that most EVs have already finished charging overnight when the morning peak occurs, leaving

little load to be shifted. Summer afternoon peak savings are more significant, showing 0.14-0.17 kW per EV, on average – a reduction of more than 50%.

20. Please explain any historic trends related to the following:

- a. PEV counts
- b. PEV charging installation counts
- c. Annual energy consumption
- d. Seasonal Peak Demand (Summer and Winter)

RESPONSE:

- a. Historical PEV count growth in the DEF region has been strong with compound annual growth rate of approximately 43% between 2019 and 2024. Recent registration data suggests that while growth will continue, the rate of growth is slowing. The Company will continue to monitor as more data becomes available.
- b. The Company continues to see charger installation growth with a compound annual growth rate of approximately 30%.
- c. PEV energy consumption is directly tied to the number of PEVs in operation and has grown at a similar rate to the PEV count growth above.
- d. Like PEV energy consumption, PEV peak demand impacts are tied to PEVs in operation and have grown similarly.

21. Please explain any current or forecasted trends related to the following:

- a. PEV counts
- b. PEV charging installation counts
- c. Annual energy consumption
- d. Seasonal Peak Demand (Summer and Winter)

RESPONSE:

- a. Forecasted growth in PEV counts continues to be strong throughout the forecast period. There is downward pressure on the near term forecast due to inflation, interest rates, and

total market vehicle availability, but we anticipate a compound annual growth rate of approximately 36% through 2029 and 31% through 2034.

- b. PEV charger installation counts are expected to continue to grow at a compound annual growth rate of approximately 31% through 2029 and 26% through 2034.
 - c. Annual energy consumption across all duties of PEVs (light, medium, and heavy-duty) is forecasted to grow at a compound annual growth rate of 69% over the next 5 years, and 48% over the next 10.
 - d. PEV Summer peak demand contribution is expected to grow at a compound annual growth rate of approximately 60% over the next 5 years and 43% over the next 10 years. The PEV Winter peak demand contribution is expected to grow at approximately 98% over the next 5 years, and 63% over the next 10 years.
22. Please describe any Company programs or tariffs currently offered to customers relating to PEVs and describe whether any new or additional programs or tariffs relating to PEVs will be offered to customers within the current planning period.
- a. Of these programs or tariffs, are any designed for or do they include educating customers on electricity as a transportation fuel?
 - b. Does the Company have any programs where customers can express their interest or expectations for electric vehicle infrastructure as provided for by the Utility, and if so, please describe in detail.

RESPONSE:

The Company offers an EV charger installation rebates program for residential, commercial & industrial customers that install EV charging solutions, a program that assists residential customers to avoid system on-peak charging and rewards that behavior with small monthly credits as well as a publicly available DC fast chargers. The Company consistently evaluates potential new programs that might be offered to assist customers with EV adoption.

- a. While all programs include budget for education & outreach that inherently increases customer knowledge of electricity as a transportation fuel, the Off-Peak Credit program, in particular, provides prospective and actual participants with education and experience not only in using electricity as a fuel but also in managing that use for the benefit of the system as a whole. The Company also regularly updates its website to enhance web pages for consumer information of electric vehicles and electric vehicle infrastructure.
- b. The Company consistently seeks to add programs and processes that ease the transition to electric transport for customers. These efforts include consideration of programs that would assist with or directly provide for privately controlled charging infrastructure.

Recently, the Company launched the Charger Prep Credit (also known as Make Ready Credit) program. The Charger Prep Credit program provides funding for behind the meter infrastructure to support customers, or third party owned EV chargers for both residential and non-residential customers and has proven successful in other parts of the Duke Energy footprint. The Company has also expanded the successful Off-Peak Credit program.

Finally, the Company employs personnel who serve as liaisons for non-residential customers that seek to deploy larger EV charging sites such as public DC fast charging station or private fleet electrification installations. The Transportation Electrification Grid Readiness liaison group works directly with public charging vendors and private fleets on grid readiness for large EV charging installs. This includes fleet advisory services which help to educate operators by meeting them where they are in their electrification journey and assisting them in the development and facilitation of infrastructure upgrades. This can range from working with a third-party analytics firm who analyzes a customer's fleet vehicles and operations then recommends tailored solutions to working with more seasoned fleets on their capacity upgrades and timely installs across the enterprise.

23. Has the Company conducted or contracted any research to determine demographic and regional factors that influence the adoption of PEVs applicable to its service territory? If so, please describe in detail the methodology and findings.

RESPONSE:

The Company has not studied demographic characteristics. The Company uses registration data as a base dataset for EV adoption so some regional characteristics/factors would be reflected in this dataset, but at this time the company has not conducted any research into demographics factors that influence adoption based on historical adoption and future trends.

24. Please describe if and how the 2024 presidential election and the new administration has impacted the Company's projection of PEV growth and related demand and energy growth.

RESPONSE:

The forecast was developed prior to the completion of the 2024 presidential election. Therefore, the outcome of the election and any impact of the new administration could not be included. The Company will continue to monitor the policies of the new administration and incorporate their impacts as more information becomes available.

25. If applicable, please list and briefly describe all PEV pilot programs the Company is currently implementing and the status of each program.

RESPONSE:

The Company's 7th Annual Report to the Florida Public Service Commission on its EV programs provides descriptions of and updates on its DC fast charging program as well as its Off-Peak Credit program. Today, the Off-Peak Credit program has been expanded and is early in the process of enrolling customers without any annual cap on participation. Finally, the Charger Prep Credit program (also known as Make Ready Credit) has launched with active marketing beginning in March.

26. If applicable, please describe any key findings and metrics of the Company's PEV pilot program(s) which reveal the PEV impact to the demand and energy requirements of the Company.

RESPONSE:

The Company's 7th Annual Report to the Florida Public Service Commission on its EV programs provides findings and metrics of its programs.

Demand Response

27. **[FEECA Utilities Only]** Please refer to the Excel Tables File (DR Participation). Complete the table by providing for each source of demand response annual customer participation information for 10 years prior to the current planning period. Please also provide a summary of all sources of demand response using the table.

RESPONSE:

Please see tables below and tab *DR Participation* of the attached Excel File *2025 TYSP - Data Request #1.Excel Tables*:

[Demand Response Source or All Demand Response Sources]									
Year	Participating Customers			Available Capacity (MW)					
				Summer			Winter		
	Start of Year	Lost	Added	Start of Year	Lost	Added	Start of Year	Lost	Added
2015	410,855	1,376	6,372	752	DNA	29	1,055	DNA	35
2016	415,838	372	8,782	714	DNA	79	1,014	DNA	88
2017	424,246	4,064	9,592	756	DNA	34	1,065	DNA	43
2018	429,750	3,968	6,478	783	DNA	42	1,090	DNA	51
2019	432,277	3,910	6,862	786	DNA	69	1,098	DNA	76
2020	435,224	2,881	2,758	875	DNA	97	1,136	DNA	85
2021	435,102	2,713	1,613	908	DNA	9	1,161	DNA	10
2022	433,981	3,324	772	923	DNA	5	1,171	DNA	5
2023	431,460	617	2,922	903	2	36	1,157	2	31
2024	433,765	5,004	2,589	937	52.4	21	1,186	47	23
Notes									
(Include Notes Here)									

Residential Load Management									
Year	Participating Customers			Available Capacity (MW)					
				Summer			Winter		
	Start of Year	Lost	Added	Start of Year	Lost	Added	Start of Year	Lost	Added
2015	410,396	1,372	6,345	357	2	7	656	3	13
2016	415,369	103	8,634	366	1	10	669	6	19
2017	423,900	4,058	9,561	382	3	11	694	4	20
2018	429,403	3,965	6,424	388	3	7	698	4	13
2019	431,862	3,902	6,847	396	2	7	711	4	14
2020	434,807	2,879	2,735	394	2	3	671	4	6
2021	434,663	2,704	1,604	392	4	2	667	5	3
2022	433,563	3,289	767	390	14	1	665	16	1
2023	431,041	614	2,916	377	1	10	650	1	5
2024	433,343	4,998	2,579	386	4	2	654	8	4
Notes									
A transition from CSS to SAP began Nov 1 2021. The residential transition is ongoing and many of the reports have not been completed									
Beginning year 2023 customers = SAP/HANA report for participants Jan 1, 2023 - Jan 31, 2023									
Capacity at generator based on participant counts									
Customers lost in 2024 increased due to Switch Replacement Plan ¹									

Commercial Load Management									
Year	Participating Customers			Available Capacity (MW)					
				Summer			Winter		
	Start of Year	Lost	Added	Start of Year	Lost	Added	Start of Year	Lost	Added
2015	64	1	0	4	0	0	0	0	0
2016	63	0	0	4	0	0	0	0	0
2017	63	0	0	4	0	0	0	0	0
2018	63	0	0	4	0	0	0	0	0
2019	63	0	0	4	0	0	0	0	0
2020	63	0	0	4	0	0	0	0	0
2021	63	4	0	4	0	0	0	0	0
2022	59	1	0	4	0	0	0	0	0
2023	58	0	0	4	0	0	0	0	0
2024	58	0	0	4	0	0	0	0	0
Notes									
The program closed to new participants in 2000 and several participants have closed their accounts.									

Standby Generation									
Year	Participating Customers			Available Capacity (MW)					
				Summer			Winter		
	Start of Year	Lost	Added	Start of Year	Lost	Added	Start of Year	Lost	Added
2015	260	2	25	108	DNA	20	109	DNA	20
2016	269	269	147	68	DNA	68	68	DNA	68
2017	145	5	28	77	DNA	7	77	DNA	7
2018	147	1	12	82	DNA	3	82	DNA	3
2019	178	3	1	83	DNA	0	83	DNA	0
2020	175	1	5	80	DNA	2	80	DNA	0
2021	179	3	5	81	1	2	80	1	2
2022	183	0	3	82	0	1	81	0	1
2023	186	3	4	83	1	3	82	1	3
2024	187	2	7	85	1	3	84	1	3
Notes									
(Include Notes Here)									

Interruptible Service									
Year	Participating Customers			Available Capacity (MW)					
				Summer			Winter		
	Start of Year	Lost	Added	Start of Year	Lost	Added	Start of Year	Lost	Added
2015	131	1	2	277	DNA	3	283	DNA	3
2016	133	0	1	270	DNA	1	270	DNA	1
2017	134	1	3	287	DNA	16	287	DNA	16
2018	133	2	42	303	DNA	32	303	DNA	34
2019	170	5	14	297	DNA	62	297	DNA	62
2020	175	1	18	389	DNA	92	376	DNA	79
2021	193	2	4	395	2	6	381	2	6
2022	172	34	2	398	4.8	3	384	4.8	3
2023	171	0	1	390	0	22	384	0	22
2024	172	2	3	412	2	16	406	2	16
Notes									
34 accounts no longer qualified for Interruptible Service beginning Jan 1 2022 and were removed from the program.									

Curtailable Service									
Year	Participating Customers			Available Capacity (MW)					
				Summer			Winter		
	Start of Year	Lost	Added	Start of Year	Lost	Added	Start of Year	Lost	Added
2015	4	0	0	6	DNA	0	7	DNA	0
2016	4	0	0	6	DNA	0	7	DNA	0
2017	4	0	0	6	DNA	0	7	DNA	0
2018	4	0	0	6	DNA	0	7	DNA	0
2019	4	0	0	6	DNA	0	7	DNA	0
2020	4	0	0	8	DNA	0	9	DNA	0
2021	4	0	0	36	DNA	0	33	DNA	0
2022	4	0	0	49	DNA	0	41	DNA	0
2023	4	0	1	49	0	1	41	0	1
2024	5	2	0	50	45	0	42	36	0
Notes									
January 2024 Lost capacity due to the closure of curtailable customer called GP Cellulose									

Table Footnotes:

- (1) Total available capacity may change as a result of multiple factors including changes in participation, changes in contribution from existing participants, and periodic evaluation of system response.
Thus, changes in total available capacity do not directly correlate to changes in participation.
- (2) Added capacity corresponds to the addition of new participants and those converted from suspended accounts.
- (3) Data is Not Available (DNA) on lost capacity for certain source programs and therefore is listed as DNA in their specific table and for the aggregated ALL Source Table.
- (4) Nov 1 2021, the customer accounting system CSS was moved to Customer Connect (SAP)
- (5) The transition has resulted in reporting errors affecting all programs, especially residential DR reporting
- (6) The Interruptible Tariff was revised January 1 2022 resulting in 34 participants no longer qualifying for the program
- (7) In 2021 it was discovered that a large Curtailable customer load was not being reported and corrected accounting for additional reported load.
- (8) The Commercial Load Management program was closed to new participants in 2000 and participation is slowly diminishing
- (9) During 2016 the Emergency Stand-by Tariff was closed and the customers were removed from the program.
The Standby Generation Tariff was modified and the program renewed as non-Emergency Standby Tariff.
- (10) Curtailable Service: it was discovered in 2020 that one account was not included in the CSS reports. The increase in reported MW is due to that.

28. **[FEECA Utilities Only]** Please refer to the Excel Tables File (DR Annual Activation). Complete the table by providing for each source of demand response annual usage information for 10 years prior to the current planning period. Please also provide a summary of all demand response using the table.

RESPONSE:

Please see tables below and tab *DR Annual Activation* of the attached Excel File *2025 TYSP - Data Request #1.Excel Tables*:

Demand Response Source or All Demand Response Sources														
Year	Summer							Winter						
	Total Events	Customers Activated			Capacity Activated (MW)			Total Events	Customers Activated			Capacity Activated (MW)		
		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day
2015	125	0	0	0	0	0	0	0	0	0	0	0	0	0
2016	114	0	0	0	0	0	0	0	0	0	0	0	0	0
2017	134	0	0	0	0	0	0	0	0	0	0	0	0	0
2018	84	0	0	0	0	0	0	0	0	0	0	0	0	0
2019	98	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	91	0	0	0	0	0	0	0	0	0	0	0	0	0
2021	74	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	86	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	38	0	0	0	0	0	0	0	0	0	0	0	0	0
2024	46	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes														
(Include Notes Here)														

Residential Load Management														
Year	Summer							Winter						
	Total Events	Customers Activated			Capacity Activated (MW)			Total Events	Customers Activated			Capacity Activated (MW)		
		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day
2015	125	0	0	0	0	0	0	0	0	0	0	0	0	0
2016	114	0	0	0	0	0	0	0	0	0	0	0	0	0
2017	134	0	0	0	0	0	0	0	0	0	0	0	0	0
2018	84	0	0	0	0	0	0	0	0	0	0	0	0	0
2019	98	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	91	0	0	0	0	0	0	0	0	0	0	0	0	0
2021	74	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	86	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	38	0	0	0	0	0	0	0	0	0	0	0	0	0
2024	46	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes														
All events did not occur during the peak.														

Commercial Load Management														
Year	Summer							Winter						
	Total Events	Customers Activated			Capacity Activated (MW)			Total Events	Customers Activated			Capacity Activated (MW)		
		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day
2015	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2018	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes														
(Include Notes Here)														

StandBy Generation														
Year	Summer							Winter						
	Total Events	Customers Activated			Capacity Activated (MW)			Total Events	Customers Activated			Capacity Activated (MW)		
		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day
2015	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2018	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes														
(Include Notes Here)														

Interruptible Service														
Year	Summer							Winter						
	Total Events	Customers Activated			Capacity Activated (MW)			Total Events	Customers Activated			Capacity Activated (MW)		
		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day
2015	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2018	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes														
(Include Notes Here)														

Curtailable Service														
Year	Summer							Winter						
	Total Events	Customers Activated			Capacity Activated (MW)			Total Events	Customers Activated			Capacity Activated (MW)		
		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day
2015	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2018	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes														
(Include Notes Here)														

Generation & Transmission

Utility-Owned Resources

29. Please refer to the Excel Tables File tabs listed below. Complete the tables by providing information on the utility-owned generation resources for the time period listed. When completing the tables, please consider the following factors: (i) for multiple small (<0.25 MW) distributed resources of the same type and fuel source, provide a single entry; (ii) for solar facilities, if available, provide the nameplate DC capacity as the gross capacity, the nameplate AC capacity as the net capacity, and the firm contribution during time of system peak as the firm capacity. If a solar facility is combined with an energy storage system, identify the capacity of the energy storage system in a separate line.

- a. Excel Tables File (Existing Utility), including each utility-owned generation resource in service as of December 31 of the year prior to the current planning period.
- b. Excel Tables File (Planned Utility), including each utility-owned generation resource that is planned to enter service during the current planning period.

RESPONSE:

- a. Excel Please see table below and tab Existing Utility of the attached Excel File 2025 TYSP - Data Request #1.Excel Tables:.

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Capacity (MW)					
							Gross		Net		Firm	
					Mo	Yr	Sum	Win	Sum	Win	Sum	Win
Anclote	1	PASCO	ST	NG	October	1974	522	534	508	521	508	521
Anclote	2	PASCO	ST	NG	October	1978	512	517	497	504	497	504
Crystal River	4	CITRUS	ST	BIT	December	1982	769	778	712	721	712	721
Crystal River	5	CITRUS	ST	BIT	October	1984	767	778	710	721	710	721
Bartow CC	4	PINELLAS	CC	NG	June	2009	1162	1279	1,142	1,259	1,142	1,200
Citrus CC	PB1	CITRUS	CC	NG	October	2018	825	943	807	925	807	925
Citrus CC	PB2	CITRUS	CC	NG	November	2018	828	947	810	929	810	929
Hines Energy Complex	1	POLK	CC	NG	April	1999	508	528	501	521	501	521
Hines Energy Complex	2	POLK	CC	NG	December	2003	540	557	532	549	532	549
Hines Energy Complex	3	POLK	CC	NG	November	2005	531	543	523	535	523	535
Hines Energy Complex	4	POLK	CC	NG	December	2007	552	552	544	544	544	544
Osprey CC	1	POLK	CC	NG	May	2004	628	623	616	611	245	245
Tiger Bay	1	POLK	CC	NG	August	1997	202	233	199	230	199	230
Bartow Peaker	P1	PINELLAS	GT	DFO	May	1972	41	50	41	50	41	50
Bartow Peaker	P2	PINELLAS	GT	NG	June	1972	41	53	41	53	41	53
Bartow Peaker	P3	PINELLAS	GT	DFO	June	1972	41	51	41	51	41	51
Bartow Peaker	P4	PINELLAS	GT	NG	June	1972	45	58	45	58	45	58
Bayboro	P1	PINELLAS	GT	DFO	April	1973	37	55	37	55	37	55
Bayboro	P2	PINELLAS	GT	DFO	April	1973	19	28	19	28	19	28
Bayboro	P3	PINELLAS	GT	DFO	April	1973	40	54	40	54	40	54
Bayboro	P4	PINELLAS	GT	DFO	April	1973	41	56	41	56	41	56
DeBary	P2	VOLUSIA	GT	DFO	December	1975	45	57	45	57	45	57
DeBary	P3	VOLUSIA	GT	DFO	December	1975	45	59	45	59	45	59
DeBary	P4	VOLUSIA	GT	DFO	December	1975	46	59	46	59	46	59
DeBary	P5	VOLUSIA	GT	DFO	December	1975	45	58	45	58	45	58
DeBary	P6	VOLUSIA	GT	DFO	December	1975	46	59	46	59	46	59
DeBary	P7	VOLUSIA	GT	NG	October	1992	74	93	74	93	74	93
DeBary	P8	VOLUSIA	GT	NG	October	1992	75	94	75	94	75	94
DeBary	P9	VOLUSIA	GT	NG	October	1992	76	94	76	94	76	94
DeBary	P10	VOLUSIA	GT	DFO	October	1992	72	88	72	88	72	88
Intercession City	P1	OSCEOLA	GT	DFO	May	1974	45	61	45	61	45	61
Intercession City	P2	OSCEOLA	GT	DFO	May	1974	46	60	46	60	46	60
Intercession City	P3	OSCEOLA	GT	DFO	May	1974	46	61	46	61	46	61
Intercession City	P4	OSCEOLA	GT	DFO	May	1974	46	62	46	62	46	62
Intercession City	P5	OSCEOLA	GT	DFO	May	1974	45	59	45	59	45	59
Intercession City	P6	OSCEOLA	GT	DFO	May	1974	47	60	47	60	47	60
Intercession City	P7	OSCEOLA	GT	NG	October	1993	78	90	78	90	78	90
Intercession City	P8	OSCEOLA	GT	NG	October	1993	77	88	77	88	77	88
Intercession City	P9	OSCEOLA	GT	NG	October	1993	77	88	77	88	77	88
Intercession City	P10	OSCEOLA	GT	NG	October	1993	74	86	74	86	74	86
Intercession City	P11	OSCEOLA	GT	DFO	January	1997	142	163	140	161	140	161
Intercession City	P12	OSCEOLA	GT	NG	December	2000	73	89	73	89	73	89
Intercession City	P13	OSCEOLA	GT	NG	December	2000	73	91	73	91	73	91
Intercession City	P14	OSCEOLA	GT	NG	December	2000	73	90	73	90	73	90
Suwannee Peaker	P1	SUWANNEE	GT	NG	October	1980	48	65	48	65	48	65
Suwannee Peaker	P2	SUWANNEE	GT	NG	October	1980	48	64	48	64	48	64
Suwannee Peaker	P3	SUWANNEE	GT	NG	November	1980	49	65	49	65	49	65
University of Florida	P1	ALACHUA	GT	NG	January	1994	45	51	44	50	44	50
Econlockhatchee Photovoltaic Array	1	Volusia	PV	SO	1	1989	0.01	0.01	0.01	0.01	0.00	0.00
Osceola	1	Osceola	PV	SO	5	2016	3.6	3.6	3.6	3.6	2.0	0.18
Perry	1	Taylor	PV	SO	7	2016	4.9	4.9	4.9	4.9	2.6	0.24
Suwannee	1	Suwannee	PV	SO	12	2017	8.5	8.5	8.5	8.5	4.6	0.42
Hamilton	1	Hamilton	PV	SO	12	2018	72.7	72.7	72.7	72.7	39.0	3.63
Lake Placid	1	Highlands	PV	SO	12	2019	25.2	25.2	25.2	25.2	13.5	1.26
Trenton	1	Gilchrist	PV	SO	12	2019	73.0	73.0	73.0	73.0	39.2	3.65
St. Petersburg Pier	1	Pinellas	PV	SO	12	2019	0.3	0.3	0.3	0.3	0.2	0.02
Columbia	1	Columbia	PV	SO	3	2020	73.0	73.0	73.0	73.0	39.2	3.65
DeBary	1	Volusia	PV	SO	5	2020	72.7	72.7	72.7	72.7	39.0	3.63
Sante Fe	1	Columbia	PV	SO	3	2021	73.4	73.4	73.4	73.4	39.4	3.67
Twin Rivers	1	Hamilton	PV	SO	3	2021	73.4	73.4	73.4	73.4	39.4	3.67
Duette	1	Manatee	PV	SO	10	2021	73.4	73.4	73.4	73.4	39.4	3.67
Sandy Creek	1	Bay	PV	SO	5	2022	73.8	74.2	73.8	74.2	39.6	3.71
Ft Green	1	Hardee	PV	SO	6	2022	73.8	74.2	73.8	74.2	39.6	3.71
Charlie Creek	1	Hardee	PV	SO	8	2022	73.8	74.2	73.8	74.2	39.6	3.71
Bay Trail	1	Citrus	PV	SO	9	2022	74.2	74.2	74.2	74.2	39.8	3.7
Dolphin Solar	1	Pinellas	PV	SO	8	2022	0.2	0.2	0.2	0.2	0.1	0.0
Hildreth	1	Suwannee	PV	SO	4	2023	74.2	74.5	74.2	74.5	39.8	3.7
High Springs	1	Alachua	PV	SO	4	2023	74.2	74.5	74.2	74.5	39.8	3.7
Hardeetown	1	Levy	PV	SO	4	2023	74.2	74.5	74.2	74.5	39.8	3.7
Bay Ranch	1	Bay	PV	SO	4	2023	74.2	74.5	74.2	74.5	39.8	3.7
John Hopkins	1	Pinellas	PV	SO	11	2023	0.7	0.7	0.7	0.7	0.4	0.0
Hines Floating Solar	1	Polk	PV	SO	11	2023	0.7	0.7	0.7	0.7	0.4	0.0
Mule Creek	1	Bay	PV	SO	3	2024	74.5	74.9	74.5	74.9	40.0	3.75
Winquepin	1	Madison	PV	SO	3	2024	74.5	74.9	74.5	74.9	40.0	3.75
Falmouth	1	Suwannee	PV	SO	6	2024	74.5	74.9	74.5	74.9	40.0	3.75
County Line	1	Alachua	PV	SO	8	2024	74.9	74.9	74.9	74.9	40.2	3.75
Notes												
Capacity for Solar resources include degradation. Distribution Connected Storage included in Existing Storage Table.												

- b. Excel Tables File (Planned Utility), including each utility-owned generation resource that is planned to enter service during the current planning period.

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service	Unit Capacity (MW)						
						Gross		Net		Firm		
						Mo	Yr	Sum	Win	Sum	Win	Sum
Sundance	1	Madison	PV	SO	7	2025	74.9	74.9	74.9	74.9	25.8	3.7
Half Moon	1	Sumter	PV	SO	1	2026	74.9	74.9	74.9	74.9	25.8	3.7
Rattler	1	Hernando	PV	SO	1	2026	74.9	74.9	74.9	74.9	25.8	3.7
Bailey Mill	1	Jefferson	PV	SO	5	2026	74.9	74.9	74.9	74.9	25.8	3.7
Jumper Creek	1	Sumter	PV	SO	6	2026	74.9	74.9	74.9	74.9	27.3	3.3
Lonesome Camp	1	Osceola	PV	SO	12	2026	74.9	74.9	74.9	74.9	27.3	3.3
Turnpike	1	Osceola	PV	SO	12	2026	74.9	74.9	74.9	74.9	27.3	3.3
Banner	1	Columbia	PV	SO	12	2026	74.5	74.5	74.5	74.5	27.2	3.3
Powerline BESS	1	Citrus	BA	N/A	3	2027	100.0	100.0	100.0	100.0	90.0	90.0
Renewable Energy Center #38	1	Unknown	PV	SO	6	2027	74.9	74.9	74.9	74.9	25.1	3.1
Renewable Energy Center #39	1	Unknown	PV	SO	6	2027	74.9	74.9	74.9	74.9	25.1	3.1
Renewable Energy Center #40	1	Unknown	PV	SO	12	2027	74.9	74.9	74.9	74.9	25.1	3.1
Renewable Energy Center #41	1	Unknown	PV	SO	12	2027	74.9	74.9	74.9	74.9	25.1	3.1
Renewable Energy Center #42	1	Unknown	PV	SO	7	2028	74.9	74.9	74.9	74.9	20.6	3.1
Renewable Energy Center #43	1	Unknown	PV	SO	7	2028	74.9	74.9	74.9	74.9	20.6	3.1
Renewable Energy Center #44	1	Unknown	PV	SO	7	2028	74.9	74.9	74.9	74.9	20.6	3.1
Renewable Energy Center #45	1	Unknown	PV	SO	7	2028	74.9	74.9	74.9	74.9	20.6	3.1
Renewable Energy Center #46	1	Unknown	PV	SO	7	2028	74.9	74.9	74.9	74.9	20.6	3.1
Co-located BESS #47	1	Unknown	BA	N/A	7	2028	100.0	100.0	100.0	100.0	90.0	90.0
Renewable Energy Center #48	1	Unknown	BA	N/A	6	2029	225.0	225.0	225.0	225.0	202.5	202.5
Renewable Energy Center #49	1	Unknown	PV	SO	7	2029	74.9	74.9	74.9	74.9	20.6	3.1
Renewable Energy Center #50	1	Unknown	PV	SO	7	2029	74.9	74.9	74.9	74.9	20.6	3.1
Renewable Energy Center #51	1	Unknown	PV	SO	7	2029	74.9	74.9	74.9	74.9	20.6	3.1
Renewable Energy Center #52	1	Unknown	PV	SO	7	2029	74.9	74.9	74.9	74.9	16.1	3.1
Renewable Energy Center #53	1	Unknown	PV	SO	7	2029	74.9	74.9	74.9	74.9	16.1	3.1
Co-located BESS #54	1	Unknown	BA	N/A	7	2029	100.0	100.0	100.0	100.0	90.0	90.0
Renewable Energy Center #55	1	Unknown	PV	SO	7	2030	74.9	74.9	74.9	74.9	16.1	3.1
Renewable Energy Center #56	1	Unknown	PV	SO	7	2030	74.9	74.9	74.9	74.9	16.1	3.1
Renewable Energy Center #57	1	Unknown	PV	SO	7	2030	74.9	74.9	74.9	74.9	16.1	3.1
Renewable Energy Center #58	1	Unknown	PV	SO	7	2030	74.9	74.9	74.9	74.9	16.1	3.1
Renewable Energy Center #59	1	Unknown	PV	SO	7	2030	74.9	74.9	74.9	74.9	16.1	3.1
Co-located BESS #60	1	Unknown	BA	N/A	7	2030	100.0	100.0	100.0	100.0	90.0	90.0
Renewable Energy Center #61	1	Unknown	PV	SO	7	2031	74.9	74.9	74.9	74.9	16.1	3.1
Renewable Energy Center #62	1	Unknown	PV	SO	7	2031	74.9	74.9	74.9	74.9	11.6	3.1
Renewable Energy Center #63	1	Unknown	PV	SO	7	2031	74.9	74.9	74.9	74.9	11.6	3.1
Renewable Energy Center #64	1	Unknown	PV	SO	7	2031	74.9	74.9	74.9	74.9	11.6	3.1
Renewable Energy Center #65	1	Unknown	PV	SO	7	2031	74.9	74.9	74.9	74.9	11.6	3.1
Renewable Energy Center #66	1	Unknown	PV	SO	7	2031	74.9	74.9	74.9	74.9	11.6	3.1
Renewable Energy Center #67	1	Unknown	PV	SO	7	2031	74.9	74.9	74.9	74.9	11.6	3.1
Renewable Energy Center #68	1	Unknown	PV	SO	7	2031	74.9	74.9	74.9	74.9	11.6	3.1
Co-located BESS #69	1	Unknown	BA	N/A	7	2031	100.0	100.0	100.0	100.0	90.0	90.0
Renewable Energy Center #70	1	Unknown	PV	SO	7	2032	74.9	74.9	74.9	74.9	11.6	3.1
Renewable Energy Center #71	1	Unknown	PV	SO	7	2032	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #72	1	Unknown	PV	SO	7	2032	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #73	1	Unknown	PV	SO	7	2032	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #74	1	Unknown	PV	SO	7	2032	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #75	1	Unknown	PV	SO	7	2032	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #76	1	Unknown	PV	SO	7	2032	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #77	1	Unknown	PV	SO	7	2032	74.9	74.9	74.9	74.9	7.1	3.1
Co-located BESS #78	1	Unknown	BA	N/A	7	2032	100.0	100.0	100.0	100.0	85.0	85.0
Undesignated CT	P1	Unknown	GT	NG	6	2033	245.5	263.6	245.5	263.6	245.5	263.6
Undesignated CT	P2	Unknown	GT	NG	6	2033	245.5	263.6	245.5	263.6	245.5	263.6
Renewable Energy Center #79	1	Unknown	PV	SO	7	2033	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #80	1	Unknown	PV	SO	7	2033	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #81	1	Unknown	PV	SO	7	2033	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #82	1	Unknown	PV	SO	7	2033	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #83	1	Unknown	PV	SO	7	2033	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #84	1	Unknown	PV	SO	7	2033	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #85	1	Unknown	PV	SO	7	2033	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #86	1	Unknown	PV	SO	7	2033	74.9	74.9	74.9	74.9	7.1	3.1
Co-located BESS #87	1	Unknown	BA	N/A	7	2033	100.0	100.0	100.0	100.0	70.0	70.0
Co-located BESS #88	1	Unknown	BA	N/A	6	2034	300.0	300.0	300.0	300.0	210.0	210.0
Undesignated CT	P3	Unknown	GT	NG	6	2034	224.3	232.5	224.3	232.5	224.3	232.5
Undesignated CT	P4	Unknown	GT	NG	6	2034	224.3	232.5	224.3	232.5	224.3	232.5
Renewable Energy Center #89	1	Unknown	PV	SO	7	2034	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #90	1	Unknown	PV	SO	7	2034	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #91	1	Unknown	PV	SO	7	2034	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #92	1	Unknown	PV	SO	7	2034	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #93	1	Unknown	PV	SO	7	2034	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #94	1	Unknown	PV	SO	7	2034	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #95	1	Unknown	PV	SO	7	2034	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #96	1	Unknown	PV	SO	7	2034	74.9	74.9	74.9	74.9	7.1	3.1
Co-located BESS #97	1	Unknown	BA	N/A	7	2034	100.0	100.0	100.0	100.0	70.0	70.0
Notes												
Sundance is expected in-service summer 2025. The remaining named units are in various development stages. *DEF modeling derives an equivalent												

30. For each planned utility-owned generation resource or group of resources, provide a narrative response discussing the current status of the project.

RESPONSE:

Solar Resources:

- Sundance: Under construction with expected in Service Date of July 1, 2025.
- Rattler: Under construction with expected in Service Date of December 17, 2025.
- Half Moon: Under construction with expected in Service Date December 31, 2025.
- Bailey Mill: Completing Development, Environmental Resource Permit Received, Planning 3Q construction start Date and 2Q 2026 in Service Date.
- Jumper Creek: Completing Development, Environmental Resource Permit Received, Planning 3Q 2025 construction start Date and 3Q 2026 in Service Date.
- Turnpike: Continuing Development, Planning 4Q2025 construction start Date and 4Q 2026 in Service Date
- Lonesome Camp: Continuing Development, Planning 4Q2025 construction start Date and 4Q 2026 in Service Date.
- Banner: Continuing Development, Planning 4Q2025 construction start Date and 4Q 2026 in Service Date

All the other resources are on schedule.

31. Please list and discuss any planned utility-owned renewable resources that have, within the past year, been cancelled, delayed, or reduced in scope. What was the primary reason for the changes? What, if any, were the secondary reasons?

RESPONSE:

Solar Resources:

No solar projects have been cancelled or reduced in scope in the past year. One project has been delayed due to local permitting and the need to understand a new solar ordinance within the county. Filing for the site plan's approval was delayed, which in turn has delayed our expected placed in-service date.

Storage Resources:

The planned storage resource Powerline project is on schedule. DEF intends to submit the Environmental Resource Permit modification summer 2025.

32. Discuss the impact of any recent federal actions on permitting for renewable generation. As part of your discussion, identify what projects, if any, were impacted and what those impacts were.

RESPONSE:

DEF's solar renewable generation sites are permitted at the local level and therefore recent federal permitting actions have not had material impacts.

33. Please refer to the Excel Tables File (Planned PPSA). Complete the table by providing information on each planned generation resource that requires siting under the Power Plant Siting Act. For each planned unit, provide the date of the Commission's Determination of Need and Power Plant Siting Act certification, if applicable.

RESPONSE:

Please see table below and tab *Planned PPSA* of the attached Excel File *2025 TYSP - Data Request #1.Excel Tables*:

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Certification Dates (if Applicable)	
							Need Approved	PPSA Certified
					Mo	Yr	(Commission)	
Undesignated CT	P1	Unknown	Gas Turbine	Natural Gas	June	2033	Not Required	Not Required
Undesignated CT	P2	Unknown	Gas Turbine	Natural Gas	June	2033	Not Required	Not Required
Undesignated CT	P3	Unknown	Gas Turbine	Natural Gas	June	2034	Not Required	Not Required
Undesignated CT	P4	Unknown	Gas Turbine	Natural Gas	June	2034	Not Required	Not Required
Notes								
(Include Notes Here)								

34. Please refer to the Excel Tables File (Planned Construction). Complete the table by providing information on all planned generating units with an in-service date within the current planning period. For each planned unit, provide the final decision ("drop dead") date for a decision on whether or not to construct each unit, and the estimated dates for site selection, engineering, permitting, procurement, and construction.

RESPONSE:

Please see table below and tab *Planned Construction* of the attached Excel File *2025 TYSP - Data Request #1.Excel Tables*:

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Final Decision ('Drop Dead') Date	Site Selection		Engineering / Permitting / Procurement		Constuction		Commercial In-Service Date
						Begins	Ends	Begins	Ends	Begins	Ends	
Undesignated CT	P1	Unknown	Gas Turbine	Natural Gas	11/2031	Q2/2026	Q4/2027	Q1/2028	Q2/2032	Q3/2031	Q2/2033	06/2033
Undesignated CT	P2	Unknown	Gas Turbine	Natural Gas	11/2031	Q2/2026	Q4/2027	Q1/2028	Q2/2032	Q3/2031	Q2/2033	06/2033
Undesignated CT	P3	Unknown	Gas Turbine	Natural Gas	11/2032	Q2/2027	Q4/2028	Q1/2029	Q2/2033	Q3/2032	Q2/2033	06/2034
Undesignated CT	P4	Unknown	Gas Turbine	Natural Gas	11/2032	Q2/2027	Q4/2028	Q1/2029	Q2/2033	Q3/2032	Q2/2033	06/2034
Notes												
(Include Notes Here)												

35. Please refer to the Excel Tables File (Unit Performance). Complete the table by providing information on each utility-owned generation resource in service during the current planning period. For historic performance, use the past three years for a historical average. For projected performance, use an average of the next 10-year period for projected factors.

RESPONSE:

Please see table below and tab *Unit Performance* of the attached Excel File *2025 TYSP - Data Request #1.Excel Tables*:

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Performance (%)						Average Net Operating Heat Rate (ANOHR)	
							Planned Outage Factor (POF)		Forced Outage Factor (FOF)		Equivalent Availability Factor (EAF)			
					Mo	Yr	Historic	Projected	Historic	Projected	Historic	Projected	Historic	Projected
Anclote	1	Pasco	Steam	Gas	10	1974	12.12	12.12	2.08	2.08	74.36	74.36	11,430	11,430
	2				10	1978	8.91	8.91	5.89	5.89	72.73	72.73	12,011	12,011
Bartow Peaker	P1	Pinellas	Gas Turbine	Gas/Oil	5	1972	5.87	5.87	26.95	26.95	53.13	53.13	15,040	15,040
	P2				6	1972	7.15	7.15	4.02	4.02	68.94	68.94	15,771	15,771
	P3				6	1972	6.13	6.13	31.23	31.23	52.26	52.26	16,665	16,665
	P4				6	1972	6.62	6.62	7.04	7.04	67.06	67.06	14,932	14,932
Bartow CC	4A	Pinellas	Combined Cycle	Gas	6	2009	9.27	9.27	9.91	9.91	71.43	71.43	11,603	11,603
	4B						5.93	5.93	4.05	4.05	75.78	75.78	11,501	11,501
	4C						2.87	2.87	20.25	20.25	71.76	71.76	11,631	11,631
	4D						10.26	10.26	1.46	1.46	81.01	81.01	11,526	11,526
	4S						10.32	10.32	1.49	1.49	78.45	78.45	701	701
Bayboro	P1	Pinellas	Gas Turbine	Oil	4	1973	2.72	2.72	6.24	6.24	77.10	77.10	13,581	13,581
	P2				4	1973	4.63	4.63	9.61	9.61	63.37	63.37	12,095	12,095
	P3				4	1973	2.70	2.70	7.48	7.48	75.10	75.10	11,958	11,958
	P4				4	1973	1.24	1.24	11.42	11.42	67.08	67.08	11,808	11,808
Citrus CC	1A	Citrus	Combined Cycle	Gas	10	2018	9.51	9.51	3.53	3.53	77.34	77.34	10,524	10,524
	1B						9.50	9.50	0.95	0.95	78.41	78.41	10,558	10,558
	1S						8.81	8.81	1.09	1.09	84.84	84.84	770	770
	2A				11	2018	10.31	10.31	0.77	0.77	78.20	78.20	10,452	10,452
	2B						10.13	10.13	1.88	1.88	77.80	77.80	10,511	10,511
	2S						7.99	7.99	0.64	0.64	86.05	86.05	691	691
Crystal River	4	Citrus	Steam	Coal	12	1982	5.59	5.59	10.63	10.63	74.09	74.09	11,068	11,068
	5				10	1984	5.55	5.55	1.62	1.62	80.07	80.07	10,757	10,757
DeBary	P2	Volusia	Gas Turbine	Gas/Oil	3	1976	3.92	3.92	1.85	1.85	71.44	71.44	15,150	15,150
	P3				12	1975	0.15	0.15	5.79	5.79	66.05	66.05	14,906	14,906
	P4				4	1976	3.44	3.44	4.73	4.73	69.33	69.33	16,118	16,118
	P5				12	1975	0.03	0.03	10.16	10.16	61.92	61.92	14,934	14,934
	P6				4	1976	3.63	3.63	14.60	14.60	61.38	61.38	14,638	14,638
	P7				10	1992	3.37	3.37	2.81	2.81	77.68	77.68	14,051	14,051
	P8				10	1992	3.70	3.70	20.06	20.06	61.08	61.08	13,277	13,277
	P9				10	1992	0.08	0.08	8.53	8.53	45.52	45.52	14,041	14,041
	P10				10	1992	6.62	6.62	3.77	3.77	46.47	46.47	14,030	14,030
Hines Energy Complex	1A	Polk	Combined Cycle	Gas	4	1999	14.17	14.17	3.28	3.28	77.51	77.51	11,427	11,427
	1B						13.54	13.54	4.16	4.16	78.70	78.70	11,570	11,570
	1S						13.48	13.48	1.56	1.56	80.55	80.55	-	-
	2A				12	2003	12.77	12.77	1.70	1.70	83.85	83.85	11,874	11,874
	2B						12.73	12.73	1.27	1.27	82.46	82.46	11,908	11,908
	2S						12.57	12.57	1.04	1.04	78.11	78.11	-	-
	3A				11	2005	17.91	17.91	3.08	3.08	71.35	71.35	11,513	11,513
	3B						17.50	17.50	2.18	2.18	74.04	74.04	11,336	11,336
	3S						17.48	17.48	1.61	1.61	75.79	75.79	-	-
	4A				12	2007	4.39	4.39	1.75	1.75	89.97	89.97	11,220	11,220
	4B						4.35	4.35	11.83	11.83	80.34	80.34	11,294	11,294
	4S						4.08	4.08	1.13	1.13	84.91	84.91	-	-
Intercession City	P1	Osceola	Gas Turbine	Gas/Oil	5	1974	7.98	7.98	-	-	72.48	72.48	14,365	14,365
	P2				5	1974	11.14	11.14	0.23	0.23	67.29	67.29	14,538	14,538
	P3				5	1974	5.70	5.70	1.05	1.05	66.66	66.66	15,475	15,475
	P4				5	1974	5.17	5.17	1.00	1.00	54.97	54.97	14,887	14,887
	P5				5	1974	7.29	7.29	2.18	2.18	74.54	74.54	14,316	14,316
	P6				5	1974	7.51	7.51	2.73	2.73	72.10	72.10	14,296	14,296
	P7				10	1993	2.38	2.38	0.80	0.80	72.35	72.35	13,571	13,571
	P8				10	1993	8.71	8.71	2.13	2.13	59.78	59.78	14,127	14,127
	P9				10	1993	15.59	15.59	0.79	0.79	52.69	52.69	13,642	13,642
	P10				10	1993	11.10	11.10	0.46	0.46	49.86	49.86	14,061	14,061
	P11				1	1997	1.95	1.95	11.07	11.07	72.77	72.77	12,596	12,596
	P12				12	2000	11.80	11.80	0.80	0.80	73.52	73.52	13,348	13,348
	P13				12	2000	5.82	5.82	0.62	0.62	77.58	77.58	13,591	13,591
	P14				12	2000	10.43	10.43	0.44	0.44	74.48	74.48	13,823	13,823
Osprey CC	1A	Polk	Combined Cycle	Gas	5	2004	16.62	16.62	2.37	2.37	72.52	72.52	11,915	11,915
	1B						17.99	17.99	3.17	3.17	70.26	70.26	11,935	11,935
	1S						16.65	16.65	0.56	0.56	67.12	67.12	772	772
Suwannee Peaker	P1	Suwannee	Gas Turbine	Gas/Oil	10	1980	3.24	3.24	4.20	4.20	53.42	53.42	14,485	14,485
	P2				10	1980	7.28	7.28	0.09	0.09	55.65	55.65	14,094	14,094
	P3				11	1980	5.02	5.02	1.06	1.06	67.21	67.21	14,058	14,058
Tiger Bay	1A	Polk	Combined Cycle	Gas	8	1997	2.84	2.84	4.91	4.91	79.94	79.94	11,964	11,964
	1S						2.86	2.86	5.05	5.05	84.22	84.22	-	-
University of Florida	P1	Alachua	Gas Turbine	Gas	1	1994	9.80	9.80	0.93	0.93	81.89	81.89	8,302	8,302
Notes														
Historical - average of past three years (2022, 2023, 2024)														
Solar Resources have an EAF of 95%														

36. Please refer to the Excel Tables File (Unit Dispatch). Complete the table by providing the actual and projected capacity factors for each existing and planned unit on the Company's system for the 11-year period beginning one year prior to the current planning period.

RESPONSE:

Please see table below and tab *Unit Dispatch* of the attached Excel File *2025 TYSP - Data Request #1.Excel Tables*:

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Capacity Factor (%)											
							Actual	Projected										
					Mo	Yr		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Anclote	1~2	Pasco	Steam	Gas	10	1974		18.0	13.1	14.3	12.3	15.3	11.6	10.2	9.0	6.4	4.5	6.9
Crystal River	4~5	Citrus	Steam	Coal	12	1982		25.8	18.1	14.3	12.7	12.6	10.9	10.0	11.2	10.7	11.8	12.6
Bartow CC	4	Pinellas	Combined Cycle	Gas	5	1972		56.8	66.9	68.1	59.4	60.4	59.9	63.3	62.9	59.8	56.5	60.0
Citrus CC	1~2	Citrus	Combined Cycle	Gas	10	2018		75.0	83.3	81.3	86.6	82.5	84.6	82.5	76.3	79.2	77.3	75.9
Hines Energy Complex	1~4	Polk	Combined Cycle	Gas	4	1999		65.1	59.1	55.0	56.1	54.8	54.1	53.5	50.2	46.7	46.2	45.5
Osprey CC	1	Polk	Combined Cycle	Gas	5	2004		58.7	59.1	72.7	65.4	64.0	69.5	68.4	67.0	64.6	61.3	59.2
Tiger Bay	1	Polk	Combined Cycle	Gas	8	1997		50.5	45.4	61.4	50.8	53.1	35.9	32.8	31.9	23.2	26.1	24.8
Bartow Peaker	1~4	Pinellas	Gas Turbine	Gas/Oil	5	1972		1.1	0.3	0.4	0.6	0.4	0.4	0.1	0.0	0.2	0.1	0.1
Bayboro	1~4	Pinellas	Gas Turbine	Oil	4	1973		0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DeBary	2~10	Volusia	Gas Turbine	Gas/Oil	3	1976		0.8	1.1	1.0	1.0	1.0	0.8	0.3	0.2	0.4	0.6	0.2
Intercession City	1~14	Osceola	Gas Turbine	Gas/Oil	5	1974		3.3	1.3	1.1	1.1	0.8	0.6	0.2	0.1	0.2	0.4	0.2
New CT	1~2	N/A	Gas Turbine	Gas	6	2034			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
New CT - S	1~2	N/A	Gas Turbine	Gas	1	2034			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
Suwannee Peaker	1~3	Suwannee	Gas Turbine	Gas/Oil	10	1980		4.3	1.7	2.0	1.6	1.1	1.1	0.7	0.6	0.8	1.2	1.1
University of Florida	1	Alachua	Gas Turbine	Gas	1	1994		86.3	85.0	86.6	84.9	86.1	86.3	85.3	85.4	85.8	85.6	85.8
Solar Bailey Mill	1	Jefferson	PV		3	2026			0.0	25.4	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Solar Banner	1	Columbia	PV		10	2026			0.0	16.5	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4
Solar Bay Ranch	1	Bay	PV		5	2023		29.1	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	25.3
Solar Bay Trail	1	Citrus	PV		11	2022		22.2	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	25.8	25.0
Solar Charlie Creek	1	Hardee	PV		8	2022		22.8	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	23.8	22.9
Solar Columbia	1	Columbia	PV		4	2020		22.7	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	23.8	22.0
Solar County Line	1	Gilchrist	PV		10	2024			26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0
Solar Debary	1	Volusia	PV		5	2020		18.0	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.3	20.6	19.7
Solar Duette	1	Manatee	PV		11	2021		23.8	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	23.8	23.0
Solar Falmouth	1	Suwannee	PV		8	2024			26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0
Solar Fort Green	1	Hardee	PV		6	2022		24.3	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	25.8	25.1
Solar Half Moon	1	Sumter	PV		1	2026			0.0	26.4	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7
Solar Hamilton	1	Hamilton	PV		1	2019		23.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	23.9	23.2	22.3
Solar Hardeetown	1	Levy	PV		5	2023		22.4	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	25.3
Solar High Spring	1	Alachua	PV		5	2023		22.5	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	25.3
Solar Hildreth	1	Suwannee	PV		5	2023		25.6	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	25.3
Solar Jumper Creek	1	Sumter	PV		7	2026			0.0	26.3	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
Solar Lake Placid	1	Highlands	PV		12	2019		17.9	26.0	26.6	26.6	26.6	26.6	26.6	26.6	26.5	25.9	24.9
Solar Lonesome Camp	1	Osceola	PV		1	2027			0.0	18.3	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
Solar Mule Creek	1	Bay	PV		3	2024			26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	25.3
Solar Osc Perry Suw	1	Osceola Taylor Suwannee	PV		11	2017		16.8	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.3	21.0
Solar Rattler	1	Hernando	PV		1	2026			0.0	26.3	26.3	26.2	26.3	26.3	26.3	26.2	26.3	26.3
Solar Sandy Creek	1	Bay	PV		6	2022		23.5	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	23.6	22.8
Solar Santa Fe	1	Columbia	PV		3	2021		22.3	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	23.5	22.5
Solar St Pete Pier	1	Pinellas	PV		12	2019			21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.4	21.0	20.5
Solar Sundance	1	Madison	PV		9	2025			23.6	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2
Solar Trenton	1	Gilchrist	PV		1	2020		22.1	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	23.4	22.5
Solar Turnpike	1	Osceola	PV		10	2026			0.0	18.2	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0
Solar Twin Rivers	1	Hamilton	PV		4	2021		23.8	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	23.6	22.7
Solar Winqepin	1	Madison	PV		3	2024			26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	25.5
Solar Generic	1~37	N/A	PV		7	2027			0.0	0.0	24.9	26.1	26.2	26.3	26.2	26.3	26.3	26.4
SPS - Solar Generic	1~14	N/A	PV		7	2028			0.0	0.0	0.0	26.0	27.3	27.5	27.6	27.7	27.8	27.8
SPS - Battery Generic	1~14	N/A	Storage		7	2028			0.0	0.0	0.0	14.1	14.5	15.2	15.3	15.4	15.7	15.8
Powerline	1~2	Citrus	Storage		3	2027			0.0	0.0	8.8	9.9	9.5	9.8	9.8	10.0	10.6	10.9
Battery 4 Hours	1~3	N/A	Storage		6	2034			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.7
Battery 4 Hours 225MW	1	N/A	Storage		2	2029			0.0	0.0	0.0	0.0	16.7	17.6	17.8	17.9	18.5	18.8
Notes																		
(Include Notes Here)																		

37. **[Investor-Owned Utilities Only]** For each existing unit on the Company’s system, please provide the planned retirement date. If the Company does not have a planned retirement date

for a unit, please provide an estimated lifespan for units of that type and a non-binding estimate of the retirement date for the unit.

RESPONSE:

DEPRECIABLE GROUP	Major Year in Service	Probable Retirement Year	Life Span
<u>STEAM PRODUCTION</u>			
ANCLOTE	1974	2042	68
CRYSTAL RIVER UNITS 4 and 5	1982	2034	52
<u>OTHER PRODUCTION</u>			
<u>COMBINED-CYCLE</u>			
BARTOW	2009	2054	45
CITRUS	2018	2063	45
OSPREY ENERGY CENTER	2004	2049	45
HINES UNIT 1	1999	2044	45
HINES UNIT 2	2003	2048	45
HINES UNIT 3	2005	2050	45
HINES UNIT 4	2007	2052	45
TIGER BAY	1995	2040	45
<u>SIMPLE CYCLE</u>			
BARTOW UNITS 1 and 3	1972	2027	55
BARTOW UNITS 2 and 4	1972	2034	62
SUWANNEE RIVER	1980	2034	54
BAYBORO	1973	2026	53
DEBARY UNITS 2-6	1975	2027	52
DEBARY UNITS 7-10	1992	2037	45
INTERCESSION CITY UNITS 1-6	1974	2034	60
INTERCESSION CITY UNITS 7-10	1993	2038	45
INTERCESSION CITY UNITS 11	1997	2042	45
INTERCESSION CITY UNITS 12-14	2000	2045	45
UNIV. OF FLA.	1993	2042	49
<u>SOLAR</u>			
OSCEOLA	2016	2051	35
PERRY	2016	2051	35
SUWANNEE	2017	2052	35
HAMILTON	2018	2053	35
LAKE PLACID	2019	2054	35
TRENTON	2019	2054	35
COLUMBIA	2020	2055	35
DEBARY	2020	2055	35
SANTA FE	2021	2056	35
TWIN RIVERS	2021	2056	35
DUETTE	2021	2056	35
SANDY CREEK	2022	2057	35
FORT GREEN	2022	2057	35
CHARLIE CREEK	2022	2057	35
BAY TRAIL	2022	2057	35
HILDRETH	2023	2058	35
HIGH SPRINGS	2023	2058	35
HARDEETOWN	2023	2058	35
BAY RANCH	2023	2058	35
WINQUEPIN	2024	2059	35
MULE CREEK	2024	2059	35
FALMOUTH	2024	2059	35
COOUNTRY LINE	2024	2059	35

38. **[Investor-Owned Utilities Only]** Please refer to the Excel Tables File (Solar and Storage Sites). Complete the table by providing information on each of the Company's existing and planned solar and/or energy storage facilities, including the Order and date of Commission approval (or Pending if not yet approved). Identify the associated cost recovery mechanism (such as in a base rate case, the environmental cost recovery clause, solar base rate adjustment, or special tariffs such as SolarTogether, SolarTogether Extension, and Clean Energy Connection) for each facility as well.

RESPONSE:

Please see table below and tab *Solar and Storage Sites* of the attached Excel File *2025 TYSP*
- *Data Request #1.Excel Tables:*

Facility Name	Unit No.	County Location	Solar Type (Fixed/Tracking)	Energy Storage Type	Facility In-Service Date		Unit Capacity (MW)				Land Use (Acres)	Commission Approval		Cost Recovery Mechanism
					Mo	Yr	Sum	Win	Sum	Win		Order No.	Approval Date	
Econlockhatchee PV Array	1	Volusia	Fixed	-	1	1989	0.0	0.0	0.0	0.0	<1	N/A	N/A	ECCR-Technology Development
Osceola	1	Osceola	Fixed	-	5	2016	3.6	3.6	2.0	0.2	-20	N/A	N/A	In IRP under Rate Settlement
Peery	1	Bay	Fixed	-	7	2016	4.9	4.9	2.6	0.2	-25	N/A	N/A	In IRP under Rate Settlement
Suwannee	1	Suwannee	Fixed	-	12	2017	8.5	8.5	4.6	0.4	-45	N/A	N/A	In IRP under Rate Settlement
Hamilton	1	Hamilton	Tracking	-	12	2018	72.7	72.7	39.0	3.6	-565	PSC-2019-0159-FOF-EI	4/30/2019	2017 Second RRSSA - SoBRA 1
Lake Placid	1	Highlands	Tracking	see below	12	2019	25.2	25.2	13.5	1.3	-380	PSC-2019-0292-FOF-EI	7/22/2019	2017 Second RRSSA - SoBRA 2
Trenton	1	Gilchrist	Tracking	-	12	2019	73.0	73.0	39.2	3.7	-735	PSC-2019-0292-FOF-EI	7/22/2019	2017 Second RRSSA - SoBRA 2
St. Petersburg Pier	1	Pinellas	Fixed	-	12	2019	0.3	0.3	0.2	0.0	N/A	N/A	N/A	In IRP under Rate Settlement
Columbia	1	Columbia	Tracking	-	3	2020	73.0	73.0	39.2	3.7	-580	PSC-2019-0159-FOF-EI	4/30/2019	2017 Second RRSSA - SoBRA 1
DeBary	1	Volusia	Fixed	-	5	2020	72.7	72.7	39.0	3.6	-445	PSC-2019-0292-FOF-EI	7/22/2019	2017 Second RRSSA - SoBRA 2
Santa Fe	1	Columbia	Tracking	-	3	2021	73.4	73.4	39.4	3.7	-607	PSC-2021-0088-TRF-EI	2/22/2021	2017 Second RRSSA - SoBRA 3
Twin Rivers	1	Hamilton	Tracking	-	3	2021	73.4	73.4	39.4	3.7	-515	PSC-2021-0088-TRF-EI	2/22/2021	2017 Second RRSSA - SoBRA 3
Duette	1	Manatee	Tracking	-	10	2021	73.4	73.4	39.4	3.7	-520	PSC-2021-0088-TRF-EI	2/22/2021	2017 Second RRSSA - SoBRA 3
Jennings BESS	1	Hamilton	N/A	Li-NMC	10	2021	5.5	5.5	5.5	5.5	<1	PSC-20170451-AS-EU	11/20/2017	2017 Second RRSSA - Battery Pilot
Co-located Lake Placid BESS	1	Highlands	N/A	Li-LFP	12	2021	17.3	17.3	17.3	17.3	-2	PSC-20170451-AS-EU	11/20/2017	2017 Second RRSSA - Battery Pilot
Trenton BESS	1	Trenton	N/A	Li-NMC	12	2021	11.0	11.0	11.0	11.0	-1	PSC-20170451-AS-EU	11/20/2017	2017 Second RRSSA - Battery Pilot
Cape San Blas BESS	1	Gulf	N/A	Li-NMC	2	2022	5.5	5.5	5.5	5.5	<1	PSC-20170451-AS-EU	11/20/2017	2017 Second RRSSA - Battery Pilot
Micanopy BESS	1	Alachua	N/A	Li-NMC	4	2022	8.3	8.3	8.3	8.3	<1	PSC-20170451-AS-EU	11/20/2017	2017 Second RRSSA - Battery Pilot
Sandy Creek	1	Bay	Tracking	-	5	2022	73.8	74.2	39.6	3.7	-625	PSC-2021-0088-TRF-EI	2/22/2021	2017 RRSSA-SoBRA 3+2021 RS**
Pt Green	1	Hardee	Fixed	-	6	2022	73.8	74.2	39.6	3.7	-790	PSC-2021-0059A-S-EI	9/23/2022	Clean Energy Connection
Charlie Creek	1	Hardee	Tracking	-	8	2022	73.8	74.2	39.6	3.7	-605	PSC-2021-0088-TRF-EI	2/22/2021	2017 Second RRSSA - SoBRA 3
Dolphin Solar	1	Pinellas	Fixed	-	8	2022	0.2	0.2	0.1	0.0	0	N/A	N/A	In IRP under Rate Settlement
Bay Trail	1	Citrus	Tracking	-	9	2022	74.2	74.2	39.8	3.7	0	PSC-2021-0059A-S-EI	9/23/2022	Clean Energy Connection
Hilthreth	1	Suwannee	Tracking	-	4	2023	74.2	74.5	39.8	3.7	-710	PSC-2021-0059A-S-EI	9/23/2022	Clean Energy Connection
High Springs	1	Alachua	Tracking	-	4	2023	74.2	74.5	39.8	3.7	-655	PSC-2021-0059A-S-EI	9/23/2022	Clean Energy Connection
Hardestown	1	Levy	Tracking	-	4	2023	74.2	74.5	39.8	3.7	-550	PSC-2021-0059A-S-EI	9/23/2022	Clean Energy Connection
Bay Ranch	1	Bay	Tracking	-	4	2023	74.2	74.5	39.8	3.7	-720	PSC-2021-0059A-S-EI	9/23/2022	Clean Energy Connection
John Hopkins BESS Microgrid	1	Pinellas	N/A	Li-LFP	8	2023	2.5	2.5	2.2	2.2	<1	PSC-20170451-AS-EU	11/20/2017	2017 Second RRSSA - Battery Pilot
John Hopkins MS	1	Pinellas	Fixed	see below	11	2023	0.7	0.7	0.4	0.0	0	PSC-20170451-AS-EU	11/20/2017	2017 Second RRSSA - Battery Pilot
Hines Floating Solar	1	Polk	Floating	-	11	2023	0.7	0.7	0.4	0.0	N/A	PSC-2021-0202A-AS-EI	6/28/2021	2021 Rate Settlement - Vision FL
Mule Creek	1	Bay	Tracking	-	3	2024	74.5	74.9	40.0	3.7	-710	PSC-2021-0059A-S-EI	9/23/2022	Clean Energy Connection
Winthrop	1	Madison	Tracking	-	3	2024	74.5	74.9	40.0	3.7	-530	PSC-2021-0059A-S-EI	9/23/2022	Clean Energy Connection
Falmouth	1	Suwannee	Tracking	-	6	2024	74.5	74.9	40.0	3.7	-775	PSC-2021-0059A-S-EI	9/23/2022	Clean Energy Connection
County Line	1	Gilchrist	Tracking	-	8	2024	74.9	74.9	40.2	3.7	-615	PSC-2021-0059A-S-EI	9/23/2022	Clean Energy Connection
Suwannee BESS	1	Suwannee	N/A	Non-Li	5	2025	5.0	5.0	4.5	4.5	-1	PSC-2021-0202A-AS-EI	6/28/2021	2021 Rate Settlement - Vision FL
Sundance	1	Madison	Tracking	-	7	2025	74.9	74.9	25.8	3.7	-500-600	Docket 20250034	Pending	2024 Rate Settlement - SoBRA 1
Half Moon	1	Sumter	Tracking	-	1	2026	74.9	74.9	25.8	3.7	-500-600	Docket 20250034	Pending	2024 Rate Settlement - SoBRA 1
Rantler	1	Hernando	Tracking	-	1	2026	74.9	74.9	25.8	3.7	-500-600	Docket 20250034	Pending	2024 Rate Settlement - SoBRA 1
Builey Mill	1	Jefferson	Tracking	-	5	2026	74.9	74.9	25.8	3.7	-500-600	Docket 20250034	Pending	2024 Rate Settlement - SoBRA 1
Jumper Creek	1	Sumter	Tracking	-	6	2026	74.9	74.9	27.3	3.3	-500-600	Pending	Pending	2024 Rate Settlement-SoBRA
Lonesome Camp	1	Osceola	Tracking	-	12	2026	74.9	74.9	27.3	3.3	-500-600	Pending	Pending	2024 Rate Settlement-SoBRA
Turkpile	1	Osceola	Tracking	-	12	2026	74.9	74.9	27.3	3.3	-500-600	Pending	Pending	2024 Rate Settlement-SoBRA
Banner	1	Columbia	Tracking	-	12	2026	74.5	74.5	27.2	3.3	-500-600	Pending	Pending	2024 Rate Settlement-SoBRA
Powerline BESS	1	Citrus	N/A	Li-LFP	3	2027	100.0	100.0	90.0	90.0	-10	PSC-2024-0472-AS-EI	Pending	2024 Rate Settlement
Renewable Energy Center #38	1	Unknown	Tracking	-	6	2027	74.9	74.9	25.1	3.1	-500-600	Pending	Pending	2024 Rate Settlement-SoBRA
Renewable Energy Center #39	1	Unknown	Tracking	-	6	2027	74.9	74.9	25.1	3.1	-500-600	Pending	Pending	2024 Rate Settlement-SoBRA
Renewable Energy Center #40	1	Unknown	Tracking	-	12	2027	74.9	74.9	25.1	3.1	-500-600	Pending	Pending	2024 Rate Settlement-SoBRA
Renewable Energy Center #41	1	Unknown	Tracking	-	12	2027	74.9	74.9	25.1	3.1	-500-600	Pending	Pending	2024 Rate Settlement-SoBRA
Renewable Energy Center #42	1	Unknown	Tracking	-	7	2028	74.9	74.9	20.6	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #43	1	Unknown	Tracking	-	7	2028	74.9	74.9	20.6	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #44	1	Unknown	Tracking	-	7	2028	74.9	74.9	20.6	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #45	1	Unknown	Tracking	-	7	2028	74.9	74.9	20.6	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #46	1	Unknown	Tracking	-	7	2028	74.9	74.9	20.6	3.1	-500-600	Pending	Pending	Pending
Co-located BESS #47	1	Unknown	-	-	7	2028	100.0	100.0	90.0	90.0	-10	Pending	Pending	Pending
Renewable Energy Center #48	1	Unknown	N/A	Pending	6	2029	225.0	225.0	202.5	202.5	-23	Pending	Pending	Pending
Renewable Energy Center #49	1	Unknown	Tracking	-	7	2029	74.9	74.9	20.6	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #50	1	Unknown	Tracking	-	7	2029	74.9	74.9	20.6	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #51	1	Unknown	Tracking	-	7	2029	74.9	74.9	20.6	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #52	1	Unknown	Tracking	-	7	2029	74.9	74.9	16.1	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #53	1	Unknown	Tracking	-	7	2029	74.9	74.9	16.1	3.1	-500-600	Pending	Pending	Pending
Co-located BESS #54	1	Unknown	N/A	Pending	7	2029	100.0	100.0	90.0	90.0	-10	Pending	Pending	Pending
Renewable Energy Center #55	1	Unknown	Tracking	-	7	2030	74.9	74.9	16.1	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #56	1	Unknown	Tracking	-	7	2030	74.9	74.9	16.1	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #57	1	Unknown	Tracking	-	7	2030	74.9	74.9	16.1	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #58	1	Unknown	Tracking	-	7	2030	74.9	74.9	16.1	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #59	1	Unknown	Tracking	-	7	2030	74.9	74.9	16.1	3.1	-500-600	Pending	Pending	Pending
Co-located BESS #60	1	Unknown	N/A	Pending	7	2030	100.0	100.0	90.0	90.0	-10	Pending	Pending	Pending
Renewable Energy Center #61	1	Unknown	Tracking	-	7	2031	74.9	74.9	11.6	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #62	1	Unknown	Tracking	-	7	2031	74.9	74.9	11.6	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #63	1	Unknown	Tracking	-	7	2031	74.9	74.9	11.6	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #64	1	Unknown	Tracking	-	7	2031	74.9	74.9	11.6	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #65	1	Unknown	Tracking	-	7	2031	74.9	74.9	11.6	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #66	1	Unknown	Tracking	-	7	2031	74.9	74.9	11.6	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #67	1	Unknown	Tracking	-	7	2031	74.9	74.9	11.6	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #68	1	Unknown	Tracking	-	7	2031	74.9	74.9	11.6	3.1	-500-600	Pending	Pending	Pending
Co-located BESS #69	1	Unknown	N/A	Pending	7	2031	100.0	100.0	90.0	90.0	-10	Pending	Pending	Pending
Renewable Energy Center #70	1	Unknown	Tracking	-	7	2032	74.9	74.9	11.6	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #71	1	Unknown	Tracking	-	7	2032	74.9	74.9	7.1	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #72	1	Unknown	Tracking	-	7	2032	74.9	74.9	7.1	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #73	1	Unknown	Tracking	-	7	2032	74.9	74.9	7.1	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #74	1	Unknown	Tracking	-	7	2032	74.9	74.9	7.1	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #75	1	Unknown	Tracking	-	7	2032	74.9	74.9	7.1	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #76	1	Unknown	Tracking	-	7	2032	74.9	74.9	7.1	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #77	1	Unknown	Tracking	-	7	2032	74.9	74.9	7.1	3.1	-500-600	Pending	Pending	Pending
Co-located BESS #78	1	Unknown	N/A	Pending	7	2032	100.0	100.0	85.0	85.0	-10	Pending	Pending	Pending
Renewable Energy Center #79	1	Unknown	Tracking	-	7	2033	74.9	74.9	7.1	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #80	1	Unknown	Tracking	-	7	2033	74.9	74.9	7.1	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #81	1	Unknown	Tracking	-	7	2033	74.9	74.9	7.1	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #82	1	Unknown	Tracking	-	7	2033	74.9	74.9	7.1	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #83	1	Unknown	Tracking	-	7	2033	74.9	74.9	7.1	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #84	1	Unknown	Tracking	-	7	2033	74.9	74.9	7.1	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #85	1	Unknown	Tracking	-	7	2033	74.9	74.9	7.1	3.1	-500-600	Pending	Pending	Pending
Renewable Energy Center #86	1	Unknown	Tracking	-	7	2033	74.9	74.9						

39. In its planning process, did the Company consider constructing any solar or energy storage facilities that are co-located with other uses such as parking areas, waterways, existing buildings (including rooftops), or substations? If not, explain why not. If so, explain whether the analysis selected any facilities of this type and identify them.

RESPONSE:

Solar Facilities are all sited with a generation substation. Some sites are also co-located with a new switching station that is the point of interconnection for the solar projects. Solar sites are not co-located with any other uses, however future storage sites will be co-located with existing solar sites.

40. Please refer to the Excel Tables File (Unit Modifications). Complete the table by providing information on all of the Company's units that are either will or are potential candidates to change fuel types or be repower, such as conversion to a Combined Cycle unit component.

RESPONSE:

Please see table below and tab *Unit Modifications* of the attached Excel File *2025 TYSP - Data Request #1.Excel Tables*:

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Planned Modification (if any)	Eligible Modifications			Potential Issues
					Mo	Yr		Fuel Switching	Combined Cycle Conversion	Other (Explain)	
HINES	4	POLK	CC	Natural Gas	4	2025	Gas Turbine Heat Rate Upgrade			Gas Turbine Heat Rate Upgrade	N/A
TIGER BAY	1	POLK	CC	Natural Gas	11	2025					N/A
CITRUS	PB1	CITRUS	CC	Natural Gas	11	2025					N/A
CITRUS	PB2	CITRUS	CC	Natural Gas	4	2026					N/A
HINES	3	POLK	CC	Natural Gas	5	2026					N/A
HINES	4	POLK	CC	Natural Gas	11	2026					N/A
Notes											
(Include Notes Here)											

41. Please refer to the Excel Tables File (Transmission Lines). Complete the table by providing a list of all proposed transmission lines for the current planning period that require certification under the Transmission Line Siting Act. Please also include in the table transmission lines that have already been approved, but are not yet in-service.

RESPONSE:

Please see table below and tab *Transmission Lines* of the attached Excel File *2025 TYSP - Data Request #1.Excel Tables*:

Transmission Line	Line Length	Nominal Voltage	Certification Dates		In-Service Date
	(Miles)		Need Approved	TLSA Certified	
N/A	N/A	N/A	N/A	N/A	N/A
Notes					
DEF has no proposed transmission lines for the current planning period that require certification under the Transmission Line Siting Act, nor are there any that have already been approved, but are not yet in-service.					

Power Purchase and/or Sale Agreements

42. Please refer to the Excel Tables File tabs listed below. Complete the tables by providing information on each power purchase agreement (PPA) for the time period listed. If the PPA is associated with a particular generating unit(s), provide additional information about those units if available. When completing the tables, please consider the following factors: (i) for multiple small (<0.25 MW) distributed resources of the same type and fuel source, provide a single entry; (ii) for solar facilities, if available, provide the nameplate DC capacity as the gross capacity, the nameplate AC capacity as the net capacity, and the firm contribution during time of system peak as the firm capacity. If a solar facility is combined with an energy storage system, identify the capacity of the energy storage system in a separate line.

- Excel Tables File (Existing PPA), including each PPA still in effect by December 31 of the year prior to the current planning period pursuant to which energy was delivered to the Company during said year.
- Excel Tables File (Planned PPA), including each PPA pursuant to which energy will begin to be delivered to the Company during the current planning period.

RESPONSE:

- Please see table below and tab *Existing PPA* of the attached Excel File *2025 TYSP - Data Request #1.Excel Tables*:

Contract Information						Provide If Associated with Specific Unit(s)													
Seller Name	Date Contract Approved	Contract Terms				Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service	Unit Capacity (MW)							
		Firm Capacity (MW)		Delivery Dates								Gross		Net		Firm			
		Sum	Win	Start	End							Mo	Yr	Sum	Win	Sum	Win	Sum	Win
Traditional																			
Northern Star Generation	7/1/1991	104	104	12/16/1995	12/31/2025	Orange Cogen	1	Polk	CC	NG	6	1995	104	104	104	104	104	104	
Northern Star Generation	Ongoing through the Fuel Clause	655	699	6/1/2012	5/31/2027	Vandolah Power	1-4	Hardee	GT	NG	6	2002	655	699	655	699	655	699	
Renewable																			
Pasco County	1995	23	23	1/1/1995	12/31/2024	Pasco County Resource Recovery	ST	Pasco	ST	MSW	1	1991	23	23	23	23	23	23	
Pinellas County	9/27/1989	55	55	1/1/1995	12/31/2024	Pinellas County Resource Recovery	ST	Pinellas	ST	MSW	5	1983	55	55	55	55	55	55	
Lake County	N/A	N/A	N/A	7/1/2014	N/A	Lake County Resource Recovery	ST	Lake	ST	MSW	3	1991	N/A	N/A	N/A	N/A	N/A	N/A	
Dade County	N/A	N/A	N/A	1/1/2014	N/A	Metro-Dade County Resource Recovery	ST	Dade	ST	MSW	11	1985	N/A	N/A	N/A	N/A	N/A	N/A	
Lee County	N/A	N/A	N/A	1/1/2017	N/A	Lee County Resource Recovery	ST	Lee	ST	MSW	11	1994	N/A	N/A	N/A	N/A	N/A	N/A	
PCS Phosphate	N/A	N/A	N/A	1/1/1980	N/A	Swift Creek	ST	Hamilton	ST	WH	1	1980	N/A	N/A	N/A	N/A	N/A	N/A	
G2 Energy Marion	N/A	N/A	N/A	1/1/2024	N/A	G2 Marion, LLC	CT	Marion	CT	LNG	1	2009	N/A	N/A	N/A	N/A	N/A	N/A	
Notes																			
(Include Notes Here)																			

- b. Please see table below and tab *Planned PPA* of the attached Excel File *2025 TYSP - Data Request #1.Excel Tables*:

Contract Information						Provide If Associated with Specific Unit(s)												
Seller Name	Date Contract Approved	Contract Terms				Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-		Unit Capacity (MW)					
		Firm Capacity		Delivery Dates							Service		Gross		Net		Firm	
		Sum	Win	Start	End						Mo	Yr	Sum	Win	Sum	Win	Sum	Win
Traditional																		
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Renewable																		
Pasco County	N/A	N/A	N/A	1/1/2024	N/A	Pasco County Resource Recovery	ST	Pasco	ST	MSW	8	1998	N/A	N/A	N/A	N/A	N/A	N/A
Pinellas County	N/A	N/A	N/A	1/1/2024	N/A	Pinellas County Resource Recovery	ST	Pinellas	ST	MSW	5	1983	N/A	N/A	N/A	N/A	N/A	N/A
Notes																		
There are no planned PPAs delivering traditional generation during the current planning period. Pasco County Resource Recovery and Pinellas County Resource Recovery enetered into As Available Tariff Agreements which commenced on 1/1/2025 and are evergreen.																		

43. For each planned power purchase agreement, provide a narrative response discussing the current status of the associated generating project.

RESPONSE:

As of 12/31/2024, DEF had 6 executed planned as-available QF contracts delivering generation that will continue in the planning period. In addition, there were two municipal solid waste generators with firm capacity and energy contracts in effect as of 12/31/2024, transitioning to executed as-available QF contracts effective 1/1/2024 that will continue in the planning period. There are two natural gas fired generators that are in-service and under firm capacity and energy contracts to continue through some of the planning period. As of 12/31/2024, there were also 2,660 MW of potential QF generators in various stages of project and interconnection development under FERC's large generator grid interconnection process.

44. Please list and discuss any long-term power purchase agreements that have, within the past year, been cancelled, delayed, or reduced in scope. What was the primary reason for the change? What, if any, were the secondary reasons?

RESPONSE:

No long-term power purchase agreements have, within the past year, been cancelled, delayed, or reduced in scope

45. Please refer to the Excel Tables File tabs listed below. Complete the tables by providing information on each power sale agreement (PSA) for the time period listed. If the PSA is associated with a particular generating unit(s), provide additional information about those units if available. When completing the tables, please consider the following factors: (i) for multiple small (<0.25 MW) distributed resources of the same type and fuel source, provide a single entry; (ii) for solar facilities, if available, provide the nameplate DC capacity as the gross capacity, the nameplate AC capacity as the net capacity, and the firm contribution during time of system peak as the firm capacity. If a solar facility is combined with an energy storage system, identify the capacity of the energy storage system in a separate line.
- a. Excel Tables File (Existing PSA), including each PSA still in effect by December 31 of the year prior to the current planning period pursuant to which energy was delivered by the Company during said year.
 - b. Excel Tables File (Planned PSA), including each PSA pursuant to which energy will begin to be delivered by the Company during the current planning period.

RESPONSE:

- a. Please see table below and tab *Existing PSA* of the attached Excel File *2025 TYSP - Data Request #1.Excel Tables*:

Contract Information						Provide If Associated with Specific Unit(s)												
Buyer Name	Date Contract Approved	Contract Terms				Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Capacity (MW)					
		Firm Capacity (MW)		Delivery Dates									Gross		Net		Firm	
		Sum	Win	Start	End						Mo	Yr	Sum	Win	Sum	Win	Sum	Win
Seminole	12/18/2009	200-500	200-500	6/1/2016	12/31/2024	N/A	N/A	N/A	Nat Gas	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Seminole	1/1/1997	0.014	0.014	6/1/1987	Evergreen	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Seminole	8/29/2016	0	50-600	1/1/2021	3/31/2027	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Seminole	9/21/2017	50-400	50-400	1/1/2021	12/31/2030	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Seminole	9/21/2017	50-400	50-400	1/1/2021	12/31/2035	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Reedy Creek	8/27/2014	141	81	1/1/2016	12/31/2024	N/A	N/A	N/A	Nat Gas	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tampa Electric	1/16/2019	0-515	0-515	1/26/2019	12/31/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Notes																		
(Include Notes Here)																		

- b. Please see table below and tab *Planned PSA* of the attached Excel File *2025 TYSP - Data Request #1.Excel Tables*:

Contract Information						Provide If Associated with Specific Unit(s)													
Buyer Name	Date Contract Approved	Contract Terms				Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Capacity (MW)						Land Use
		Firm Capacity (MW)		Delivery Dates									Gross		Net		Firm		
		Sum	Win	Start	End						Mo	Yr	Sum	Win	Sum	Win	Sum	Win	(Acres)
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Notes																			
(Include Notes Here)																			

46. For each planned power sale agreement, provide a narrative response discussing the current status of the agreement.

RESPONSE:

There are no planned power sale agreements.

47. Please list and discuss any long-term power sale agreements within the past year that were cancelled, expired, or modified. What was the primary reason for the change? What, if any, were the secondary reasons?

Renewable Generation

RESPONSE:

The Tampa Electric contract was extended to December 31, 2025.

48. Please refer to the Excel Tables File (Renewables). Complete the table by providing the actual and projected annual energy output of all renewable resources on the Company's system, by source, for the 11-year period beginning one year prior to the current planning period.

RESPONSE:

Please see table below and tab *Renewables* of the attached Excel File *2025 TYSP - Data Request #1.Excel Tables*:

Renewable Source	Annual Renewable Generation (GWh)										
	Actual	Projected									
		2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
Utility - Firm	2,789	3,244	3,946	4,702	5,640	6,488	7,344	8,441	9,827	11,133	12,401
Utility - Non-Firm	0	0	0	0	0	0	0	0	0	0	0
Utility - Co-Firing	0	0	0	0	0	0	0	0	0	0	0
Purchase - Firm	559	0	0	0	0	0	0	0	0	0	0
Purchase - Non-Firm	6	500	581	643	724	780	860	920	1,001	1,057	1,133
Purchase - Co-Firing	0	0	0	0	0	0	0	0	0	0	0
Customer - Owned	1,360	1,549	1,822	2,097	2,363	2,600	2,839	3,077	3,323	3,559	3,796
Total	4,714	5,292	6,349	7,442	8,727	9,868	11,043	12,438	14,152	15,749	17,331
Notes											
(Include Notes Here)											

49. Please describe any actions the Company engages in to encourage production of renewable energy within its service territory.

RESPONSE:

DEF encourages renewable energy advancement within its service territory as it continues to educate, engage, and discuss Florida renewable policies and the need for cost-effective renewable energy that would contribute to reliable energy and fuel diversity in Florida. DEF continues to address inquiries about developing renewable energy projects or initiatives in the state. DEF continues to explore renewable energy production through good faith purchased power discussions with qualified parties. During 2024, DEF continued to engage attentive parties, customers, and potential companies interested in the production or use of renewable energy within the state.

In addition, DEF continues to educate and engage with interested parties at various industry conferences, local community events, and via our web site on renewable energy resources, interconnection processes, and innovative technologies. Please see our response to question #80 for further industry engagement.

50. Please identify and describe any programs the Company offers that allows its customers to contribute towards the funding of specific renewable projects, such as community solar programs.

- a. Please describe any such programs in development with an anticipated launch date within the current planning period.

RESPONSE:

Duke Energy Florida continues to offer Clean Energy Connection, (CEC), which provides customer subscriptions to local clean energy. This program is an opportunity for our Florida customers who want access to renewable energy without the hassle, long term commitment or upfront installation costs or maintaining solar equipment.

Program participants subscribe to kilowatt (kW) blocks of power associated with the program's solar facilities for a fixed \$8.35/kW monthly subscription fee, where each block represents 1 kw. This subscription fee supports the operation of these CEC solar facilities and is added to the customer's regular DEF bill. In return, the customer receives monthly bill credits, and the RECs (renewable energy certificates) associated with their participation in the program.

The Program has allocations for all customer types including low-income customers. Low-income participants pay a fixed monthly kW subscription fee and receive immediate and sustained savings, as the fixed credit rate on their bill is higher than their subscription fees.

In 2024, Clean Energy Impact was approved and launched. This program allows Duke Energy Florida customers an opportunity to buy locally generated RECs from facilities that are not part of the Clean Energy Connection program. Like Clean Energy Connection, no upfront costs nor installation on a customer's property are required. Participation in the program also benefits all Duke Energy Customers.

Energy Storage

51. Briefly discuss any progress in the development and commercialization of non-lithium-ion based battery storage technology the Company has observed in recent years.

RESPONSE:

Duke Energy continues to monitor and evaluate the market for non-lithium battery solutions. Duke Energy Emerging Technology Office is dedicated to investigating technologies, including non-lithium-ion battery storage. Those technologies include sodium sulfur, nickel hydrogen, iron air, flow storage, zinc hybrid, gravity storage, adiabatic compressed air energy storage, and electro-thermal energy storage. Duke Energy participates in development and testing of battery technologies through its partnerships with entities such as EPRI as well as research and pilot projects across the Duke Energy regulated and non-regulated companies. Duke Energy has constructed a non-lithium long-duration storage pilot project in Suwannee County, FL that is entering service in early 2025.

52. If applicable, please describe the strategy of how the Company charges and discharges its energy storage facilities. As part of the response discuss if any recent legislation, including the IRA, has changed how the Company dispatches its energy storage facilities.

RESPONSE:

The Lake Placid battery is operated in PV smoothing mode to minimize the 15-minute variability that results due to the variable nature of solar energy. Lake Placid is also operated through manual charge and discharge controls. To maximize the value of the Solar ITC taken

for the Lake Placid storage investment Duke Energy targets charging the asset >75% from solar energy.

Energy storage assets directly connected through the Transmission and Distribution system are dispatched through a combination of manual charge / discharge operations and schedules that automate their operation. Those manual charge/discharge operations are determined by the Duke Energy Unit Commitment groups economic model in conjunction with the entire generation fleet to ensure effective operations to ensure reliability as well as economic dispatch. The company engages in evaluation and adjustment of strategies as needed.

53. Briefly discuss any considerations reviewed in determining the optimal positioning of energy storage technology in the Company's system (e.g., closer to/further from sources of load, generation, or transmission/distribution capabilities).

RESPONSE:

Duke Energy considers energy storage to be another power grid operator tool or resource for distribution, transmission, and generation solutions. The optimal positioning is very project specific and is dependent upon the problem being solved and involves requesting feedback from experts within the company to provide guidance using appropriate data and tools. Ultimately, energy storage projects are compared to traditional tools or methods to determine if energy storage is in fact a low cost and optimal solution. For example, Duke Energy is developing projects to retrofit solar power plants with adjacent battery storage. Duke Energy has also been focusing on opportunities to maximize the Inflation Reduction Act ITC for energy storage by locating future facilities in Energy Communities. Where feasible this will increase the ITC 10% thus improving project economics. The Powerline BESS is an example of a unit being deployed in an Energy Community.

54. Please explain whether customers have expressed interest in energy storage technologies. If so, describe the type of customer (residential, commercial industrial) and how have their interests been addressed.

RESPONSE:

DEF's retail customers are showing an interest in energy storage by installing battery storage at their premises along with their customer-owned renewable generators. DEF continues to see a modest percentage of customers installing energy storage equipment in concert with participation in the state's net metering policy. DEF continues to carefully monitor this activity and the customer's battery project configuration. DEF's commercial and industrial customers have inquired about using energy storage in various forms, usually for business continuity whether post-hurricane or for temporary interruptions. Some customers have developed their own backup power strategy. However, few have found battery storage external to their business as the best, economical solution to date. The customer is often looking for days of backup power which presently prices Li-ion technology out of consideration. DEF has a pilot project involving customer sited batteries in the Orlando area and is exploring dispatch of customer owned assets in other jurisdictions.

55. Please refer to the Excel Tables File (Existing Storage). Complete the table by providing information on all energy storage technologies that are currently either part of the Company's system portfolio or are part of a pilot program sponsored by the Company.

RESPONSE:

Please see table below and tab *Existing Storage* of the attached Excel File *2025 TYSP - Data Request #1.Excel Tables*:

Facility or Project Name	Unit No.	County Location	Energy Storage Type	Battery Chemistry (if applicable)	Land Use	Facility In-Service or Project Start Date		Unit Capacity (MW)						Storage Capacity	Conversion Efficiency
								Gross		Net		Firm			
					(Acres)	Mo	Yr	Sum	Win	Sum	Win	Sum	Win	(MWh)	(MWh)
USF Microgrid Energy Storage Pilot		Pinellas	Battery Energy Storage System	Lithium Ion	0.1	7	2018	0.3	0.3	0.3	0.3	0.23	0.2	0.48	88.0%
Trenton		Gilchrist	Battery Energy Storage System	Lithium Ion	0.5	12	2021	11	11	11	11	9.9	9.9	15.6	83.2%
Lake Placid Bess		Highlands	Battery Energy Storage System	Lithium Ion	3	12	2021	17	17	17	17	15.6	16	50.3	83.5%
Cape San Blas		Gulf	Battery Energy Storage System	Lithium Ion	0.5	2	2022	5.5	5.5	5.5	5.5	4.95	5	20.5	83.5%
Jennings		Hamilton	Battery Energy Storage System	Lithium Ion	0.5	4	2022	5.5	5.5	5.5	5.5	4.95	5	8.5	84.0%
Duke/UCF Long-Duration Energy Storage Project		Orange	Battery Energy Storage System	Vanadium Flow	0.1	7	2022	0	0	0	0	0.01	0	0.04	75.0%
Micanopy		Alachua	Battery Energy Storage System	Lithium Ion	0.5	8	2022	8.3	8.3	8.3	8.3	7.43	7.4	18.2	83.5%
John Hopkins Microgrid		Pinellas	Battery Energy Storage System	Lithium Ion	1	11	2023	2.5	2.5	2.5	2.5	2.23	2.2	23.5	83.5%
Suwannee Long Duration Energy Storage		Suwannee	Battery Energy Storage System	Sodium Sulfur	2	5	2025	5	5	5	5	4.5	4.5	40	80.0%
Notes															
(Include Notes Here)															

56. Please refer to the Excel Tables File (Planned Storage). Complete the table by providing information on all energy storage technologies planned for in-service during the current planning period either as part of the Company's system portfolio or as part of a pilot program sponsored by the Company.

RESPONSE:

Please see table below and tab *Planned Storage* of the attached Excel File *2025 TYSP - Data Request #1.Excel Tables*:

Facility or Project Name	Unit No.	County Location	Energy Storage Type	Battery Chemistry (if applicable)	Land Use	Facility In-Service or Project Start Date		Unit Capacity (MW)						Storage Capacity	Conversion Efficiency
								Gross		Net		Firm			
					(Acres)	Mo	Yr	Sum	Win	Sum	Win	Sum	Win	(MWh)	(MWh)
Powerline	1	Citrus	Battery Energy Storage System	Lithium Ion	~1 ACRE / 10 MW	3	2027	100	100	100	100	90	90	200	85%
Co-located BESS #47	1	Undetermined	Battery Energy Storage System	Lithium Ion	~1 ACRE / 10 MW	7	2028	100	100	100	100	90	90	400	85%
Renewable Energy Center #48	1	Pinellas	Battery Energy Storage System	Lithium Ion	~1 ACRE / 10 MW	6	2029	225	225	225	225	202.5	202.5	900	85%
Co-located BESS #54	1	Undetermined	Battery Energy Storage System	Lithium Ion	~1 ACRE / 10 MW	7	2029	100	100	100	100	90	90	400	85%
Co-located BESS #60	1	Undetermined	Battery Energy Storage System	Lithium Ion	~1 ACRE / 10 MW	7	2030	100	100	100	100	90	90	400	85%
Co-located BESS #69	1	Undetermined	Battery Energy Storage System	Lithium Ion	~1 ACRE / 10 MW	7	2031	100	100	100	100	90	90	400	85%
Co-located BESS #78	1	Undetermined	Battery Energy Storage System	Lithium Ion	~1 ACRE / 10 MW	7	2032	100	100	100	100	85	85	400	85%
Co-located BESS #87	1	Undetermined	Battery Energy Storage System	Lithium Ion	~1 ACRE / 10 MW	7	2033	100	100	100	100	70	70	400	85%
Co-located BESS #88	1	Undetermined	Battery Energy Storage System	Lithium Ion	~1 ACRE / 10 MW	6	2034	300	300	300	300	210	210	1200	85%
Co-located BESS #97	1	Undetermined	Battery Energy Storage System	Lithium Ion	~1 ACRE / 10 MW	7	2034	100	100	100	100	70	70	400	85%
Notes															
(Include Notes Here)															

57. Please identify and describe the objectives and methodologies of all energy storage pilot programs currently running or in development with an anticipated launch date within the current planning period. If the Company is not currently participating in or developing energy storage pilot programs, has it considered doing so? If not, please explain.

- Please discuss any pilot program results, addressing all anticipated benefits, risks, and operational limitations when such energy storage technology is applied on a utility scale (> 2 MW) to provide for either firm or non-firm capacity and energy.
- Please provide a brief assessment of how these benefits, risks, and operational limitations may change over the current planning period.
- Please identify and describe any plans to periodically update the Commission on the status of your energy storage pilot programs.

RESPONSE:

- Duke Energy is currently testing the energy storage projects as part of the 50 MW battery energy storage pilot program identified in the 2017 DEF Settlement Agreement. The pilot program is studying how energy storage is a cost-effective tool to improve customer reliability, defer or eliminate traditional distribution investment, and improve system operations at universal solar assets. Duke is also testing the Suwannee Long Duration Energy Storage unit.

- b. DEF expects the current pilot program as well as future energy storage projects will help to better optimize the best blend of multiple use battery locations which may system balancing, capacity, and energy arbitrage values. These will include projects to mitigate intermittency from solar power and improve the coincidence between renewable generation and load. DEF also expects to better understand the benefits of energy storage as a key component of localized resiliency for locations as well as future uses of batteries to harden the local grids for counties and municipalities. As costs continue to decline on Li-ion batteries and perhaps other technologies provide additional paths to energy storage, storage will become a part of the myriad of tools DEF deploys to optimize grid resiliency and reduce certain transmission or distribution congestion/redundancy needs. The Suwannee Long Duration Energy Storage unit will provide operational learnings around the non-lithium chemistry used there coupled with its 8-hour storage duration and how that can be best integrated with our existing fleet and unit commitment planning process at scale.
- c. Duke Energy plans to update the Commission on the status of our energy storage pilot programs during future Ten Year Site Plan filings and during any ad hoc requests made by the Commission.

Reliability

58. Please refer to the Excel Tables File (Reliability). Complete the table by providing the loss of load probability, reserve margin, and expected unserved energy for each year of the planning period.

RESPONSE:

Please see table below and tab *Reliability* of the attached Excel File *2025 TYSP - Data Request #1.Excel Tables*:

Loss of Load Probability, Reserve Margin, and Expected Unserved Energy						
Base Case Load Forecast						
Year	Loss of Load Probability (Days/Yr)	Annual Isolated Reserve Margin (%) (Including Firm Purchases)	Expected Unserved Energy (MWh)	Loss of Load Probability (Days/Yr)	Annual Assisted Reserve Margin (%) (Including Firm Purchases)	Expected Unserved Energy (MWh)
2025	Duke Energy Florida is required to maintain a 20% Reserve Margin, therefore no LOLP study was conducted					
2026						
2027						
2028						
2029						
2030						
2031						
2032						
2033						
2034						

59. Describe in detail the methodology the Utility used to determine the seasonal firm capacity contribution of its solar facilities or purchases and provide the percentage contribution for each facility, if applicable. As part of this discussion, please explain whether the Company's

existing and/or future solar facilities shift the hour of system peak demand for reliability planning purposes net of solar generation.

RESPONSE:

DEF conducted an Effective Load Carrying Capability Study (ELCC) for our 2025-2027 solar resources and used the results of that study for the solar firmness for summer and winter.

The ELCC study performed an analysis of the capacity value of the three 300 MWs blocks of solar resources in Duke Energy Florida's (DEF) system added between 2025 and 2027. Capacity value is the reliability contribution of a generating resource and is represented as the fraction of the rated capacity considered to be firm. Average summer and winter values are calculated for existing solar resources prior to 2025, and marginal summer and winter values are calculated for the three future solar blocks. These values are suitable for use in reserve margin calculations and other resource planning purposes. Because solar resources only generate power during daylight hours when weather conditions are favorable, a solar asset's ability to reliably provide MW capacity when it is needed will differ from that of a conventional fully dispatchable resource like a gas-fired combustion turbine. Outside of unit outages, such conventional units can be called upon in any hour under a wide range of weather conditions to provide energy. Therefore, the ELCC study evaluated the performance of these solar resources for a broad range of weather, load, and unit outage conditions within the context of DEF's portfolio of existing and planned resources for calendar year 2027. The study used the Effective Load Carrying Capability (ELCC) methodology commonly employed by utility companies, Regional Transmission Organizations (RTOs), and reliability corporations in North America.

Based on the ELCC study this is the solar firmness associated with our current and future solar fleet. The values through 2027 came from the ELCC study. Response to question 29 shows the solar firmness for our planning and existing solar resources.

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%

As more solar assets are added to the portfolio, they reduce the net load during the day, eventually pushing the peak net load outside the hours where solar generation is available. This is reflected in the generally decreasing marginal ELCC values trend. The summer values for 2025 are lower than the ones in 2026 because one of the solar resources added in 2025 is fixed tilt while the rest of resources added are tracking.

At the point of saturation, no matter how much solar is added, the peak net load that occurs outside daylight hours cannot be reduced further. Any load shed risk occurring during the day is removed by the additional solar generation. As a result, the only remaining load shed risk exists during the periods of the day without sunlight. Consequently, solar additions past the point of saturation contribute negligible direct benefit to the resource class's ELCC, though indirect synergistic benefits may continue with other resources such as batteries that can benefit from excess solar generation.

In the 2025 TYSP, 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.

60. **[Investor Owned Utilities Only]** Please refer to Excel Tables File (Firm Solar). Provide an example hourly contribution of the Company's generating units compared to the system demand for a typical seasonal peak day for each season (Summer and Winter). As part of this response, provide the typical hourly demand and contribution of non-firm renewable resources (such as solar or wind), energy storage (charging and discharging separately), nuclear, natural gas, coal, oil, firm renewables, all other generation, purchased power, power sales, and demand response, if applicable.

RESPONSE:

Please see the table below and tab *Firm Solar* of the Excel File *2025 TYSP - Data Request #1 - Excel Tables.xlsx*.

Peak Summer Day Hourly Dispatch (MW)												
Hour	Customer Oriented		Power Transactions		Energy Storage		Generation Resources					
	Load	Demand Response	Sales	Purchases	Charging	Discharging	Nuclear	Natural Gas	Coal	Oil	Other	Solar
1	5,865	-	224	60	-	-	-	5,606	200	-	-	-
2	5,417	-	206	60	-	-	-	5,157	200	-	-	-
3	5,094	-	193	60	-	-	-	4,834	200	-	-	-
4	4,901	-	186	60	156	-	-	4,797	200	-	-	-
5	4,820	-	182	60	212	-	-	4,772	200	-	-	-
6	5,018	-	190	60	15	-	-	4,772	200	-	-	-
7	6,408	-	245	60	-	325	-	5,823	200	-	-	-
8	5,824	-	222	60	-	-	-	5,318	200	-	-	246
9	6,153	-	235	60	668	-	-	4,047	200	-	-	2,515
10	6,593	-	253	60	875	-	-	3,125	200	-	-	4,083
11	7,095	-	273	60	875	-	-	3,080	200	-	-	4,631
12	7,674	-	296	60	810	-	-	3,462	200	-	-	4,763
13	8,232	-	318	60	526	-	-	4,038	200	-	-	4,460
14	8,777	-	340	60	128	-	-	4,191	200	-	-	4,453
15	9,190	-	356	60	-	-	-	4,879	200	-	-	4,051
16	9,909	-	385	60	-	-	-	6,576	560	-	-	2,713
17	10,015	-	389	60	-	-	-	6,790	710	-	-	2,456
18	10,323	-	401	60	-	336	-	7,034	710	-	-	2,183
19	9,560	-	371	60	-	664	-	7,120	710	-	-	1,006
20	9,197	-	356	60	-	875	-	7,413	710	-	-	139
21	8,741	-	338	60	-	875	-	7,080	710	-	-	16
22	8,125	-	314	60	-	550	-	6,806	710	-	-	-
23	7,389	-	284	60	-	-	-	6,619	710	-	-	-
24	6,603	-	253	60	-	-	-	5,983	560	-	-	-

Peak Winter Day Hourly Dispatch (MW)												
Hour	Customer Oriented		Power Transactions		Energy Storage		Generation Resources					
	Total Load	Demand	Sales	Purchases	Charging	Discharging	Nuclear	Natural Gas	Coal	Oil	Other	Solar
1	7,555	-	292	60	-	-	-	6,053	1,442	-	-	-
2	7,528	-	291	60	-	-	-	6,026	1,442	-	-	-
3	7,700	-	298	60	-	87	-	6,111	1,442	-	-	-
4	7,865	-	305	60	-	187	-	6,176	1,442	-	-	-
5	8,251	-	320	60	-	69	-	6,680	1,442	-	-	-
6	8,876	-	345	60	-	458	-	6,755	1,442	161	-	-
7	9,989	-	390	60	-	590	-	7,737	1,442	161	-	-
8	10,268	-	401	60	-	825	-	7,711	1,442	161	-	70
9	10,076	-	393	60	-	84	-	6,563	1,281	-	-	2,089
10	9,219	-	359	60	-	-	-	4,956	561	-	-	3,643
11	8,285	-	322	60	-	-	-	4,309	335	-	-	3,581
12	7,551	-	292	60	50	-	-	3,565	335	-	-	3,642
13	6,910	-	267	60	564	-	-	3,531	335	-	-	3,549
14	6,355	-	245	60	770	-	-	3,102	335	-	-	3,629
15	5,989	-	230	60	825	-	-	2,701	335	-	-	3,718
16	5,973	-	229	60	816	-	-	2,826	335	-	-	3,568
17	6,228	-	240	60	622	-	-	4,016	335	-	-	2,440
18	6,872	-	265	60	-	-	-	5,547	962	-	-	304
19	7,763	-	301	60	-	634	-	5,616	1,442	-	-	11
20	7,904	-	306	60	-	775	-	5,616	1,442	-	-	11
21	7,795	-	302	60	-	667	-	5,616	1,442	-	-	11
22	7,610	-	295	60	-	658	-	5,616	1,276	-	-	-
23	7,099	-	274	60	-	50	-	5,547	1,442	-	-	-
24	6,705	-	259	60	-	158	-	5,433	1,055	-	-	-

61. If the Company utilizes non-firm generation sources in its system portfolio, please detail whether it currently utilizes or has considered utilizing energy storage technologies to provide firm capacity from such generation sources. If not, please explain.

- a. Based on the Company's operational experience, please discuss to what extent energy storage technologies can be used to provide firm capacity from non-firm generation sources. As part of your response, please discuss any operational challenges faced and potential solutions to these challenges.

RESPONSE:

Solar generation is an intermittent or non-firm resource reliant on weather conditions coupled with time of day to allow for appropriate solar irradiation to create power output for the grid. Excess energy can be used to charge an energy storage system to firm the output of the site in case of a change in cloud cover whether co-located or only nearby on the system. Winter peak load demand does not coincide with peak solar generation output. Power stored in energy storage systems during the day can be discharged prior to sunrise or after sunset to provide more consistent output on a predictable, scheduled basis. DEF continues to examine this opportunity for providing additional firm capacity.

DEF has been testing the DC coupled energy storage located at the Lake Placid Solar Facility. The asset primarily operates in PV smoothing mode but can be dispatched provide firm capacity from the solar facility. DEF is currently developing a suite of solar plus storage projects in Florida to assist with firming solar output in addition to other the other existing grid benefits.

Environmental

62. Please explain if the Company assumes carbon dioxide (CO₂) compliance costs in the resource planning process used to generate the resource plan presented in the Company's current planning period TYSP. If the response is affirmative, answer the following questions:
 - a. Please identify the year during the current planning period in which CO₂ compliance costs are first assumed to have a non-zero value.
 - b. **[Investor-Owned Utilities Only]** Please explain if the exclusion of CO₂ compliance costs would result in a different resource plan than that presented in the Company's current planning period TYSP.
 - c. **[Investor-Owned Utilities Only]** Please provide a revised resource plan assuming no CO₂ compliance costs.

RESPONSE:

DEF did not assume CO₂ compliance costs in the resource planning process used to generate the resource plan presented in the current TYSP.

- a. N/A.
- b. N/A.

c. N/A.

63. Provide a narrative explaining the impact of any existing environmental regulations relating to air emissions and water quality or waste issues on the Company's system during the previous year. As part of your narrative, please discuss the potential for existing environmental regulations to impact unit dispatch, curtailments, or retirements during the current planning period.

RESPONSE:

There was no known occurrence of impacts to unit dispatch, curtailments, or retirements during 2024 due to environmental regulations. DEF is not planning to retire any units in the current planning period as a response to existing environmental regulations. In the past DEF has experienced curtailments of some units related to water temperature restrictions. Because these events are weather related, there is no anticipated curtailment in the plan.

64. For the U.S. EPA's Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Utility Generating Units Rule:

- a. Will your Company be materially affected by the rule?
- b. What compliance strategy does the Company anticipate employing for the rule?
- c. If the strategy has not been completed, what is the Company's timeline for completing the compliance strategy?
- d. Will there be any regulatory approvals needed for implementing this compliance strategy? How will this affect the timeline?
- e. Does the Company anticipate asking for cost recovery for any expenses related to this rule? Refer to the Excel Tables File (Emissions Cost). Complete the table by providing information on the costs for the current planning period.
- f. If the answer to any of the above questions is not available, please explain why.

RESPONSE:

- a. No, DEF has not been materially affected by the EPA's "Standards of Performance for Greenhouse Gas Emissions from New, Modified and Reconstructed Stationary Sources: Electric Utility Generating Units" (CO2 NSPS) final rule. DEF does not anticipate any reliability impacts of this rule. Due to ongoing litigation, EPA is evaluating the potential to regulate additional units and pollutants under Section 112 of the Clean Air Act. The current CO2 NSPS rules remain in effect pending outcome of the review. DEF will evaluate potential applicability to any modifications of existing facilities and will reassess impacts upon promulgation of a final rule.

- b. While DEF’s existing facilities are not materially affected by the rule, DEF will ensure that all future “New” generating facilities comply with standards and will monitor maintenance and compliance activities related to existing facilities that could potentially result in the facilities being identified as "Modified" or "Reconstructed" stationary sources under the rule.
- c. N/A
- d. There are no specific regulatory approvals identified as associated with compliance with this rule.
- e. Please see the table below and tab *Emissions Cost* of the Excel File *2025 TYSP - Data Request #1 - Excel Tables.xlsx*.

Year	Estimated Cost of Standards of Performance for Greenhouse Gas Emissions Rule for New Sources Impacts (Present-Year \$ millions)			
	Capital Costs	O&M Costs	Fuel Costs	Total Costs
2025	0	0	0	0
2026	0	0	0	0
2027	0	0	0	0
2028	0	0	0	0
2029	0	0	0	0
2030	0	0	0	0
2031	0	0	0	0
2032	0	0	0	0
2033	0	0	0	0
2034	0	0	0	0
Notes				
(Include Notes Here)				

65. Explain any expected reliability impacts resulting from each of the EPA rules listed below. As part of your explanation, please discuss the impacts of transmission constraints and changes to units not modified by the rule that may be required to maintain reliability.
- a. Mercury and Air Toxics Standards (MATS) Rule.
 - b. Cross-State Air Pollution Rule (CSAPR).
 - c. Cooling Water Intake Structures (CWIS) Rule.
 - d. Coal Combustion Residuals (CCR) Rule.
 - e. Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Utility Generating Units.

- f. Affordable Clean Energy Rule or its replacement.
- g. Effluent Limitations Guidelines and Standards (ELGS) from the Steam Electric Power Generating Point Source Category.

RESPONSE:

- a. Mercury and Air Toxics Standards (MATS) Rule.
DEF has provided its compliance strategy for MATS in the Integrated Clean Air Compliance Plan submitted to the Commission on March 29, 2019, in Docket 20190007-EI and updated in Docket 20210007-EI. This compliance strategy has been implemented and there are no reliability impacts from this regulation. No additional impacts are expected due to the revisions finalized in 2024.
- b. Cross-State Air Pollution Rule (CSAPR).
DEF sources are not subject to CSAPR and therefore there are no reliability impacts from this regulation.
- c. Cooling Water Intake Structures (CWIS) Rule.
DEF has provided updates on the compliance strategy for CWIS at the Crystal River station in the testimony provided to the Commission on April 1, 2021, Docket No 20210007-EI. There are no reliability impacts from this regulation.

As explained in the prior testimonies of DEF witnesses Patricia West and Kim McDaniel in Dockets 20170007-EI, 20180007-EI, and 20190007-EI, DEF has been conducting 316(b) studies at the Anclote and Bartow stations and study results, along with proposed compliance strategies, were filed with the Florida Department of Environmental Protection (“FDEP”) in July and August 2020, respectively, as part of the NPDES renewal process. The Bartow NPDES permit renewal was issued on January 12, 2023, including a schedule to install modified traveling screens and organism return in compliance with the 316(b) rule within 5 years from issuance of the renewed permit. The final Anclote NPDES permit was issued on May 29, 2024. The permit authorizes the station to initiate an Impingement Mortality Performance Study to determine if modifications to the intake screens are required. The study is expected to commence in April 2025 and will continue for at least 12 months. Upon completion of the study the full compliance strategy for the site can be determined. There are no reliability impacts anticipated with the proposed compliance strategies.

- d. Coal Combustion Residuals (CCR) Rule.
In accordance with the Environmental Protection Agency's CCR contained in 40 CFR Parts 257 and 261, there have been no reliability issues to DEF nor DEF's customers resulting from implementation / compliance with this rule. In 2021 DEF completed the installation of a liner system in the existing sedimentation basin and west ditch. The liner system was installed as a corrective measure to address groundwater quality impacts. Actions to address groundwater exceedances and comply with groundwater assessment mandates resulting from the CCR landfill are described in Docket No. 20190007-EI, approved by

PSC-2019-0500-FOF-EI, and updated in Docket Nos. 20200007-EI, 20210007-EI, and Docket No. 20220007-EI. This compliance strategy is not expected to have any impacts on reliability. In 2024 EPA finalized the Legacy CCR Rule, effective November 8, 2024, which requires a Facility Evaluation Report. This report is currently in progress.

- e. Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Utility Generating Units.

The "new" units (Citrus Combined Cycle Units) affected by these standards meet the compliance requirements outlined in the rule. This compliance strategy is not expected to have any impact on reliability. DEF does not anticipate impacts on reliability due to the rule proposed in December 2024. DEF will reassess impacts upon promulgation of a final rule.

- f. Affordable Clean Energy Rule or its replacement.

On January 19, 2021, the court vacated the ACE rule and remanded it back to EPA. Currently, neither the ACE rule nor Clean Power Plan rule are in effect. On October 29, 2021, the Supreme Court agreed to hear the appeal of 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. In April 2024 EPA finalized a replacement rule, establishing GHG performance standards for existing fossil fuel-fired EGUs and new natural gas combustion turbines. The EPA rule implements more protective GHG emission standards, which are applicable to several DEF coal and natural gas combustion turbine units. DEF is evaluating compliance options and staying abreast of impacts from EPA's review of the rule.

- g. Effluent Limitations Guidelines and Standards (ELGS) from the Steam Electric Power Generating Point Source Category.

On November 22, 2019, EPA published a revised ELG rule with proposed changes to the FGD effluent and bottom ash transport water limits. EPA published the final ELG Reconsideration Rule on October 13, 2020, with an effective date of December 14, 2020. DEF has evaluated the changes in the ELG Reconsideration Rule and has determined that modifications completed at the Crystal River North station in 2020 under the original rule satisfy the requirements of the ELG Reconsideration Rule. On March 29, 2023, EPA requested comments regarding a proposed rule ("2023 Proposed Rule") revising the Agency's 2020 ELG Reconsideration Rule. The 2024 Final Rule does not require implementation of additional modifications at the Crystal River Units 4&5 Station. The FDEP renewed the NPDES permit for Crystal River Units 4 and 5 on October 23, 2023, and appropriately applied the 2020 Reconsideration Rule provisions with which the facility is fully compliant. Should Crystal River Units 4 and 5 operate past December 31, 2034, the units could require additional technology. There are no anticipated reliability impacts from this rule.

66. Please refer to the Excel Tables File (EPA Operational Effects). Complete the table by identifying, for each unit affected by one or more of EPA's rules, what the impact is for each rule, including: unit retirement; curtailment; installation of additional emissions controls: fuel switching: or other impacts identified by the Company.

RESPONSE:

Please see the table below and tab *EPA Operational Effects* of the Excel File 2025 TYSP.SDR_1. Excel Tables.xlsx.

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Capacity (MW)		Estimated EPA Rule Impacts: Operational Effects						
							Net							CCR	
					Mo	Yr	Sum	Win	ELGS	ACE or replacement	MATS	CSAPR/CAIR	CWIS	Non-Hazardous Waste	Special Waste
Anclote	1	Pasco	Steam	NG	Oct	1974	508	521	NA	NA	Convert to NG	Convert to NG	Impacted	NA	NA
Anclote	2	Pasco	Steam	NG	Oct	1978	497	504	NA	NA	Convert to NG	Convert to NG	Impacted	NA	NA
P L Bartow	CC	Pinellas	CC	NG	Jun	2009	1142	1200	NA	NA	NA	Dispatch Changes	Impacted	NA	NA
Citrus Combined Cycle	CC	Citrus	CC	NG	Oct	2018	1617	1854	NA	NA	NA	NA	Compliant as Constructed	NA	NA
Crystal River	4	Citrus	Steam	Coal	Dec	1982	712	721	Impacted	Impacted	Reagent, CEMS	FGD, SCR, Dispatch	Impacted	Impacted	NA
Crystal River	5	Citrus	Steam	Coal	Oct	1984	710	721	Impacted	Impacted	Reagent, CEMS	FGD, SCR, Dispatch	Impacted	Impacted	NA
Osprey	CC	Polk	CC	NG	May	2004	245	245	NA	NA	NA	NA	NA	NA	NA
Hines	1-4	Polk	CC	NG	Aug	1998	2100	2149	NA	NA	NA	Dispatch Changes	NA	NA	NA
Notes															
(Include Notes Here)															

67. Please refer to the Excel Tables File (EPA Cost Effects). Complete the table by identifying, for each unit impacted by one or more of the EPA's rules, what the estimated cost is for implementing each rule over the course of the planning period.

RESPONSE:

Please see the table below and tab *EPA Cost Effects* of the Excel File 2025 TYSP.SDR_1. Excel Tables.xlsx.

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Capacity (MW)		Estimated EPA Rule Impacts: Cost Effects						
							Net		ELGS	ACE or replacement	MATS	CSAPR/CAIR	CWIS	CCR	
					Mo	Yr	Sum	Win						Non-Hazardous Waste	Special Waste
Anclote	1	Pasco	Steam	Natural Gas	Oct	1974	508	521	N/A	N/A	0	0	15-130	N/A	N/A
Anclote	2	Pasco	Steam	Natural Gas	Oct	1978	497	504			0	0		N/A	N/A
P.L. Bartow	CC	Pinellas	CC	Natural Gas	Jun	2009	1142	1200	N/A	N/A	0	0	20 - 50	N/A	N/A
Crystal River	4	Citrus	Steam	Coal	Dec	1982	712	721	TBD	TBD	0	0	1 - 3	TBD	0
Crystal River	5	Citrus	Steam	Coal	Oct	1984	710	721			0	0			0
Notes															
(Include Notes Here)															

68. Please refer to the Excel Tables File (EPA Unit Availability). Complete the table by identifying, for each unit impacted by one or more of EPA's rules, when and for what duration units would be required to be offline due to retirements, curtailments, installation of additional controls, or additional maintenance related to emission controls. Include important dates relating to each rule.

RESPONSE:

Please see the table below and tab *EPA Unit Availability* of the Excel File 2025 TYSP.SDR_1. Excel Tables.xlsx.

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Capacity		Estimated EPA Rule Impacts: Unit Availability						
							Net		ELGS	ACE or replacement	MATS	CSAPR/CAIR	CWIS	CCR	
					Mo	Yr	Sum	Win						Non-Hazardous Waste	Special Waste
Anclote	1	Pasco	Steam	NG	Oct	1974	508	521	NA	NA	NA	NA	TBD	NA	NA
Anclote	2	Pasco	Steam	NG	Oct	1978	497	504	NA	NA	NA	NA	TBD	NA	NA
P.L. Bartow	CC	Pinellas	CC	NG	Jun	2009	1142	1200	NA	NA	NA	NA	TBD	NA	NA
Citrus CC	CC	Citrus	CC	NG	Oct	2018	1617	1854	NA	NA	NA	NA	NA	NA	NA
Crystal River	4	Citrus	Steam	Coal	Dec	1982	712	721	NA	TBD	NA	NA	NA	TBD	NA
Crystal River	5	Citrus	Steam	Coal	Oct	1984	710	721	NA	TBD	NA	NA	NA	TBD	NA
Osprey	CC	Polk	CC	NG	May	2004	245	245	NA	NA	NA	NA	NA	NA	NA
Hines	1-4	Polk	CC	NG	Aug	1998	2100	2149	NA	NA	NA	NA	NA	NA	NA
Notes (Include Notes Here)															

69. If applicable, identify any currently approved costs for environmental compliance investments made by your Company, including but not limited to renewable energy or energy efficiency measures, which would mitigate the need for future investments to comply with recently finalized or proposed EPA regulations. Briefly describe the nature of these investments and identify which rule(s) they are intended to address.

RESPONSE:

DEF's currently approved costs for environmental compliance investments which may be considered in the EPA's future CO2 regulations include plant conversions to natural gas, coal resource retirements, and utilizing advanced natural gas technologies as discussed in detail in question #65. These plans were undertaken to address the requirements of various new or forthcoming rules. The retirement of Crystal River units 1 and 2 in response to MATS and the Regional Haze rule also reduced the impacts of the CCR rule, the CWIS rule and updates to the State Implementation Plan to achieve attainment with SO2 and Ozone National Ambient Air Quality Standards (NAAQS). This retirement reduced DEF's CO2 footprint. The conversion of the two units at Anclote to natural gas firing in response to MATS similarly reduced priority pollutant emissions and the resultant risk around future updates to the NAAQS as well as CO2 emissions.

Until the EPA's CO2 emission reduction regulations are clearly defined, DEF can only estimate which investments would contribute to compliance and to what degree. DEF does, however, have some approved renewable energy and energy efficiency investments, recovered or administered under the energy conservation cost recovery clause that may mitigate the need for some limited future investments that may be contemplated in the EPA's future CO2 regulations; and, finally, DEF continues to evaluate clean energy technologies and prudently prepare now for a CO2 constrained future.

Fuel Supply & Transportation

70. Please refer to the Excel Tables File (Energy Rates). Complete the table by providing information on the Utility's firm capacity and energy purchases, non-firm energy purchases, and the utility's as-available energy rate. If the Company uses multiple areas for as-available energy rates, please provide a system-average rate as well.

RESPONSE:

Please see the table below and tab *Energy Rates* of the Excel File 2025 TYSP.SDR_1. Excel Tables.xlsx.

Year		Firm Purchase Rates		Non-Firm Purchase Rates		As-Available Energy Rates		
		Annual Average	Escalation Rate	Annual Average	Escalation Rate	Annual Average	On-Peak Average	Off-Peak Average
		(\$/MWh)	(%)	(\$/MWh)	(%)	(\$/MWh)	(\$/MWh)	(\$/MWh)
Actual	2015	72.15		43.00		26.03	28.74	23.74
	2016	37.98	-0.47	31.82	-0.26	25.97	29.79	22.73
	2017	43.78	0.15	33.00	0.04	28.97	32.44	26.03
	2018	46.91	0.07	46.95	0.42	30.84	34.80	27.49
	2019	40.12	1.72	36.76	-0.22	23.71	27.22	20.73
	2020	35.80	0.09	31.32	-0.15	18.57	21.22	16.33
	2021	52.19	0.13	53.11	0.70	34.45	40.53	29.30
	2022	85.75	0.14	105.54	0.99	61.67	73.74	51.45
	2023	53.76	0.06	60.49	-0.43	24.47	28.56	21.00
Projected	2024	39.60	0.09	61.68	0.02	21.80	25.32	18.81
	2025	46.96	0.07	33.07	-0.46	29.15	32.70	26.15
	2026	47.62	-0.08	38.66	0.17	32.21	36.23	28.80
	2027	48.76	0.10	41.93	0.08	32.72	37.40	28.76
	2028			42.71	0.02	32.02	36.51	28.22
	2029			36.62	-0.14	29.82	33.39	26.80
	2030			32.31	-0.12	28.81	31.04	26.92
	2031			34.05	0.05	30.63	32.28	29.23
	2032			38.73	0.14	33.92	35.30	32.76
Notes	2033			41.75	0.08	37.11	38.21	36.18
	2034			42.55	0.02	39.72	40.69	38.89
Firm Purchase Rates don't include capacity payments								

71. Please refer to the Excel Tables File (Fuel Usage & Price). Complete the table by providing, on a system-wide basis, the actual annual fuel usage (in GWh) and average fuel price (in nominal \$/MMBTU) for each fuel type utilized by the Company in the 10-year period prior to the current planning period. Also, provide the forecasted annual fuel usage (in GWh) and forecasted annual average fuel price (in nominal \$/MMBTU) for each fuel type forecasted to be used by the Company in the current planning period.

RESPONSE:

Please see the table below and tab *Fuel Usage & Price* of the Excel File 2025 TYSP.SDR_1. Excel Tables.xlsx.

Year	Uranium		Coal		Natural Gas		Residual Oil		Distillate Oil		Hydrogen		Other (Specify)	
	GWh	\$/MMBTU	GWh	\$/MMBTU	GWh	\$/MMBTU	GWh	\$/MMBTU	GWh	\$/MMBTU	GWh	\$/MMBTU	GWh	\$/MMBTU
Actual	2015	-	-	9,718	3.72	25,227	4.67	-	-	72.85	22.30	-	-	-
	2016	-	-	8,885	3.62	24,807	4.09	-	-	77.00	18.66	-	-	-
	2017	-	-	8,722	3.44	27,307	4.26	-	-	62.00	16.43	-	-	-
	2018	-	-	8,422	3.20	28,687	4.52	-	-	90.00	19.80	-	-	-
	2019	-	-	4,322	3.66	35,170	3.93	-	-	33.05	20.36	-	-	-
	2020	-	-	3,287	3.66	36,327	3.37	-	-	33.06	22.28	-	-	-
	2021	-	-	5,042	3.03	34,517	5.28	-	-	61.41	20.27	-	-	-
	2022	-	-	4,375	4.58	36,423	8.50	-	-	145.95	22.63	-	-	-
	2023	-	-	3,829	4.61	35,526	4.16	-	-	28.88	26.51	-	-	-
Projected	2024	-	-	3,262	4.41	37,494	3.74	-	-	29.53	25.75	-	-	-
	2025	-	-	2,269	2.95	36,924	3.41	-	-	6.47	15.65	-	-	-
	2026	-	-	1,789	3.60	38,080	3.79	-	-	8.65	15.80	-	-	-
	2027	-	-	1,590	3.68	37,635	3.83	-	-	29.60	16.07	-	-	-
	2028	-	-	1,585	3.77	37,060	3.76	-	-	24.49	16.53	-	-	-
	2029	-	-	1,372	3.84	36,708	3.69	-	-	15.93	17.11	-	-	-
	2030	-	-	1,252	3.98	36,332	3.79	-	-	4.89	17.53	-	-	-
	2031	-	-	1,400	4.08	34,435	4.12	-	-	2.38	17.85	-	-	-
	2032	-	-	1,350	4.23	33,423	4.64	-	-	5.36	18.08	-	-	-
	2033	-	-	1,475	4.38	32,280	5.18	-	-	1.41	18.43	-	-	-
	2034	-	-	657	4.46	32,440	5.35	-	-	3.29	18.70	-	-	-
Notes														
(Include Notes Here)														

Projected values include commodity price and variable transportation cost.

Actual values include commodity prices, variable and fixed transportation cost, surcharge delivery costs, and cost of existing inventory (coal sitting on the pile, oil in the tanks).

72. Please discuss how the Company compares its fuel price forecasts to recognized, authoritative independent forecasts.

RESPONSE:

DEF's fuel price forecasts are developed based on the forward market price for the first five years, followed by the long-term fundamental forecast beyond year five. The fundamental forecast is created as a composite of several nationally recognized fuel forecasts including both publicly available data (e.g. EIA) and purchased proprietary forecasts prepared by major consulting companies.

As part of its forecast comparison process, Duke Energy compares its composite fundamental commodity price outlooks to a range of individual forecasts, including both public forecasts like EIA, and proprietary outlooks from other leading energy consultants. Duke Energy also compares supply and demand fundamentals where they are available to review the underlying drivers. Natural gas and distillate fuel oil are widely traded commodities with multiple forecasts although these forecasts are influenced by views of not only domestic supply and demand effects, but also international market trends. Coal price forecast comparisons are more tenuous given the limited number of qualified outlooks, the significance of transportation cost and the non-homogeneous nature of the commodity itself. Duke Energy utilizes direct comparisons for selecting coal product qualities widely available in the market. Since the objective of Duke Energy fundamental forecasting process is to produce a comprehensive internally consistent forecast, Duke Energy also performs checks that the final price forecast is intuitively aligned with the supply/demand balances across the various commodities.

73. Please identify and discuss expected industry trends and factors for each fuel type listed below that may affect the Company during the current planning period.

- a. Coal.
- b. Natural Gas.
- c. Nuclear.
- d. Fuel Oil.
- e. Other (please specify each, if any).

RESPONSE:

- a. Coal

Over the course of 2023, near term coal pricing for CAPP, NAPP and ILB regions declined from the historically high levels in 2022 in response to low natural gas prices and an overall lack of generation demand to almost pre-pandemic levels. Throughout 2024, the published prices for U.S. coal markets remained relatively unchanged as low natural gas prices and high utilities inventories resulted in lower overall demand. For the ten year forecast period, on average, the high-sulfur high chlorine Illinois basin coal prices generally are in the low to mid \$40's per ton increasing to the low to mid-\$50's for the balance of the period, while Illinois basin low chlorine coal prices are mid \$40's per ton increasing to low \$60's per ton in the back half of the period. Central Appalachia coal prices are high \$70's per ton increasing to the low \$80's before breaking \$90 per ton in the last two years of the period; Northern Appalachia coal prices are low to mid \$50's per ton increasing to the mid-\$60's across the period; Powder River Basin coal prices are in the low to mid-teens escalating to the high teens; and Colorado coal prices are \$63 per ton in the first year of the period declining to the low-\$50's before rebounding to the mid-\$50's in the back half of the period. Despite the published coal market prices, the impacts of rising production costs on individual mining operations may result in higher coal contract prices than market publications imply.

Coal demand is primarily driven by changes in electric power consumption and is expected to continue to experience a high degree of market volatility over the next decade due to a number of factors, including: (1) the inability of coal suppliers to respond timely to changes in demand; (2) natural gas price volatility; (3) continued uncertainty regarding proposed and imposed U.S. Environmental Protection Agency ("EPA") regulations for power plants; (4) volatility in global demand for both steam and metallurgical coal; (5) tightened access to investor financing; (6) continued shifts in production between thermal and metallurgical coal; and, (7) continued labor and resource constraints further limiting suppliers' operational flexibility. International coal pricing assumptions are not currently accounted for in long-term fundamental price modeling. In the future if domestic coal

supply becomes increasingly constrained, importing international supply may become necessary to ensure adequate supply.

Finally, declining demand for coal in the utility sector has also driven transportation providers to modify their business models to be less dependent on coal-related transportation revenues. Transportation providers generally have limited ability to quickly adapt to significant changes in scheduling demand resulting from the Company's burn volatility. DEF expects barge and rail transportation to remain key components of its transportation portfolio during the planning period and maintains communications with its transportation providers as well as its coal suppliers to actively explore opportunities to maintain cost competitive transportation to its coal generating station.

b. Natural Gas

Over the planning horizon there are a number of trends that could have an impact on natural gas prices, and the overall supply and demand for domestic natural gas. First, is the level of production of domestic natural gas, particularly from associated gas. Second, is the forecasted growth in the use of natural gas from electric power generation, and the industrial sector. Third, is the level of natural gas exports via pipelines to Mexico, and LNG to the global natural gas market from U.S. export facilities.

The U.S. Energy Information Agency ("EIA") routinely publishes a long-term forecast of energy market fundamentals ("Annual Energy Outlook") that is used as a guide for long term planning. The next update is expected Spring 2025 as the EIA is currently working to implement changes as they require "substantial updates to better model hydrogen, carbon capture, and other emerging technologies". Until then, according to the most recent Short Term Energy Outlook (STEO) published March 11, 2025, the EIA projects total U.S. dry natural gas production to grow from 103 Bcf/day in 2024 to as high as 109 Bcf/day by end of 2026. Permian Basin is the primary driver behind associated natural gas growth. Increases in shale gas production mainly come from the Texas-Louisiana Haynesville Basin and the Appalachian Basin. Additional production growth from the Marcellus and Utica plays in the Appalachia region could be limited by the lack of new pipeline infrastructure projects. In 2026, the EIA forecasts domestic natural gas consumption will be approximately 91 Bcf/day, with a total volume of net exports at approximately 18 Bcf/day. Power generation is expected to be approximately 36 Bcf/day of the domestic natural gas demand in 2026. U.S. LNG exports averaged 11.9 Bcf/d in 2024 and are expected to grow to an average of 16.4 Bcf/d in 2026.

Domestic production is expected to continue outpacing domestic consumption with the excess going to meet export demand. Planned production versus domestic and export demand is expected to bring markets into greater equilibrium and increase prices from the recent lows seen in 2023 and 2024. In 2024, spot prices at the Henry Hub averaged \$2.28 per MMBtu and are expected to average \$4.64 in 2026.

c. Nuclear

DEF has retired the Crystal River 3 Nuclear plant and does not plan to add a new nuclear unit in the ten-year horizon. Therefore, it does not expect to be significantly impacted by trends and factors of nuclear fuel.

d. Fuel Oil

With respect to industry trends, per the EIA's STEO for 2025 published March 11, 2025, expectations are for production growth in global production volumes driven mostly by the extension of OPEC+ and further growth expected from countries outside of OPEC+. Because of the economic growth concerns related to potential tariffs by both the United States and other trade partners, expectations are for Brent crude spot prices to average ~\$75 per barrel by Q3 2025. The STEO expects Brent Crude to average \$74 per barrel for the full year 2025 and WTI to average \$70 for the same period. The STEO forecast shows a downward projection on pricing through 2026, with Brent averaging \$68 per barrel and WTI projected to average \$65 per barrel for the same period. Actual price outcomes are dependent on global market production which is affected by 1) the ongoing unrest in the Middle East; 2) existing sanctions imposed on Russia and recently announced sanctions on Iran; as well as 3) the revocation of licenses for Venezuela oil exports. All which have served to increase oil price volatility in recent weeks. In addition, the degree to which other oil producers respond to current oil prices, as well as the effects macroeconomic developments might have on global oil demand, will be important for oil price formation in the coming months. EIA's Short Term Energy Outlook forecasts that global consumption of petroleum and liquid fuels will increase by 1.3 million barrels per day in 2025 to a global average of 104.1 million barrels per day and 1.2 million barrels per day in 2026 for a global average of 105.3 million barrels per day, driven primarily by demand from non-OECD Asia.

DEF will continue to monitor oil prices, trends and its fuel forecast over time and will procure needed fuel oil supply and transportation services to meet its generation fleet needs over the planning horizon. As new information becomes available, DEF will monitor this information for potential developments.

74. Please provide a comparison of the Utility's 2024 fuel price forecast used to prepare its 2024 TYSP and its actual 2024 delivered fuel prices.

RESPONSE:

Year		Coal		Natural Gas		Distillate Oil	
		GWh	\$/MMBTU	GWh	\$/MMBTU	GWh	\$/MMBTU
Projected	2024	2,157	3.37	36,625	3.59	7	21.01
Actual	2024	3,262	3.74	37,494	4.41	30	25.75
Notes							
(Include Notes Here)							

Projected values include commodity price and variable transportation cost.

Actual values include commodity prices, variable and fixed transportation cost, surcharge delivery costs, and cost of existing inventory (coal sitting on the pile, oil in the tanks).

75. Please explain any notable changes in the Utility's forecast of fuel prices used to prepare the Utility's current TYSP compared to the fuel process used to prepare the Utility's prior TYSP.

RESPONSE:

DEF's 2025 TYSP is based on fuel forecasts developed in the Fall of 2024. Markets continue to change based on both near-term and projected long-term factors. 2024 represented a year of return to "normal" market behavior, recovered from the dislocation of the COVID pandemic and adjusted to the impacts of sanctions on Russian oil and gas supplies.

US natural gas markets adjusted for higher LNG demand in a way that allowed a steady decline in prices to a point roughly on par with pre-2022 prices. Although 2024 prices were below the recent average for much of the year, 2025 and 2026 prices are expected to rise due to increased demand related to increasing electric demand and low storage volumes at the end of 2024. DEF forecasts natural gas prices to be below the long-term fundamentals and generally stable for the next several years before generally rising beyond 2030. On average

DEF's Fall 2024 forecast projects natural gas prices to be approximately 10% below the Fall 2023 forecast for the 2025-2030 period, but 5% higher in the 2031-2035 period as fundamental lifting costs are projected to rise with inflationary pressures.

Coal prices have also returned to pre-COVID levels and are expected to remain stable for the next three to five years. The 2023 Fall forecast projected some lingering influence of the high price hangover from the 2022 fuel price spike. More recent movement in the spot market has yielded lower prices for 2024 and 2025 than forecast in the 2023 forecast. On average DEF's Fall 2024 forecast projects coal prices to be approximately 3% below the Fall 2024 forecast. In general, the Fall 2024 forecast shows that coal prices are moving in a very similar trend to the gas prices over the next 10 years.

Distillate oil comprises a very small portion of DEF's annual fuel cost. The price of distillate oil moves with worldwide economic trends and is closely tied to forces in the transportation fuel market. Overall, DEF's 2024 Fall fuel forecast is only slightly changed from the 2023 Fall forecast over the next 5 years and lower by approximately 5% over the 10-year period.

76. Please identify and discuss steps that the Company has taken to ensure natural gas supply availability and transportation over the current planning period.

RESPONSE:

DEF has broad contacts and relationships with natural gas suppliers and pipeline transportation providers. DEF performs short-term and long-term fuel forecasts to project estimated fuel usage for future periods. The short-term forecasts typically cover a period of five years, and the long-term forecasts cover years six through year twenty. Fuel forecasts include items such as, but not limited to, load forecasts, fuel and emission prices, operational specifics of owned

generation and contracted generation resources, wholesale power sales agreements, and unit maintenance schedules. The short-term forecast is performed approximately four times per year for a five-year period and currently covers years 2025 through 2030. The long-term forecast is performed two times per year and currently covers years 2031 through 2050.

To ensure that DEF has the needed natural gas supply to meets its generation needs over the planning horizon, DEF performs periodic competitive natural gas supply Request for Proposals (“RFP’s”) and market solicitations to procure the needed competitively priced natural gas supply consistent with its procurement approach. In addition, DEF also monitors potential pipeline expansion projects that can access competitively priced and secure natural gas for delivery to DEF’s facilities. DEF monitors potential pipeline expansions through on-going discussions and periodic meetings with gas suppliers and pipeline providers, open seasons issued by pipelines, industry events, and publications.

Emerging Technologies

77. **[FEECA Utilities Only]** Please refer to the Excel Tables File tabs listed below. Complete the tables by providing information on the data centers for the time period listed.

- a. Excel Tables File (Existing Data Centers), including for data centers being served as of December 31 of the year prior to the current planning period.
- b. Excel Tables File (Planned Data Centers), including for data centers that are planned during the current planning period.

RESPONSE:

- a. Please see the table below and tab *Existing Data Centers* of the Excel File 2025 TYSP.SDR_1. Excel Tables.xlsx.

Table I: Current Data Center Information										
Data Centers Currently Located in Utility Service Area										
Total No. of Data Centers	Customer Class Served	Total Energy Usage in 2024	Impact to Summer Peak Demand	Impact to Winter Peak Demand	Seasonality Observed, if any	For each of the Data Centers				
							Type of Data Center*	Energy Used in 2024	Hours of Peak Usage**	Impact to Peak Demand
								(MWHs)		(MWs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
5	B2B	48,000	14.5	7	N/A	1	Colocation	7,815	1:00	1.69
						2	Colocation/cloud	7,958	1:15	1.78
						3	Colocation/cloud	5,892	1:15	1.28
						4	Colocation	10,733	1:00	
						5	Colocation/cloud	2,179	2:15	0.48
* Examples of the data center types: colocation, enterprise, cloud, edge, and micro data.										
** Based on military time 1 - 24.										

- b. Please see the table below and tab *Planned Data Centers* of the Excel File 2025 TYSP.SDR_1. Excel Tables.xlsx.

Table II: Planned Data Center Information						
Planned Data Centers in Your Service Area						
	Type of Data Center*	Customer Class Served	Expected In-Service Data	Expected Annual Energy Usage	Expected Impact to Summer Peak Demand	Expected Impact to Winter Peak Demand
				(MWHs)	(MWs)	(MWs)
	(1)	(2)	(3)	(4)	(5)	(6)
1	Hybrid Cloud Solutions (Colocation & Cloud)	B2B	4Q 2025	8	5	4
2						
3						
...						

* Examples of the data center types: colocation, enterprise, cloud, edge, and micro data.

78. With respect to the load forecast included in the Utility's 2025 Ten-Year Site Plan to be filed in April this year, does the load forecast include projections of annual energy consumption and demand associated with data centers within your service area during the forecasting time horizon (2025-2034)?

- If any such projections have been made, please provide details of the projections including the type of data centers expected to contribute to such energy/demand, and what factors are driving such energy consumption and demand.
- If no specific projections have been made, what does the Utility believe is the likely pattern of load growth associated with this industry within its service territory?

RESPONSE:

- DEF has included the forecast for data centers currently operating in the DEF territory and identified expansions from those customers. These are included in the overall DEF forecast of commercial load. Details are provided in the response to Question 77.
- DEF has received inquiries from a number of potential new customers. None of these progressed to the level of commitment that would warrant inclusion in the DEF 2025 TYSP load forecast. Because these inquiries are of a preliminary nature and lack specifics of timing, location, and load, it is not clear at this time what a realistic projection of this development, if any, would be. DEF will continue to update its load forecast as greater certainty emerges.

79. Please identify the Utility's issues and/or concerns, if any, that are expected to result from the growth in data centers in your utility's service territory. Please also specify how has, and how does, your utility anticipate responding to such issues or concerns.

RESPONSE:

DEF recognizes that substantial increases in load, if they were to materialize, would require new infrastructure in both generation and transmission. The specific scope of that infrastructure will depend on the timing, scale, and location of the load. As it does with any proposed load growth, DEF will evaluate the potential impacts and work with the customer to accommodate their requirements while maintaining service and protecting the interests of its existing customers.

80. **[FEECA Utilities Only]** Please identify and discuss the Company's role in the research and development of utility power technologies, including, but not limited to, research programs that are funded through the Energy Conservation Cost Recovery Clause. As part of this response, please describe any plans to implement the results of research and development into the Company's system portfolio, and the timing of such implementation. In addition, discuss how any anticipated benefits will affect your customers.

RESPONSE:

DEF continues to work using its own resources and in collaboration with a wide range of partners to investigate and develop new technologies to enhance the reliability and efficiency of the DEF generation, transmission, and distribution systems.

DEF is continuing several technology projects begun under its Vision Florida program. Included in this are:

- The Suwannee Long Duration Energy Storage project which will evaluate the operation of an 8-hour, non-lithium battery storage technology on the DEF system. This project is expected to come into service in the second quarter of 2025.
- The Debary Hydrogen project which will evaluate the costs, feasibility, and the safety and operational issues of using hydrogen to power a combustion turbine. This project includes hydrogen generation powered by solar generation, hydrogen storage, conversion of an existing turbine to hydrogen service, and operation of the unit. This project is expected to begin generation in the third quarter of 2025.
- The Hunter's Creek residential battery storage pilot. This project will install up to 100 Generac PWRcell systems along Hunters Creek feeder to seek proof of concept that residential battery storage is a suitable solution to defer distribution feeder upgrades through peak load shaving.

DEF also has a wide variety of customer energy efficiency initiatives. These are detailed in Schedule CT-5 of DEF's most recent filing under the Energy Conservation Cost Recovery Clause. Projects under this umbrella include advanced communication and control of residential devices including thermostats, PV, batteries, and appliances; vehicle to grid technology, ultra efficient air conditioning units, and long duration batteries for customer micro-grids.

81. Has the Utility employed, or considered using, any type of artificial intelligence and/or other new technologies/tools in its load forecasting, operation, customer service, and cybersecurity management? Please explain your response.

RESPONSE:

DEF continues to evolve its short- and long-term forecasting approaches. DEF's current modeling practices utilize regression based neural networks to provide insight into its human based forecasting. As technology evolves, DEF will continue to monitor innovation opportunities.

82. Please identify and discuss emerging power generation and consumption technologies your Company is considering. As part of this response, please describe any formal steps the Company has or will take for possible implementation of the technology.

RESPONSE:

DEF continues to evaluate the potential benefits of emerging technologies to provide affordable generation and to enhance the reliability and resilience of the DEF system.

Over the course of the last several years, DEF has widely deployed Solar PV generation at a utility scale. This generation has moved from evolving to a fully commercial part of DEF's portfolio. DEF continues to develop the integration of solar generation into its operations through improved solar forecasting and the implementation of more flexibility in its conventional generating fleet to better complement the variable nature of the solar development.

DEF has completed the construction and deployment of seven battery energy storage systems (BESS) totaling 50 MW. These BESS installations provide DEF with at scale experience in operation of BESS in a variety of services. DEF proposes in the current TYSP to deploy over 1300 MW of BESS over the next 10 years including over 500 MW in the next 5 years. These batteries will provide capacity support during peak load periods and will be operated in concert with the solar generation to efficiently capture and supply energy to smooth solar variability and improve fleet efficiency by capturing energy during low-cost periods and supplying that energy during higher cost periods.

DEF is constructing a long duration battery. Located at DEF's Suwannee Power Plant, the Suwannee Long Duration BESS will be a 5MW, 40 MWhr (8-hr duration) battery that will enable DEF to evaluate the operation of non-lithium battery technology and to better understand the use cases for longer duration storage. DEF expects the Suwannee long duration storage system to be in operation in the second half of 2025.

DEF is constructing a hydrogen generation facility at its DeBary Power Station. Hydrogen from this system will be used to fuel one of the existing DeBary peakers utilizing hydrogen generated with electricity generated primarily from solar generation. DEF will evaluate the

operational impacts of various hydrogen blends (25-100%), operational reliability, ongoing costs, hydrogen storage operation and safety. These learnings will inform DEFs future hydrogen deployment strategies.

TYSP Year

2025

Tab Name	DR No.
Table of Contents	-
Financial Assumptions	3(a)
Financial Escalation	3(b)
Hourly System Load	4
Historic Peak Demand	5
PEV Charging	18
DR Participation	27
DR Activations	28
Existing Utility	29(a)
Planned Utility	29(b)
Planned PPSA	33
Planned Construction	34
Unit Performance	35
Unit Dispatch	36
Solar and Storage Sites	38
Unit Modifications	40
Transmission Lines	41
Existing PPA	42(a)
Planned PPA	42(b)
Existing PSA	45(a)
Planned PSA	45(b)
Renewables	48
Existing Storage	55
Planned Storage	56
Reliability	58
Firm Solar	60
Emissions Cost	64(e)
EPA Operational Effects	66
EPA Cost Effects	67
EPA Unit Availability	68
Energy Rates	70
Fuel Usage & Price	71
Existing Data Centers	77(a)
Planned Data Centers	77(b)

TYSP Year 2025
 Question No. 3(a)

Financial Assumptions			
Base Case			
AFUDC Rate		(%)	8.11
Capitalization Ratios	Debt	(%)	47.00
	Preferred	(%)	
	Equity	(%)	53.00
Rate of Return	Debt	(%)	5.65
	Preferred	(%)	
	Equity	(%)	10.30
Income Tax rate	State	(%)	5.50
	Federal	(%)	21.00
	Effective	(%)	25.32
Other Tax Rate:		(%)	
Discount Rate:		(%)	7.44
Tax - Depreciation Rate:		(%)	

Tax Depreciation Rate

CT 15 Years (MACRS Table)
 CC 20 Years (MACRS Table)
 Solar and SPS 5 Years (MACRS Table)
 Battery 5 Years (MACRS Table)

TYSP Year 2025

Question No. 3(b)

Financial Escalation Assumptions			
Year	General Inflation	Fixed O&M Cost	Variable O&M Cost
	(%)	(%)	(%)
2025	2.50%	2.50%	2.50%
2026	2.50%	2.50%	2.50%
2027	2.50%	2.50%	2.50%
2028	2.50%	2.50%	2.50%
2029	2.50%	2.50%	2.50%
2030	2.50%	2.50%	2.50%
2031	2.50%	2.50%	2.50%
2032	2.50%	2.50%	2.50%
2033	2.50%	2.50%	2.50%
2034	2.50%	2.50%	2.50%

Year	Plant Construction Cost %				
	CT	CC	Solar	SPS	Battery
2025	0.74%	1.02%	0.94%	0.07%	-1.87%
2026	0.74%	1.02%	0.94%	0.07%	-1.87%
2027	0.74%	1.02%	0.94%	0.07%	-1.87%
2028	0.74%	1.02%	0.94%	0.07%	-1.87%
2029	0.74%	1.02%	0.94%	0.07%	-1.87%
2030	0.74%	1.02%	0.94%	0.07%	-1.87%
2031	0.74%	1.02%	0.94%	0.07%	-1.87%
2032	0.74%	1.02%	0.94%	0.07%	-1.87%
2033	0.74%	1.02%	0.94%	0.07%	-1.87%
2034	0.74%	1.02%	0.94%	0.07%	-1.87%

TYSP Year 2025

Question No. 4

Date	Hourly System Load (MW)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1/1/2024	4,044	4,153	4,150	4,166	4,163	4,322	4,551	4,831	4,912	4,700	4,180	4,070	3,908	3,820	3,775	3,911	4,166	4,480	4,721	4,400	4,227	4,034	3,780	3,455
1/2/2024	3,262	3,110	3,036	3,086	3,221	3,616	4,188	4,679	4,908	4,726	4,438	4,123	4,014	3,920	3,885	3,974	4,210	4,720	5,200	5,264	5,197	5,033	4,760	4,445
1/3/2024	4,330	4,166	4,152	4,171	4,320	4,668	5,315	5,678	5,682	5,293	4,895	4,649	4,317	4,044	3,944	4,059	4,243	4,623	5,000	4,959	4,813	4,453	4,007	3,692
1/4/2024	3,425	3,215	3,151	3,122	3,259	3,533	3,973	4,416	4,630	4,596	4,501	4,431	4,155	3,931	3,843	3,959	4,175	4,570	5,071	5,180	5,090	4,955	4,699	4,331
1/5/2024	4,064	3,977	4,018	4,050	4,203	4,632	5,219	5,578	5,472	4,947	4,418	4,040	3,891	3,820	3,853	3,978	4,146	4,288	4,520	4,394	4,234	4,031	3,775	3,471
1/6/2024	3,231	3,041	2,913	2,893	2,863	2,922	3,074	3,308	3,671	3,976	4,150	4,130	4,088	4,098	4,254	4,362	4,521	4,565	4,681	4,479	4,300	4,049	3,753	3,426
1/7/2024	3,163	2,997	2,855	2,778	2,715	2,747	2,944	3,233	3,606	3,835	3,920	3,828	3,741	3,726	3,787	3,905	4,066	4,298	4,611	4,558	4,445	4,210	3,962	3,650
1/8/2024	3,519	3,382	3,335	3,389	3,519	3,852	4,484	4,936	5,100	5,018	4,957	4,743	4,654	4,543	4,521	4,532	4,586	4,806	5,020	4,889	4,650	4,349	3,898	3,528
1/9/2024	3,212	3,049	2,922	2,884	2,909	3,149	3,583	3,947	4,035	4,151	4,159	4,181	4,236	4,461	4,466	4,489	4,524	4,712	4,560	4,416	4,206	3,931	3,616	3,290
1/10/2024	3,081	3,008	2,968	3,008	3,131	3,462	4,077	4,567	4,538	4,229	4,042	3,895	3,764	3,692	3,707	3,824	4,042	4,426	4,819	4,843	4,796	4,637	4,379	4,046
1/11/2024	3,844	3,785	3,821	3,893	4,083	4,563	5,303	5,783	5,686	5,285	4,963	4,710	4,509	4,337	4,258	4,288	4,419	4,761	5,098	5,055	4,904	4,580	4,193	3,819
1/12/2024	3,545	3,377	3,308	3,262	3,312	3,570	4,009	4,302	4,396	4,436	4,436	4,392	4,301	4,255	4,250	4,292	4,390	4,592	4,746	4,637	4,476	4,305	4,061	3,781
1/13/2024	3,504	3,279	3,134	3,039	3,033	3,044	3,136	3,317	3,584	3,824	3,919	3,860	3,884	3,826	3,824	3,953	4,090	4,296	4,532	4,536	4,386	4,277	4,082	3,889
1/14/2024	3,710	3,557	3,510	3,501	3,555	3,739	4,023	4,645	5,168	5,441	5,465	5,348	5,171	5,176	5,091	4,920	4,714	4,789	5,141	5,135	5,077	4,896	4,619	4,292
1/15/2024	4,038	3,853	3,743	3,703	3,753	3,968	4,373	4,791	4,796	4,605	4,487	4,351	4,261	4,316	4,344	4,325	4,352	4,531	4,762	4,683	4,559	4,289	3,831	3,472
1/16/2024	3,149	2,944	2,813	2,818	2,907	3,178	3,663	4,138	4,235	4,300	4,484	4,582	4,575	4,532	4,546	4,488	4,474	4,725	5,117	4,982	4,739	4,404	3,933	3,587
1/17/2024	3,343	3,245	3,247	3,369	3,753	4,395	5,439	6,178	6,253	5,876	5,379	4,940	4,577	4,350	4,198	4,239	4,499	5,100	5,733	5,993	6,041	5,868	5,585	5,234
1/18/2024	4,897	4,795	4,775	4,744	4,878	5,321	5,825	6,081	5,993	5,630	5,051	4,677	4,537	4,507	4,475	4,562	4,786	5,060	5,270	5,241	5,049	4,716	4,206	3,786
1/19/2024	3,532	3,401	3,349	3,331	3,428	3,747	4,309	4,790	4,743	4,426	4,059	3,904	3,913	4,047	4,099	4,126	4,123	4,281	4,494	4,414	4,291	4,141	3,934	3,658
1/20/2024	3,508	3,459	3,484	3,565	3,723	4,075	4,551	5,164	5,486	5,374	5,090	4,683	4,358	4,036	3,961	4,051	4,247	4,750	5,426	5,659	5,733	5,736	5,623	5,507
1/21/2024	5,308	5,417	5,580	5,742	5,923	6,252	6,672	7,203	7,365	7,075	6,494	5,740	5,116	4,640	4,426	4,406	4,634	5,112	5,747	5,939	5,946	5,748	5,392	5,048
1/22/2024	4,874	4,761	4,750	4,817	5,014	5,554	6,292	6,695	6,665	6,218	5,601	5,044	4,657	4,417	4,349	4,379	4,550	4,833	5,157	4,985	4,797	4,495	4,052	3,652
1/23/2024	3,374	3,233	3,169	3,160	3,261	3,563	4,094	4,416	4,385	4,188	4,015	3,963	3,935	3,883	3,944	4,013	4,139	4,398	4,692	4,620	4,442	4,167	3,820	3,392
1/24/2024	3,021	2,843	2,761	2,737	2,790	3,043	3,533	3,879	3,975	3,949	3,992	4,015	4,111	4,225	4,353	4,488	4,666	4,836	5,069	4,977	4,737	4,451	4,045	3,541
1/25/2024	3,221	2,989	2,882	2,855	2,889	3,128	3,584	3,888	3,974	3,983	4,099	4,264	4,514	4,774	5,129	5,334	5,462	5,511	5,617	5,502	5,275	4,806	4,222	3,724
1/26/2024	3,372	3,116	2,934	2,888	2,935	3,159	3,562	3,877	4,031	4,140	4,273	4,479	4,780	4,974	5,099	5,107	5,121	5,218	5,228	5,048	4,702	4,305	3,964	3,623
1/27/2024	3,337	3,110	2,953	2,848	2,821	2,906	3,035	3,313	3,611	3,917	4,186	4,441	4,761	4,976	5,155	5,270	5,376	5,379	5,356	5,176	4,674	4,399	4,066	3,688
1/28/2024	3,445	3,242	3,076	2,991	2,909	2,923	3,059	3,311	3,666	3,890	3,981	3,905	3,769	3,775	3,863	3,933	4,065	4,286	4,627	4,640	4,455	4,127	3,865	3,366
1/29/2024	3,147	3,013	2,982	3,012	3,179	3,689	4,444	4,941	4,974	4,776	4,578	4,293	4,087	3,911	3,824	3,850	4,084	4,556	5,121	5,218	5,154	4,971	4,681	4,247
1/30/2024	3,977	3,917	3,900	3,992	4,190	4,837	5,585	6,073	5,730	5,023	4,423	4,100	3,975	3,723	3,787	3,905	4,050	4,371	4,823	4,963	4,780	4,512	4,150	3,894
1/31/2024	3,783	3,697	3,683	3,714	3,934	4,402	5,160	5,601	5,312	4,631	4,137	3,838	3,683	3,629	3,588	3,706	3,902	4,236	4,711	4,856	4,789	4,432	4,131	3,810
2/1/2024	3,633	3,580	3,635	3,758	4,042	4,595	5,428	5,945	5,639	4,826	4,312	3,910	3,698	3,593	3,609	3,689	3,954	4,212	4,681	4,826	4,723	4,486	4,054	3,750
2/2/2024	3,565	3,439	3,423	3,468	3,623	3,994	4,853	5,355	5,270	4,807	4,078	3,808	3,664	3,619	3,598	3,759	3,977	4,202	4,377	4,380	4,236	4,099	3,898	3,638
2/3/2024	3,473	3,398	3,405	3,475	3,666	3,956	4,545	4,996	5,187	4,850	4,216	3,791	3,611	3,518	3,534	3,673	3,873	4,065	4,256	4,226	4,082	3,887	3,704	3,406
2/4/2024	3,193	3,033	2,932	2,847	2,865	2,933	3,108	3,403	3,789	4,155	4,296	4,245	4,096	4,025	3,984	4,006	4,168	4,397	4,606	4,670	4,453	4,030	3,686	3,317
2/5/2024	3,080	2,939	2,899	2,896	3,062	3,425	4,028	4,540	4,801	4,516	4,521	4,324	4,055	4,038	3,941	4,070	4,210	4,628	4,982	5,031	4,805	4,527	3,999	3,604
2/6/2024	3,408	3,290	3,248	3,285	3,400	3,870	4,655	5,171	4,999	4,514	4,223	3,805	3,663	3,563	3,555	3,663	3,909	4,375	4,865	4,984	4,859	4,651	4,152	3,858
2/7/2024	3,716	3,673	3,682	3,813	3,938	4,474	5,438	5,887	5,487	4,757	4,190	3,879	3,667	3,574	3,511	3,658	3,893	4,165	4,511	4,601	4,566	4,449	4,126	3,742
2/8/2024	3,557	3,526	3,519	3,550	3,743	4,240	5,010	5,505	5,216	4,517	4,214	3,952	3,872	3,765	3,722	3,755	3,971	4,182	4,467	4,416	4,293	4,060	3,707	3,352
2/9/2024	3,130	3,005	2,951	2,987	3,127	3,490	4,074	4,526	4,560	4,227	3,929	3,849	3,815	3,815	3,836	3,988	4,181	4,282	4,407	4,335	4,129	3,924	3,644	3,316
2/10/2024	3,060	2,887	2,781	2,777	2,818	2,947	3																	

TYSP Year 2025

Question No. 4

Date	Hourly System Load (MW)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
2/20/2024	4,187	4,135	4,168	4,268	4,528	5,089	6,241	6,659	6,185	5,241	4,579	4,042	3,756	3,647	3,575	3,665	4,021	4,474	4,794	5,018	4,970	4,765	4,502	4,200
2/21/2024	3,997	3,976	3,991	4,104	4,323	4,981	5,968	6,169	5,679	4,953	4,400	4,067	3,882	3,699	3,635	3,756	4,035	4,432	4,740	4,900	4,821	4,664	4,412	4,114
2/22/2024	3,961	3,905	3,982	4,097	4,358	5,111	6,160	6,534	5,952	4,931	4,206	3,912	3,701	3,725	3,783	3,870	4,190	4,442	4,720	4,825	4,685	4,433	4,156	3,753
2/23/2024	3,494	3,353	3,327	3,388	3,613	4,007	4,564	4,837	4,619	4,355	4,106	4,023	4,049	4,158	4,120	4,233	4,430	4,576	4,733	4,693	4,497	4,237	3,917	3,573
2/24/2024	3,296	3,057	2,917	2,821	2,863	3,062	3,369	3,745	3,897	3,791	3,610	3,490	3,467	3,468	3,520	3,643	3,821	3,995	4,305	4,285	4,141	3,854	3,640	3,438
2/25/2024	3,233	3,064	3,027	3,034	3,098	3,216	3,642	4,046	4,119	3,978	3,650	3,486	3,451	3,449	3,544	3,749	3,957	4,196	4,523	4,595	4,508	4,056	3,657	3,346
2/26/2024	3,143	3,061	3,045	3,086	3,342	3,888	4,675	5,184	4,995	4,317	3,780	3,601	3,583	3,589	3,685	3,909	4,191	4,482	4,747	4,827	4,603	4,215	3,776	3,352
2/27/2024	3,085	2,918	2,867	2,921	3,125	3,483	4,228	4,668	4,427	4,001	3,709	3,617	3,648	3,749	3,898	4,213	4,672	4,874	4,965	4,982	4,719	4,174	3,781	3,327
2/28/2024	3,028	2,826	2,740	2,711	2,789	3,071	3,625	3,854	3,800	3,746	3,809	3,919	4,071	4,361	4,646	5,076	5,375	5,470	5,506	5,465	5,154	4,756	4,145	3,621
2/29/2024	3,246	3,024	2,854	2,778	2,869	3,086	3,522	3,792	3,921	3,969	4,033	4,042	4,163	4,282	4,400	4,587	4,783	4,884	4,987	5,036	4,786	4,478	3,979	3,539
3/1/2024	3,153	2,954	2,817	2,765	2,833	3,088	3,597	3,920	4,046	4,125	4,291	4,511	4,663	4,709	4,896	5,062	5,187	5,190	5,216	5,134	4,874	4,647	4,081	3,741
3/2/2024	3,534	3,192	2,967	2,857	2,812	2,900	3,056	3,311	3,756	4,074	4,380	4,519	4,675	4,747	4,905	4,992	5,022	5,001	5,102	5,029	4,811	4,501	4,202	3,830
3/3/2024	3,323	3,061	2,930	2,848	2,827	2,888	3,005	3,219	3,530	3,827	4,009	4,187	4,532	4,842	5,157	5,134	5,069	5,040	5,021	4,999	4,744	4,317	3,903	3,442
3/4/2024	3,117	2,887	2,778	2,729	2,801	3,134	3,502	3,791	4,215	4,288	4,318	4,373	4,444	4,683	4,864	5,181	5,414	5,559	5,557	5,450	5,203	4,788	4,167	3,720
3/5/2024	3,357	3,110	2,973	2,932	2,920	3,146	3,598	3,861	3,983	4,090	4,283	4,427	4,647	4,705	4,931	5,135	5,270	5,360	5,484	5,441	5,161	4,843	4,257	3,729
3/6/2024	3,369	3,168	3,053	2,965	2,992	3,198	3,630	3,951	4,116	4,151	4,268	4,521	4,791	4,989	5,161	5,291	5,326	5,241	5,379	5,315	5,036	4,648	4,106	3,609
3/7/2024	3,272	3,048	2,914	2,836	2,867	3,075	3,453	3,776	3,869	3,923	4,051	4,295	4,574	4,861	5,192	5,533	5,829	5,889	5,740	5,629	5,249	4,739	4,203	3,750
3/8/2024	3,366	3,090	2,958	2,894	2,971	3,150	3,554	3,851	4,021	4,186	4,387	4,827	5,248	5,609	5,913	6,167	6,301	6,265	6,085	5,821	5,503	5,236	4,764	4,324
3/9/2024	3,933	3,687	3,500	3,403	3,334	3,354	3,518	3,831	4,200	4,601	5,040	5,481	5,728	6,050	6,244	6,374	6,381	6,167	5,987	5,759	5,543	5,122	4,771	4,313
3/10/2024	4,047	3,787	-	3,566	3,363	3,344	3,361	3,475	3,601	3,827	3,938	4,015	4,118	4,262	4,417	4,558	4,733	4,972	4,895	4,830	4,834	4,340	3,985	3,547
3/11/2024	3,198	2,920	2,764	2,697	2,758	2,975	3,345	3,664	3,791	3,736	3,645	3,590	3,562	3,566	3,636	3,803	4,130	4,444	4,590	4,644	4,759	4,416	3,942	3,490
3/12/2024	3,169	2,970	2,819	2,796	2,864	3,113	3,533	3,966	4,065	3,919	3,791	3,700	3,792	3,921	4,139	4,358	4,692	5,084	5,273	5,208	5,126	4,630	4,142	3,629
3/13/2024	3,237	3,016	2,843	2,761	2,841	3,034	3,384	3,647	3,751	3,818	3,864	3,924	4,156	4,335	4,653	5,014	5,444	5,595	5,567	5,492	5,445	5,083	4,489	3,872
3/14/2024	3,441	3,149	2,967	2,893	2,932	3,127	3,465	3,700	3,816	3,926	3,991	4,145	4,417	4,799	5,203	5,638	6,115	6,394	6,303	6,024	5,721	5,256	4,834	4,166
3/15/2024	3,665	3,292	3,072	2,925	2,917	3,053	3,315	3,589	3,811	4,017	4,233	4,508	4,861	5,373	5,730	6,115	6,438	6,562	6,416	6,028	5,660	5,202	4,715	4,267
3/16/2024	3,802	3,477	3,226	3,096	3,044	3,047	3,169	3,376	3,687	3,998	4,246	4,495	4,779	5,007	5,400	5,614	5,860	6,072	6,039	5,723	5,460	5,153	4,718	4,229
3/17/2024	3,775	3,440	3,255	3,093	3,026	3,001	3,112	3,327	3,587	3,941	4,170	4,439	4,773	5,013	5,300	5,658	5,976	6,187	6,075	5,860	5,745	5,343	4,792	4,215
3/18/2024	3,782	3,476	3,289	3,143	3,183	3,434	3,788	4,124	4,326	4,596	4,780	4,841	4,973	5,221	5,472	5,737	5,937	5,976	5,829	5,625	5,411	4,938	4,382	3,903
3/19/2024	3,500	3,255	3,051	2,892	2,870	3,037	3,382	3,685	3,774	3,740	3,618	3,521	3,457	3,424	3,433	3,580	3,810	4,067	4,259	4,440	4,457	4,222	3,812	3,411
3/20/2024	3,122	2,941	2,909	2,937	3,019	3,471	3,937	4,443	4,414	4,130	3,749	3,514	3,402	3,416	3,480	3,648	3,911	4,260	4,445	4,482	4,456	4,179	3,832	3,378
3/21/2024	3,108	2,915	2,871	2,837	2,853	3,204	3,738	4,160	4,195	3,963	3,805	3,613	3,648	3,737	3,899	4,204	4,607	5,082	5,227	5,206	5,109	4,758	4,195	3,733
3/22/2024	3,395	3,196	3,030	2,949	2,944	3,096	3,370	3,662	3,882	4,063	4,129	4,244	4,237	4,246	4,149	4,163	4,346	4,571	4,542	4,534	4,451	4,221	3,927	3,555
3/23/2024	3,252	3,036	2,877	2,768	2,748	2,821	3,002	3,217	3,554	3,822	3,979	4,138	4,203	4,399	4,609	4,800	4,994	5,016	4,978	4,781	4,630	4,334	4,054	3,685
3/24/2024	3,364	3,090	2,874	2,794	2,743	2,767	2,886	3,084	3,349	3,575	3,735	3,831	3,971	4,171	4,271	4,293	4,520	4,654	4,696	4,674	4,656	4,423	3,968	3,532
3/25/2024	3,153	2,919	2,742	2,709	2,731	2,995	3,396	3,700	3,731	3,758	3,767	3,811	3,945	4,150	4,444	4,700	4,966	5,119	5,204	5,241	5,212	4,739	4,243	3,727
3/26/2024	3,342	3,057	2,882	2,818	2,886	3,079	3,474	3,727	3,854	3,978	4,101	4,318	4,580	4,815	5,156	5,450	5,856	6,121	6,250	6,045	5,922	5,508	4,900	4,225
3/27/2024	3,748	3,420	3,252	3,173	3,186	3,402	3,796	4,091	4,263	4,392	4,560	4,745	5,031	5,220	5,310	5,263	5,263	5,059	4,910	4,869	4,842	4,599	4,206	3,796
3/28/2024	3,459	3,253	3,150	3,112	3,147	3,328	3,700	4,037	4,242	4,405	4,433	4,322	4,292	4,237	4,279	4,487	4,806	5,178	5,201	5,083	4,967	4,689	4,113	3,609
3/29/2024	3,233	2,992	2,863	2,758	2,788	2,942	3,245	3,514	3,675	3,700	3,698	3,708	3,771	3,828	3,976	4,225	4,533	4,861	4,909	4,833	4,582	4,255	3,887	3,543
3/30/2024	3,202	2,935	2,763	2,690	2,665	2,762	2,940	3,184	3,444	3,569	3,574	3,624	3,794	3,979	4,198	4,517	4,919	5,170	5,286	5,148	4,947	4,498	4,113	3,672
3/31/2024	3,329	3,030	2,867	2,754	2,706	2,742</																		

TYSP Year 2025

Question No. 4

Date	Hourly System Load (MW)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
4/10/2024	3,507	3,236	3,031	2,931	2,942	3,175	3,569	3,862	4,038	4,165	4,321	4,584	4,848	5,245	5,625	6,102	6,483	6,451	6,418	6,075	5,977	5,606	5,137	4,565
4/11/2024	4,170	3,732	3,474	3,371	3,410	3,682	4,229	4,521	4,722	5,035	5,259	5,486	5,640	5,486	5,222	5,045	5,206	5,371	5,440	5,323	5,281	4,998	4,587	4,072
4/12/2024	3,655	3,270	3,060	2,950	2,952	3,101	3,465	3,699	3,770	3,858	3,917	3,929	4,106	4,215	4,446	4,812	5,091	5,277	5,314	5,054	4,928	4,667	4,265	3,706
4/13/2024	3,338	3,056	2,919	2,826	2,793	2,851	2,993	3,210	3,441	3,585	3,596	3,650	3,756	3,808	4,018	4,347	4,751	5,033	5,125	4,883	4,724	4,410	3,982	3,585
4/14/2024	3,199	2,961	2,828	2,729	2,699	2,731	2,875	3,072	3,355	3,557	3,698	3,811	3,944	4,188	4,474	4,835	5,246	5,593	5,726	5,478	5,347	4,966	4,473	3,802
4/15/2024	3,246	2,983	2,833	2,746	2,784	2,998	3,380	3,716	3,837	3,878	4,077	4,288	4,606	4,953	5,306	5,674	6,127	6,554	6,513	6,148	5,799	5,215	4,703	4,051
4/16/2024	3,513	3,156	2,972	2,887	2,891	3,072	3,520	3,744	3,862	3,959	4,066	4,297	4,653	5,028	5,375	5,784	6,177	6,441	6,557	6,088	5,888	5,446	4,887	4,184
4/17/2024	3,671	3,262	3,052	2,953	2,980	3,201	3,638	3,863	4,078	4,216	4,423	4,645	4,965	5,352	5,775	6,193	6,587	6,745	6,661	6,317	6,058	5,618	5,009	4,419
4/18/2024	3,845	3,452	3,196	3,110	3,138	3,308	3,839	3,993	4,251	4,325	4,524	4,915	5,341	5,778	6,176	6,606	6,974	7,209	7,120	6,742	6,466	6,008	5,359	4,786
4/19/2024	4,256	3,818	3,484	3,265	3,218	3,350	3,755	3,973	4,212	4,398	4,755	5,217	5,712	6,138	6,576	6,907	7,207	7,425	7,190	6,747	6,399	5,967	5,448	4,877
4/20/2024	4,346	3,881	3,517	3,292	3,237	3,226	3,307	3,448	3,821	4,228	4,696	5,116	5,548	5,908	6,356	6,740	7,015	7,253	7,147	6,666	6,355	5,940	5,369	4,808
4/21/2024	4,277	3,766	3,487	3,312	3,210	3,212	3,273	3,372	3,831	4,238	4,742	5,171	5,440	5,676	5,995	6,307	6,486	6,673	6,542	6,318	6,235	5,843	5,331	4,755
4/22/2024	4,272	3,845	3,524	3,401	3,334	3,569	3,911	4,129	4,048	4,157	4,111	4,243	4,277	4,389	4,588	4,833	5,032	5,312	5,358	5,121	5,072	4,786	4,263	3,617
4/23/2024	3,271	3,000	2,816	2,718	2,755	2,988	3,444	3,737	3,717	3,731	3,628	3,739	3,900	4,102	4,270	4,604	4,973	5,138	5,210	5,108	5,081	4,782	4,244	3,613
4/24/2024	3,199	2,972	2,859	2,807	2,861	3,061	3,436	3,747	3,802	3,685	3,725	3,902	4,250	4,546	4,903	5,242	5,669	5,963	5,979	5,736	5,551	5,197	4,612	3,991
4/25/2024	3,417	3,161	2,983	2,901	2,931	3,139	3,557	3,817	3,899	3,952	4,097	4,380	4,736	5,153	5,440	5,783	6,116	6,278	6,269	6,039	5,807	5,399	4,879	4,241
4/26/2024	3,741	3,301	3,081	2,993	3,021	3,175	3,551	3,718	3,940	4,203	4,500	4,707	5,114	5,460	5,880	6,134	6,400	6,546	6,343	6,034	5,794	5,434	5,028	4,506
4/27/2024	4,003	3,558	3,326	3,181	3,100	3,085	3,226	3,359	3,774	4,295	4,572	4,869	5,134	5,373	5,645	5,709	5,844	5,805	5,668	5,467	5,361	5,109	4,773	4,171
4/28/2024	3,781	3,433	3,213	3,085	3,005	3,013	3,059	3,212	3,614	4,079	4,361	4,662	4,943	5,231	5,497	5,777	5,963	6,091	6,047	5,854	5,756	5,341	4,811	4,168
4/29/2024	3,680	3,288	3,091	2,989	2,998	3,165	3,484	3,667	3,900	4,165	4,448	4,754	5,062	5,411	5,812	6,144	6,538	6,865	6,779	6,450	6,128	5,722	5,218	4,491
4/30/2024	3,989	3,638	3,427	3,307	3,300	3,453	3,806	4,039	4,206	4,484	4,931	5,303	5,660	5,982	6,248	6,461	6,761	6,817	6,676	6,194	6,001	5,537	4,952	4,363
5/1/2024	3,936	3,582	3,373	3,245	3,203	3,372	3,718	3,915	4,096	4,340	4,744	5,338	5,833	6,312	6,688	7,042	7,393	7,507	7,391	7,031	6,551	6,077	5,521	4,739
5/2/2024	4,168	3,810	3,568	3,437	3,431	3,564	3,889	4,169	4,420	4,700	5,160	5,638	6,132	6,701	7,087	7,431	7,550	7,563	7,353	7,042	6,766	6,325	5,665	5,007
5/3/2024	4,404	3,908	3,694	3,545	3,510	3,623	3,882	4,118	4,396	4,823	5,215	5,617	6,028	6,510	7,035	7,331	7,501	7,598	7,334	6,812	6,547	6,045	5,581	5,051
5/4/2024	4,321	4,041	3,710	3,540	3,471	3,471	3,504	3,662	4,035	4,585	5,124	5,529	5,952	6,367	6,722	6,989	7,061	6,912	6,791	6,444	6,203	5,817	5,403	4,860
5/5/2024	4,323	3,957	3,667	3,500	3,414	3,394	3,475	3,594	4,034	4,662	5,227	5,663	6,170	6,559	6,883	7,141	7,306	7,316	7,177	6,789	6,458	6,097	5,581	4,901
5/6/2024	4,284	3,921	3,654	3,558	3,540	3,710	4,032	4,252	4,493	4,942	5,285	5,796	6,262	6,713	7,180	7,524	7,721	7,841	7,710	7,190	6,895	6,454	5,808	5,140
5/7/2024	4,502	4,038	3,784	3,651	3,608	3,760	4,091	4,383	4,657	5,006	5,472	5,972	6,517	6,972	7,486	7,867	8,278	8,452	8,338	7,719	7,390	6,795	6,144	5,453
5/8/2024	4,761	4,277	3,977	3,811	3,761	3,917	4,239	4,485	4,764	5,155	5,818	6,433	7,067	7,733	8,148	8,552	8,864	9,016	8,894	8,199	7,687	7,137	6,408	5,764
5/9/2024	5,186	4,649	4,334	4,199	4,180	4,323	4,675	4,897	5,262	5,580	6,064	6,568	7,107	7,565	8,062	8,368	8,698	8,782	8,675	8,176	7,687	7,167	6,475	5,774
5/10/2024	5,203	4,710	4,316	4,126	4,076	4,185	4,521	4,751	4,958	5,335	5,764	6,156	6,597	6,916	7,213	7,644	7,933	8,114	7,937	7,471	7,162	6,788	6,329	5,785
5/11/2024	5,256	4,748	4,486	4,265	4,156	4,117	4,132	4,206	4,592	5,084	5,538	5,993	6,421	6,888	7,198	7,468	7,636	7,762	7,566	6,996	6,554	6,105	5,590	4,910
5/12/2024	4,288	3,910	3,640	3,445	3,348	3,293	3,337	3,469	3,878	4,323	4,820	5,043	5,253	5,382	5,595	6,050	6,384	6,734	6,695	6,467	6,220	5,889	5,273	4,749
5/13/2024	4,142	3,815	3,629	3,536	3,526	3,732	4,107	4,325	4,598	5,039	5,566	6,007	6,424	6,793	7,097	7,272	7,417	7,138	6,825	6,539	6,407	6,035	5,585	4,877
5/14/2024	4,449	4,141	3,953	3,857	3,867	4,119	4,515	4,787	5,090	5,450	5,934	6,228	5,928	5,689	5,697	6,421	7,138	7,830	7,899	7,542	7,228	6,828	6,157	5,577
5/15/2024	5,050	4,704	4,486	4,327	4,303	4,440	4,754	4,823	4,955	5,053	5,353	5,495	5,761	6,106	6,097	6,121	6,295	6,373	6,566	6,573	6,300	5,953	5,397	4,768
5/16/2024	4,311	3,991	3,781	3,741	3,742	3,912	4,231	4,400	4,608	4,897	5,278	5,699	6,375	6,821	7,482	7,763	8,094	8,420	8,048	7,652	7,065	6,508	5,736	5,051
5/17/2024	4,492	4,122	3,859	3,659	3,612	3,757	4,035	4,225	4,463	4,829	4,956	4,984	5,155	5,496	6,019	6,783	7,621	8,022	7,985	7,434	7,065	6,537	5,968	5,350
5/18/2024	4,866	4,495	4,147	3,983	3,857	3,880	3,949	4,137	4,631	5,390	6,155	6,793	7,300	7,672	7,950	8,022	7,540	7,420	7,241	6,985	6,596	6,139	5,631	5,141
5/19/2024	4,761	4,477	4,206	4,001	3,964	4,022	4,117	4,239	4,532	4,993	5,385	5,859	6,446	6,834	7,155	7,447	7,613	7,673	7,572	7,183	6,798	6,471	5,728	5,038
5/20/2024	4,578	4,233	3,966	3,811	3,793	3																		

TYSP Year 2025

Question No. 4

Date	Hourly System Load (MW)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
5/30/2024	5,046	4,592	4,276	4,033	3,926	4,013	4,223	4,441	4,877	5,392	5,987	6,562	7,250	7,918	8,341	8,620	8,820	8,877	8,670	8,197	7,491	6,958	6,205	5,486
5/31/2024	4,911	4,464	4,113	3,908	3,799	3,887	4,094	4,293	4,745	5,221	5,763	6,276	6,840	7,352	7,975	8,189	8,316	8,302	8,057	7,516	6,944	6,368	5,799	5,185
6/1/2024	4,738	4,326	4,023	3,824	3,707	3,665	3,683	3,865	4,328	4,716	5,156	5,521	5,948	6,447	6,661	7,042	7,247	7,328	7,186	6,832	6,299	5,938	5,475	4,850
6/2/2024	4,486	4,075	3,787	3,561	3,500	3,444	3,424	3,607	4,094	4,555	4,972	5,475	6,117	6,565	6,892	7,121	7,224	7,268	7,214	6,851	6,576	6,258	5,738	5,078
6/3/2024	4,720	4,198	3,920	3,730	3,700	3,785	3,963	4,261	4,680	5,109	5,817	6,369	6,816	7,103	7,523	7,741	7,922	7,944	7,567	7,211	6,978	6,616	5,872	5,357
6/4/2024	4,721	4,340	4,088	3,802	3,749	3,877	4,035	4,277	4,631	5,073	5,535	6,227	6,844	7,337	7,895	8,251	8,395	8,513	8,371	7,968	7,474	7,009	6,273	5,570
6/5/2024	4,943	4,546	4,238	4,047	3,992	4,100	4,306	4,651	5,029	5,494	6,061	6,824	7,472	7,961	8,285	8,641	8,962	9,167	9,013	8,549	7,964	7,552	6,796	6,030
6/6/2024	5,426	4,989	4,686	4,517	4,440	4,524	4,656	4,872	5,409	5,994	6,631	7,319	8,044	8,575	9,035	9,321	9,378	9,448	8,909	8,040	7,491	6,946	6,331	5,680
6/7/2024	4,925	4,539	4,236	4,056	3,996	4,099	4,200	4,451	4,972	5,474	6,088	6,708	7,360	7,857	8,285	8,675	8,867	8,879	8,734	8,189	7,815	7,403	6,726	6,145
6/8/2024	5,539	5,100	4,775	4,521	4,368	4,312	4,278	4,459	5,082	5,664	6,325	6,973	7,552	7,909	8,368	8,701	8,999	8,984	9,090	8,579	8,044	7,612	7,061	6,386
6/9/2024	5,773	5,227	4,851	4,646	4,502	4,424	4,348	4,532	5,127	5,764	6,410	6,909	7,580	8,120	8,493	8,810	9,111	9,282	9,111	8,774	8,305	7,756	7,083	6,368
6/10/2024	5,711	5,121	4,733	4,501	4,405	4,463	4,601	4,873	5,363	5,951	6,459	7,543	8,067	8,666	9,023	9,297	9,377	9,103	8,937	8,495	8,025	7,528	6,633	5,877
6/11/2024	5,329	4,992	4,735	4,586	4,534	4,609	4,768	4,960	5,266	5,674	6,076	6,499	6,874	6,879	6,459	6,281	6,264	6,286	6,330	6,215	6,090	5,889	5,427	4,951
6/12/2024	4,620	4,337	4,154	4,056	4,047	4,195	4,425	4,649	4,929	5,300	5,781	6,250	6,780	7,241	7,518	7,833	8,024	7,922	7,820	7,565	7,266	6,804	6,193	5,609
6/13/2024	5,083	4,710	4,435	4,277	4,270	4,411	4,634	4,831	5,191	5,638	6,196	6,812	7,417	8,007	8,321	8,561	8,509	8,227	7,872	7,501	7,140	6,767	5,956	5,365
6/14/2024	4,947	4,520	4,278	4,096	4,024	4,077	4,229	4,422	4,852	5,324	5,864	6,598	7,225	7,779	8,085	8,316	8,536	8,431	8,140	7,527	7,106	6,743	6,167	5,529
6/15/2024	5,026	4,684	4,360	4,214	4,077	4,052	4,081	4,270	4,802	5,401	6,066	6,838	7,257	7,409	7,485	7,576	7,532	7,203	6,945	6,515	6,186	5,869	5,447	5,011
6/16/2024	4,625	4,283	4,042	3,877	3,797	3,749	3,757	3,959	4,486	5,088	5,654	6,330	7,030	7,510	7,745	7,938	8,112	8,359	8,148	7,685	7,259	6,872	6,281	5,530
6/17/2024	4,980	4,594	4,329	4,183	4,160	4,295	4,497	4,720	5,127	5,489	5,978	6,480	7,061	7,397	7,665	7,898	8,175	8,171	7,976	7,595	7,263	6,922	6,174	5,479
6/18/2024	4,909	4,523	4,243	4,074	3,999	4,102	4,271	4,521	4,861	5,311	5,749	6,338	6,803	7,163	7,365	7,537	7,550	7,431	7,213	6,874	6,607	6,334	5,736	5,205
6/19/2024	4,776	4,489	4,322	4,203	4,217	4,339	4,535	4,667	4,970	5,268	5,548	5,851	6,190	6,292	6,514	6,724	6,940	6,967	6,820	6,620	6,340	6,026	5,522	5,024
6/20/2024	4,589	4,304	4,131	3,993	3,965	4,116	4,359	4,588	4,889	5,260	5,655	6,284	6,752	7,167	7,478	7,789	7,935	8,060	7,954	7,598	7,159	6,822	6,100	5,387
6/21/2024	4,912	4,549	4,296	4,142	4,073	4,165	4,290	4,421	4,798	5,205	5,712	6,158	6,661	7,145	7,416	7,677	7,912	8,059	7,927	7,462	7,181	6,868	6,241	5,635
6/22/2024	5,131	4,779	4,513	4,357	4,263	4,277	4,295	4,454	4,795	5,459	6,266	6,706	7,244	7,624	8,130	8,194	8,142	8,218	7,915	7,414	7,132	6,854	6,366	5,645
6/23/2024	5,232	4,923	4,630	4,420	4,293	4,241	4,211	4,425	4,872	5,467	6,074	6,481	6,854	7,277	7,460	7,382	7,402	7,227	7,243	6,890	6,682	6,469	6,010	5,266
6/24/2024	4,823	4,420	4,208	4,074	4,058	4,136	4,349	4,650	5,008	5,553	6,238	6,848	7,391	7,848	8,369	8,779	9,011	9,206	8,799	8,382	7,805	7,348	6,914	6,064
6/25/2024	5,313	4,885	4,611	4,413	4,344	4,432	4,596	4,849	5,167	5,682	6,281	6,904	7,443	7,963	8,346	8,578	8,558	8,494	8,231	7,850	7,405	7,029	6,426	5,759
6/26/2024	5,179	4,724	4,510	4,321	4,272	4,426	4,619	4,895	5,265	5,695	6,382	7,056	7,859	8,262	8,568	8,961	9,111	9,137	8,583	7,854	7,475	7,139	6,607	5,888
6/27/2024	5,270	4,889	4,626	4,452	4,437	4,559	4,761	5,041	5,435	5,894	6,519	7,126	7,519	7,814	7,982	7,847	7,808	7,792	7,698	7,574	7,352	6,850	6,320	5,815
6/28/2024	5,279	4,878	4,611	4,440	4,427	4,493	4,628	4,817	5,175	5,549	5,965	6,464	7,007	7,272	7,497	7,615	7,690	7,651	7,323	6,912	6,448	6,062	5,635	5,183
6/29/2024	4,835	4,493	4,283	4,128	4,020	4,022	4,038	4,221	4,661	5,208	5,983	6,843	7,299	7,428	7,555	7,501	7,157	6,815	6,442	6,132	5,933	5,751	5,388	4,980
6/30/2024	4,617	4,334	4,066	3,942	3,830	3,890	3,975	4,138	4,594	5,128	5,831	6,695	7,298	7,654	7,760	7,451	7,323	7,153	7,068	6,831	6,325	6,061	5,622	4,999
7/1/2024	4,580	4,291	4,038	3,927	3,931	4,093	4,263	4,445	4,862	5,346	5,815	6,515	7,105	7,544	7,908	8,171	8,388	8,696	8,731	8,369	7,965	7,560	6,906	6,173
7/2/2024	5,379	4,877	4,554	4,387	4,310	4,416	4,576	4,888	5,254	5,784	6,475	7,038	7,646	8,084	8,515	8,719	9,077	9,010	8,711	8,292	7,855	7,385	6,759	6,007
7/3/2024	5,482	5,050	4,725	4,550	4,483	4,559	4,725	5,012	5,454	5,972	6,635	7,492	8,085	8,566	8,750	9,234	9,385	9,236	8,774	8,280	7,767	7,387	6,825	6,106
7/4/2024	5,612	5,090	4,704	4,503	4,383	4,373	4,369	4,596	5,094	5,776	6,572	7,296	7,916	8,257	8,479	8,618	8,569	8,373	7,912	7,535	7,169	6,829	6,594	6,045
7/5/2024	5,531	5,057	4,736	4,524	4,447	4,461	4,538	4,820	5,318	6,001	6,696	7,347	7,902	8,325	8,468	8,505	8,502	8,555	8,288	7,901	7,559	7,185	6,710	6,071
7/6/2024	5,531	5,004	4,702	4,484	4,342	4,285	4,275	4,515	5,035	5,654	6,279	6,997	7,535	8,012	8,275	8,471	8,585	8,497	8,273	8,090	7,796	7,481	6,941	6,298
7/7/2024	5,784	5,399	4,958	4,674	4,554	4,463	4,460	4,625	5,184	5,833	6,430	7,138	7,708	8,134	8,662	8,808	9,004	9,146	9,071	8,734	8,309	7,936	7,318	6,614
7/8/2024	5,935	5,422	5,138	4,913	4,848	4,892	5,022	5,300	5,805	6,473	7,106	7,776	8,435	9,006	9,273	9,468	9,376	8,905	8,368	7,777	7,235	6,788	6,202	5,475
7/9/2024	5,070	4,812	4,585	4,437	4,374	4,490	4																	

TYSP Year 2025

Question No. 4

Date	Hourly System Load (MW)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
7/19/2024	5,268	4,881	4,605	4,428	4,345	4,355	4,463	4,706	5,135	5,754	6,515	7,130	7,715	8,192	8,453	8,769	8,956	8,885	8,507	8,135	7,745	7,248	6,586	5,804
7/20/2024	5,312	4,928	4,666	4,489	4,362	4,359	4,373	4,576	5,103	5,856	6,504	7,174	7,816	8,179	8,458	8,679	8,845	8,769	8,475	8,032	7,647	7,202	6,533	5,801
7/21/2024	5,347	4,934	4,683	4,473	4,374	4,317	4,327	4,427	4,870	5,609	6,291	7,000	7,689	8,140	8,337	8,591	8,725	8,548	8,303	7,794	7,363	7,011	6,401	5,622
7/22/2024	5,128	4,775	4,506	4,331	4,337	4,477	4,666	4,871	5,242	5,750	6,498	7,202	7,814	8,280	8,569	8,780	8,656	8,355	7,999	7,610	7,279	6,953	6,301	5,565
7/23/2024	5,145	4,784	4,562	4,403	4,359	4,411	4,605	4,769	5,122	5,718	6,346	6,997	7,586	8,007	8,458	8,833	8,759	8,342	7,848	7,527	7,170	6,807	6,272	5,578
7/24/2024	5,039	4,744	4,486	4,353	4,340	4,389	4,607	4,845	5,223	5,784	6,463	7,084	7,672	8,076	8,433	8,676	8,793	8,503	8,127	7,714	7,378	7,026	6,342	5,706
7/25/2024	5,213	4,827	4,555	4,362	4,307	4,359	4,583	4,847	5,146	5,565	6,068	6,740	7,308	7,779	8,185	8,383	8,420	8,297	7,987	7,445	7,363	7,059	6,495	5,791
7/26/2024	5,285	4,916	4,641	4,453	4,426	4,468	4,624	4,856	5,231	5,781	6,404	7,035	7,615	8,125	8,409	8,598	8,287	8,054	7,756	7,363	7,085	6,725	6,222	5,628
7/27/2024	5,154	4,828	4,560	4,369	4,255	4,216	4,237	4,414	4,766	5,294	5,860	6,484	6,953	7,346	7,753	7,779	7,609	7,461	7,189	6,871	6,704	6,420	6,095	5,437
7/28/2024	4,935	4,625	4,351	4,168	4,103	4,089	4,110	4,314	4,820	5,373	5,967	6,581	7,122	7,656	7,947	7,965	7,667	7,511	7,272	6,799	6,531	6,228	5,787	5,193
7/29/2024	4,805	4,490	4,235	4,140	4,142	4,250	4,496	4,774	5,156	5,613	6,252	6,901	7,272	7,529	7,810	8,103	7,937	8,071	8,015	7,737	7,358	6,957	6,359	5,643
7/30/2024	5,057	4,638	4,440	4,265	4,200	4,305	4,497	4,752	5,126	5,608	6,327	7,082	7,827	8,335	8,769	8,979	9,004	8,761	8,143	7,611	7,194	6,796	6,254	5,578
7/31/2024	4,963	4,574	4,346	4,184	4,180	4,296	4,509	4,769	5,083	5,608	6,282	6,796	7,510	8,051	8,459	8,719	8,887	8,864	8,730	8,291	7,885	7,490	6,929	6,157
8/1/2024	5,503	5,139	4,872	4,691	4,660	4,748	4,916	5,196	5,687	6,237	6,863	7,492	7,988	8,166	8,288	8,287	8,061	7,532	7,121	6,794	6,679	6,453	6,014	5,169
8/2/2024	4,764	4,453	4,252	4,115	4,087	4,215	4,407	4,700	5,144	5,716	6,420	7,032	7,621	8,112	8,304	8,453	8,622	8,343	7,895	7,289	6,966	6,570	6,181	5,566
8/3/2024	5,037	4,678	4,427	4,278	4,151	4,129	4,172	4,333	4,878	5,625	6,277	6,800	7,225	7,269	7,066	7,036	7,083	6,960	6,853	6,574	6,438	6,281	5,966	5,328
8/4/2024	4,905	4,641	4,372	4,210	4,108	4,079	4,110	4,345	4,817	5,390	5,910	6,271	6,458	6,273	6,171	6,142	6,139	6,093	5,943	5,845	5,769	5,655	5,242	4,705
8/5/2024	4,438	4,228	4,094	4,047	4,119	4,245	4,504	4,736	4,919	5,300	5,463	5,623	5,757	5,832	6,048	6,337	6,493	6,581	6,470	6,380	6,307	6,148	5,733	5,115
8/6/2024	4,579	4,269	4,131	4,056	4,118	4,303	4,613	4,901	5,211	5,562	6,105	6,597	6,945	7,234	7,488	7,737	8,062	8,222	8,295	8,129	7,790	7,364	6,887	6,264
8/7/2024	5,668	5,306	5,132	5,034	5,027	5,209	5,453	5,620	5,986	6,539	6,900	7,447	7,848	8,060	8,290	8,513	8,622	8,713	8,653	8,284	7,926	7,573	7,011	6,388
8/8/2024	5,990	5,587	5,351	5,230	5,238	5,361	5,627	5,721	6,020	6,507	7,077	7,733	8,193	8,574	8,814	8,958	9,235	9,269	9,189	8,627	8,272	7,750	7,107	6,433
8/9/2024	5,991	5,499	5,262	5,085	4,974	4,992	5,128	5,362	5,780	6,366	6,852	7,424	7,874	8,353	8,726	9,047	9,070	8,727	8,394	8,111	7,743	7,421	6,884	6,385
8/10/2024	5,947	5,504	5,247	5,014	4,893	4,859	4,919	4,865	5,341	6,166	6,921	7,583	7,866	8,156	8,412	8,578	8,433	8,305	8,059	7,639	7,374	7,088	6,655	6,121
8/11/2024	5,531	5,094	4,779	4,588	4,455	4,448	4,465	4,566	5,044	5,780	6,537	7,121	7,724	8,220	8,350	8,120	7,835	7,620	7,424	7,171	7,063	6,722	6,265	5,621
8/12/2024	5,121	4,802	4,518	4,346	4,318	4,515	4,795	4,828	5,058	5,644	6,288	6,771	7,240	7,702	7,947	7,959	8,147	8,239	8,091	7,918	7,578	7,171	6,553	5,859
8/13/2024	5,370	5,023	4,807	4,545	4,530	4,728	5,020	5,205	5,486	5,963	6,578	7,209	7,773	8,256	8,549	8,708	8,980	9,184	9,188	8,807	8,331	7,850	7,116	6,351
8/14/2024	5,863	5,339	4,942	4,748	4,705	4,842	5,043	5,217	5,654	6,247	6,803	7,311	7,811	8,297	8,672	8,953	8,974	8,892	8,687	8,143	7,925	7,477	6,859	6,229
8/15/2024	5,705	5,200	4,901	4,772	4,752	4,891	5,183	5,290	5,507	6,000	6,612	7,220	7,688	7,865	7,952	7,955	8,002	7,915	7,782	7,520	7,326	6,948	6,373	5,696
8/16/2024	5,214	4,720	4,449	4,260	4,226	4,399	4,658	4,822	5,074	5,576	6,127	6,595	7,037	7,324	7,601	7,848	8,087	8,104	8,043	7,567	7,146	6,707	6,168	5,421
8/17/2024	5,027	4,578	4,232	4,067	3,962	3,925	3,902	4,009	4,407	5,012	5,657	6,279	6,823	7,321	7,612	7,992	8,170	8,225	8,175	7,838	7,376	6,887	6,351	5,722
8/18/2024	5,140	4,667	4,332	4,153	4,039	3,963	3,961	4,068	4,460	5,114	5,800	6,469	7,091	7,555	7,932	8,337	8,652	8,860	8,883	8,499	7,946	7,437	6,744	5,923
8/19/2024	5,363	4,856	4,572	4,387	4,409	4,563	4,854	5,025	5,444	5,912	6,597	7,227	7,735	8,112	8,526	8,687	8,968	9,089	8,932	8,537	8,180	7,711	7,032	6,279
8/20/2024	5,744	5,262	4,981	4,849	4,822	4,970	5,268	5,425	5,663	6,093	6,764	7,299	7,875	7,693	7,404	7,661	7,858	7,988	8,058	7,896	7,538	7,151	6,510	5,836
8/21/2024	5,318	4,852	4,564	4,388	4,365	4,499	4,794	4,944	5,153	5,551	6,101	6,722	7,270	7,498	7,551	7,781	7,864	7,922	7,830	7,455	7,181	6,718	6,178	5,579
8/22/2024	4,999	4,615	4,346	4,186	4,157	4,320	4,616	4,750	4,902	5,227	5,452	5,727	5,855	5,980	6,207	6,236	6,359	6,524	6,484	6,378	6,323	6,011	5,472	4,909
8/23/2024	4,435	4,138	3,954	3,866	3,845	3,995	4,272	4,435	4,689	5,083	5,571	6,219	6,900	7,471	7,810	8,087	8,050	7,814	7,331	6,858	6,422	5,899	5,451	4,909
8/24/2024	4,475	4,136	3,951	3,790	3,767	3,774	3,829	3,953	4,324	4,930	5,453	6,071	6,685	7,322	7,648	7,950	8,115	7,994	7,735	7,461	7,165	6,813	6,281	5,650
8/25/2024	5,180	4,766	4,411	4,252	4,136	4,104	4,105	4,188	4,655	5,235	5,910	6,567	7,269	7,708	8,038	8,192	8,074	7,904	7,824	7,517	7,206	6,819	6,145	5,406
8/26/2024	4,975	4,651	4,452	4,334	4,310	4,480	4,837	4,980	5,267	5,706	6,198	6,896	7,442	7,716	7,727	7,453	7,369	7,309	7,057	6,919	6,782	6,336	5,927	5,301
8/27/2024	4,821	4,484	4,266	4,145	4,126	4,316	4,619	4,898	5,276	5,725	6,293	6,850	7,447	7,957	8,131	8,328	8,358	8,346	8,024	7,745	7,435	7,001	6,374	5,681
8/28/2024	5,318	4,985	4,666	4,430	4,3																			

TYSP Year 2025

Question No. 4

Date	Hourly System Load (MW)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
9/7/2024	4,901	4,572	4,317	4,143	4,066	4,097	4,147	4,281	4,636	5,197	5,804	6,431	7,145	7,527	7,749	8,008	8,087	8,000	7,693	7,286	6,928	6,436	6,011	5,451
9/8/2024	4,962	4,595	4,361	4,141	4,059	4,057	4,129	4,235	4,679	5,278	5,850	6,475	7,094	7,499	7,578	7,695	7,931	7,949	7,591	7,060	6,647	6,142	5,614	5,070
9/9/2024	4,678	4,386	4,176	4,126	4,152	4,365	4,721	4,907	5,036	5,364	5,776	6,314	6,973	7,274	7,334	7,352	7,283	7,203	7,003	6,809	6,484	5,996	5,484	4,923
9/10/2024	4,604	4,329	4,169	4,055	4,054	4,241	4,606	4,798	4,979	5,322	5,672	6,200	6,807	7,147	7,520	7,767	7,839	7,758	7,432	7,179	6,937	6,380	5,895	5,351
9/11/2024	4,945	4,618	4,432	4,286	4,287	4,446	4,797	4,915	5,071	5,394	5,841	6,354	7,114	7,487	7,760	7,915	7,719	7,550	7,263	7,068	6,750	6,233	5,654	5,147
9/12/2024	4,809	4,526	4,294	4,195	4,215	4,402	4,718	4,849	4,977	5,329	5,730	6,204	6,804	7,343	7,754	7,916	7,966	7,905	7,621	7,205	6,796	6,371	5,851	5,295
9/13/2024	4,949	4,639	4,471	4,372	4,332	4,451	4,811	4,961	5,196	5,563	6,051	6,656	7,146	7,372	7,288	7,240	6,910	6,721	6,443	6,217	6,057	5,834	5,494	5,070
9/14/2024	4,649	4,361	4,132	3,992	3,935	3,969	4,072	4,214	4,561	5,092	5,568	6,036	6,505	6,734	6,909	7,033	7,330	7,334	7,036	6,744	6,450	5,853	5,454	4,951
9/15/2024	4,589	4,245	4,070	3,923	3,863	3,847	3,948	4,089	4,415	4,921	5,424	5,937	6,601	6,901	7,279	7,526	7,661	7,585	7,395	7,181	6,922	6,372	5,757	5,114
9/16/2024	4,710	4,379	4,158	4,063	4,081	4,262	4,555	4,710	4,850	5,100	5,446	5,838	6,436	6,875	7,258	7,548	7,821	7,796	7,515	7,223	6,930	6,277	5,687	5,033
9/17/2024	4,637	4,310	4,049	3,937	3,912	4,069	4,360	4,509	4,655	5,021	5,416	5,948	6,609	7,243	7,680	8,030	8,256	8,277	8,015	7,636	7,227	6,603	5,915	5,244
9/18/2024	4,762	4,447	4,200	4,041	4,028	4,187	4,473	4,611	4,859	5,338	5,959	6,478	7,218	7,736	8,041	8,363	8,659	8,663	8,608	8,133	7,587	7,008	6,143	5,420
9/19/2024	4,943	4,600	4,347	4,193	4,159	4,318	4,611	4,753	4,916	5,294	5,774	6,393	7,019	7,465	7,748	8,134	8,360	8,410	8,193	7,704	7,335	6,703	5,996	5,297
9/20/2024	4,854	4,516	4,277	4,102	4,056	4,175	4,468	4,608	4,815	5,187	5,679	6,246	6,935	7,372	7,616	7,908	7,968	7,919	7,615	7,222	6,833	6,365	5,845	5,233
9/21/2024	4,852	4,525	4,226	4,034	3,953	3,933	4,009	4,114	4,452	4,967	5,514	6,135	6,686	7,124	7,363	7,660	7,794	7,736	7,478	7,109	6,701	6,245	5,683	5,114
9/22/2024	4,728	4,368	4,087	3,909	3,784	3,756	3,782	3,911	4,279	4,824	5,334	5,887	6,556	6,976	7,314	7,598	7,814	7,865	7,771	7,386	7,031	6,424	5,777	5,102
9/23/2024	4,676	4,337	4,124	4,008	3,987	4,156	4,476	4,621	4,832	5,218	5,764	6,373	7,058	7,494	7,888	8,256	8,457	8,484	8,245	7,785	7,439	6,810	6,048	5,346
9/24/2024	4,846	4,480	4,202	4,002	3,980	4,128	4,462	4,608	4,867	5,319	5,874	6,514	7,135	7,828	8,050	8,289	8,523	8,658	8,355	7,874	7,522	6,995	6,308	5,584
9/25/2024	5,139	4,800	4,546	4,384	4,344	4,492	4,793	4,958	5,171	5,483	6,177	6,730	7,139	7,262	7,343	7,502	7,250	6,907	6,529	6,350	6,126	5,817	5,375	4,942
9/26/2024	4,682	4,449	4,319	4,211	4,170	4,249	4,479	4,716	4,995	5,361	5,649	5,664	6,191	6,578	6,910	6,949	6,703	6,649	6,462	6,321	5,917	5,560	5,046	4,555
9/27/2024	4,362	4,090	3,894	3,756	3,708	3,817	3,991	4,140	4,339	4,684	5,011	5,271	5,720	5,886	6,189	6,568	6,684	6,713	6,621	6,301	5,978	5,665	5,241	4,754
9/28/2024	4,371	4,099	3,886	3,784	3,682	3,682	3,773	3,877	4,183	4,735	5,183	5,639	5,907	6,010	6,107	6,181	6,559	6,820	6,833	6,566	6,150	5,788	5,420	4,986
9/29/2024	4,649	4,346	4,142	3,999	3,869	3,843	3,889	3,987	4,328	4,923	5,429	6,099	6,761	7,206	7,590	7,902	8,117	8,106	7,836	7,448	7,085	6,395	5,791	5,183
9/30/2024	4,761	4,426	4,214	4,067	4,083	4,230	4,534	4,721	4,921	5,345	5,898	6,520	7,201	7,793	8,163	8,445	8,801	8,881	8,721	8,196	7,655	7,045	6,339	5,643
10/1/2024	5,203	4,844	4,586	4,432	4,431	4,569	4,872	5,068	5,204	5,391	5,764	6,208	6,696	7,291	7,720	8,110	8,158	7,987	7,563	7,271	6,880	6,303	5,739	5,148
10/2/2024	4,745	4,427	4,143	4,019	3,990	4,157	4,482	4,749	4,896	5,239	5,571	6,118	6,792	7,418	7,846	8,167	8,407	8,308	7,938	7,682	7,368	6,831	6,016	5,338
10/3/2024	4,932	4,587	4,315	4,163	4,153	4,270	4,609	4,810	4,977	5,314	5,797	6,368	6,950	7,390	7,720	7,843	7,841	7,692	7,260	7,034	6,713	6,256	5,662	5,040
10/4/2024	4,682	4,384	4,186	4,057	4,039	4,180	4,509	4,743	4,979	5,423	5,989	6,503	7,070	7,584	7,850	8,136	8,154	8,030	7,464	7,170	6,853	6,320	5,844	5,153
10/5/2024	4,796	4,438	4,220	4,066	3,996	4,008	4,083	4,245	4,587	5,107	5,694	6,130	6,631	7,115	7,498	7,667	7,691	7,607	7,321	7,070	6,684	6,323	5,925	5,374
10/6/2024	4,899	4,589	4,347	4,206	4,112	4,094	4,179	4,293	4,556	4,919	5,292	5,383	5,421	5,398	5,344	5,266	5,241	5,284	5,321	5,448	5,332	5,101	4,707	4,198
10/7/2024	3,803	3,551	3,436	3,395	3,459	3,630	3,998	4,313	4,484	4,713	4,911	5,087	5,249	5,517	5,549	5,549	5,575	5,604	5,625	5,703	5,581	5,313	4,913	4,371
10/8/2024	3,950	3,689	3,523	3,415	3,410	3,531	3,804	3,988	4,119	4,349	4,580	4,977	5,474	5,906	6,101	6,167	6,111	5,977	5,817	5,764	5,540	5,210	4,713	4,221
10/9/2024	3,927	3,678	3,505	3,399	3,402	3,466	3,620	3,865	4,156	4,471	4,771	4,940	5,083	4,992	4,781	4,672	4,613	4,703	4,664	4,463	4,130	3,497	3,063	2,575
10/10/2024	2,350	2,209	2,069	1,932	1,800	1,726	1,749	1,760	1,798	1,882	2,038	2,127	2,274	2,435	2,628	2,819	2,976	3,086	3,163	3,300	3,274	3,108	2,850	2,547
10/11/2024	2,192	2,115	2,049	1,989	1,980	2,068	2,198	2,371	2,546	2,759	3,012	3,287	3,579	3,827	4,154	4,426	4,564	4,666	4,629	4,631	4,388	3,986	3,690	3,291
10/12/2024	3,039	2,827	2,652	2,551	2,526	2,557	2,644	2,747	2,948	3,255	3,552	3,951	4,410	4,789	5,115	5,309	5,442	5,533	5,435	5,255	5,003	4,640	4,221	3,830
10/13/2024	3,501	3,215	3,023	2,869	2,830	2,820	2,870	3,000	3,240	3,647	4,012	4,486	5,001	5,477	5,809	6,121	6,324	6,465	6,255	5,998	5,660	5,222	4,623	4,037
10/14/2024	3,659	3,375	3,184	3,070	3,072	3,180	3,390	3,565	3,762	4,000	4,258	4,603	5,110	5,512	5,930	6,307	6,605	6,711	6,449	6,223	5,856	5,342	4,724	4,043
10/15/2024	3,638	3,382	3,217	3,117	3,112	3,281	3,585	3,871	4,028	4,227	4,451	4,799	5,322	5,907	6,325	6,659	6,892	6,966	6,750	6,604	6,224	5,697	5,128	4,424
10/16/2024	4,052	3,733	3,524	3,379	3,363	3,483	3,759	3,896	3,955	3,959	3,919	4,003	4,008	4,016	4,119	4,144	4,283	4,405	4,396	4,513	4,389	4,027	3,631	3,176
10/17/2024	2,936	2,760	2,638	2,615																				

TYSP Year 2025
Question No. 4

Date	Hourly System Load (MW)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
10/27/2024	3,635	3,341	3,161	3,039	2,983	2,967	3,043	3,174	3,426	3,711	4,000	4,368	4,726	5,197	5,531	5,745	5,912	5,957	5,844	5,712	5,372	4,973	4,457	3,975
10/28/2024	3,573	3,318	3,148	3,087	3,127	3,303	3,689	3,944	4,083	4,238	4,371	4,641	4,961	5,179	5,485	5,668	5,865	5,970	5,928	5,962	5,652	5,352	4,761	4,278
10/29/2024	3,784	3,466	3,267	3,163	3,215	3,391	3,764	4,024	4,125	4,373	4,574	4,700	5,020	5,565	5,887	6,221	6,454	6,591	6,417	6,322	5,982	5,632	5,141	4,570
10/30/2024	4,030	3,722	3,560	3,472	3,448	3,604	3,916	4,209	4,328	4,548	4,821	5,249	5,718	6,003	6,238	6,497	6,612	6,559	6,450	6,267	5,815	5,473	4,967	4,386
10/31/2024	3,963	3,676	3,467	3,322	3,293	3,480	3,773	4,000	4,110	4,280	4,487	4,940	5,303	5,673	5,930	6,214	6,375	6,407	6,058	5,696	5,391	5,218	4,642	4,102
11/1/2024	3,714	3,468	3,291	3,191	3,139	3,286	3,646	3,898	4,019	4,224	4,542	4,900	5,327	5,722	6,062	6,171	6,215	6,241	6,047	5,938	5,607	5,195	4,894	4,435
11/2/2024	4,284	3,872	3,573	3,434	3,347	3,332	3,417	3,622	3,987	4,436	4,856	5,248	5,604	5,821	5,950	6,038	6,029	5,938	5,721	5,598	5,372	5,154	4,829	4,376
11/3/2024	4,082	3,729	3,353	3,236	3,190	3,208	3,331	3,626	4,184	4,721	5,267	5,599	5,937	6,179	6,333	6,421	6,396	6,230	6,118	5,818	5,502	5,144	4,712	4,177
11/4/2024	3,798	3,413	3,244	3,178	3,220	3,433	3,890	4,192	4,447	4,714	5,175	5,449	5,762	6,186	6,342	6,365	6,306	6,181	6,205	5,937	5,630	5,280	4,882	4,235
11/5/2024	4,003	3,802	3,635	3,549	3,570	3,780	4,179	4,372	4,624	4,896	5,256	5,688	6,017	6,223	6,216	6,195	6,231	6,320	6,352	6,178	5,978	5,701	5,306	4,847
11/6/2024	4,540	4,369	4,196	4,111	4,146	4,382	4,786	5,040	5,264	5,461	5,690	5,974	6,260	6,599	6,924	6,981	7,163	6,965	6,874	6,608	6,321	5,949	5,533	5,081
11/7/2024	4,694	4,484	4,310	4,274	4,286	4,522	4,886	5,139	5,346	5,607	5,979	6,288	6,411	6,577	6,718	6,746	6,758	6,721	6,672	6,364	6,026	5,639	5,256	4,713
11/8/2024	4,367	4,117	3,950	3,831	3,838	3,992	4,351	4,634	4,907	5,280	5,687	5,997	6,337	6,657	6,871	6,922	6,946	6,624	6,371	6,029	5,675	5,424	5,068	4,575
11/9/2024	4,205	3,960	3,809	3,599	3,555	3,588	3,750	4,030	4,489	4,964	5,396	5,695	5,978	6,237	6,404	6,466	6,449	6,216	6,061	5,742	5,436	5,165	4,844	4,375
11/10/2024	4,104	3,854	3,667	3,504	3,434	3,436	3,519	3,802	4,347	4,912	5,292	5,611	5,987	6,265	6,519	6,580	6,504	6,354	6,258	5,973	5,666	5,340	4,933	4,423
11/11/2024	4,058	3,769	3,613	3,511	3,478	3,653	4,005	4,274	4,589	4,998	5,368	5,839	6,222	6,549	6,803	6,984	7,002	6,785	6,675	6,326	5,982	5,544	5,044	4,480
11/12/2024	4,137	3,861	3,690	3,597	3,643	3,839	4,204	4,492	4,744	5,112	5,466	5,904	6,368	6,734	6,892	6,949	6,931	6,828	6,735	6,400	6,013	5,623	5,148	4,603
11/13/2024	4,268	4,011	3,776	3,689	3,708	3,910	4,246	4,414	4,624	4,930	5,252	5,548	5,830	5,997	6,154	6,152	6,141	6,041	5,998	5,735	5,423	5,050	4,604	4,115
11/14/2024	3,784	3,509	3,373	3,279	3,317	3,527	3,923	4,109	4,258	4,492	4,784	5,128	5,507	5,833	6,119	6,286	6,384	6,275	6,221	5,994	5,742	5,369	4,919	4,422
11/15/2024	4,088	3,778	3,594	3,539	3,579	3,794	4,154	4,296	4,377	4,395	4,505	4,720	4,938	5,168	5,339	5,500	5,530	5,378	5,222	4,913	4,636	4,311	4,046	3,668
11/16/2024	3,381	3,244	3,064	2,965	2,931	2,914	3,118	3,351	3,585	3,750	3,896	4,091	4,376	4,605	4,873	5,077	5,169	5,093	5,029	4,793	4,553	4,309	4,048	3,699
11/17/2024	3,447	3,248	3,128	2,975	3,012	3,047	3,177	3,347	3,631	3,879	4,113	4,400	4,705	4,935	5,141	5,288	5,351	5,406	5,401	5,144	4,892	4,557	4,131	3,719
11/18/2024	3,348	3,072	2,902	2,854	3,019	3,299	3,689	3,914	4,028	4,093	4,261	4,484	4,687	4,907	5,073	5,218	5,327	5,479	5,546	5,344	5,102	4,774	4,409	3,909
11/19/2024	3,605	3,331	3,171	3,074	3,126	3,341	3,696	3,903	4,012	4,201	4,364	4,609	4,902	5,218	5,375	5,485	5,498	5,632	5,670	5,440	5,247	4,945	4,588	4,138
11/20/2024	3,807	3,606	3,484	3,429	3,452	3,679	4,037	4,246	4,426	4,654	4,820	4,902	5,295	5,318	5,459	5,556	5,648	5,761	5,816	5,599	5,368	5,042	4,573	4,053
11/21/2024	3,671	3,374	3,173	3,073	3,077	3,268	3,641	3,792	3,805	3,651	3,615	3,505	3,595	3,611	3,796	4,021	4,299	4,481	4,627	4,550	4,409	4,189	3,847	3,508
11/22/2024	3,293	3,025	3,000	2,904	3,056	3,475	3,948	4,321	4,181	4,040	3,871	3,766	3,664	3,589	3,679	3,859	4,158	4,423	4,541	4,492	4,317	4,164	3,874	3,508
11/23/2024	3,285	3,189	3,111	3,151	3,287	3,506	3,856	4,125	4,230	4,160	3,809	3,593	3,476	3,461	3,455	3,663	3,966	4,194	4,429	4,306	4,226	4,060	3,870	3,626
11/24/2024	3,498	3,375	3,362	3,398	3,423	3,595	3,924	4,273	4,325	4,029	3,725	3,561	3,552	3,572	3,676	3,863	4,079	4,420	4,601	4,388	4,160	3,941	3,674	3,358
11/25/2024	3,231	3,165	3,124	3,155	3,320	3,627	4,156	4,439	4,246	3,989	3,813	3,714	3,745	3,858	4,022	4,236	4,424	4,652	4,818	4,616	4,383	4,172	3,812	3,426
11/26/2024	3,151	3,019	2,944	2,938	3,055	3,267	3,637	3,944	3,945	3,856	3,760	3,792	3,874	4,035	4,246	4,459	4,770	4,801	4,778	4,631	4,401	4,146	3,808	3,436
11/27/2024	3,158	2,962	2,873	2,870	2,936	3,091	3,384	3,677	3,769	3,793	3,834	3,967	4,175	4,377	4,654	4,927	5,155	5,162	5,081	4,804	4,571	4,274	3,956	3,547
11/28/2024	3,263	3,040	2,890	2,782	2,737	2,824	2,993	3,227	3,596	3,942	4,257	4,601	4,896	5,122	5,194	5,257	5,145	4,772	4,557	4,281	4,093	3,936	3,727	3,373
11/29/2024	3,179	2,988	2,867	2,815	2,847	2,942	3,130	3,283	3,592	3,889	4,086	4,169	4,230	4,203	4,205	4,237	4,257	4,371	4,389	4,191	3,991	3,887	3,629	3,355
11/30/2024	3,173	3,024	2,949	2,950	3,045	3,194	3,483	3,935	4,205	4,174	3,826	3,642	3,545	3,508	3,567	3,727	3,903	4,168	4,444	4,418	4,282	4,156	3,979	3,690
12/1/2024	3,546	3,435	3,338	3,469	3,605	3,785	4,121	4,586	4,720	4,480	4,037	3,737	3,662	3,607	3,665	3,799	4,056	4,567	4,919	4,975	4,948	4,724	4,562	4,146
12/2/2024	3,960	3,770	3,747	3,813	4,176	4,779	5,553	6,114	5,585	4,889	4,403	4,062	3,883	3,763	3,716	3,889	4,176	4,665	5,220	5,395	5,395	5,228	4,904	4,503
12/3/2024	4,346	4,282	4,363	4,398	4,732	5,235	6,130	6,571	5,958	5,144	4,479	4,146	3,947	3,828	3,829	3,967	4,275	4,827	5,227	5,306	5,261	5,151	4,904	4,605
12/4/2024	4,473	4,450	4,451	4,683	5,084	5,588	6,537	6,911	6,218	5,433	4,735	4,258	3,992	3,835	3,806	3,900	4,155	4,745	5,127	5,144	4,976	4,758	4,474	4,144
12/5/2024	4,092	4,034	4,056	4,124	4,307	4,777	5,322	5,585	5,139	4,607	4,134	3,884	3,804	3,801	3,824	3,955	4,159	4,585	4,777	4,755	4,646	4,439	3,982	3,485
12/6/2024																								

TYSP Year 2025
Question No. 4

Date	Hourly System Load (MW)																							
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
12/16/2024	3,112	2,923	2,789	2,767	2,874	3,150	3,535	3,891	3,923	3,940	3,997	4,075	4,197	4,261	4,333	4,447	4,661	4,997	5,226	5,139	4,966	4,525	4,124	3,658
12/17/2024	3,316	3,080	2,964	2,915	2,962	3,166	3,559	3,809	3,868	3,975	4,167	4,351	4,589	4,859	5,043	5,268	5,421	5,552	5,711	5,557	5,310	4,955	4,354	3,819
12/18/2024	3,349	3,130	2,988	2,929	2,985	3,182	3,569	3,839	3,974	4,082	4,191	4,376	4,535	4,694	4,871	5,236	5,368	5,530	5,591	5,298	5,049	4,529	4,112	3,606
12/19/2024	3,244	3,035	2,933	2,896	2,963	3,162	3,547	3,865	3,987	4,021	4,126	4,135	4,334	4,549	4,807	5,061	5,335	5,388	5,417	5,180	4,967	4,531	4,127	3,646
12/20/2024	3,311	3,070	2,921	2,871	2,942	3,131	3,528	3,899	3,932	3,832	3,856	3,857	3,881	3,876	3,909	4,048	4,288	4,553	4,725	4,616	4,423	4,270	4,074	3,727
12/21/2024	3,481	3,315	3,202	3,180	3,300	3,517	3,931	4,392	4,713	4,548	4,230	3,960	3,775	3,696	3,674	3,837	4,092	4,616	4,811	4,855	4,869	4,806	4,688	4,478
12/22/2024	4,259	4,192	4,195	4,120	4,149	4,410	4,713	5,228	5,341	4,945	4,469	4,062	3,864	3,727	3,751	3,859	4,058	4,545	4,807	4,798	4,642	4,478	4,200	3,874
12/23/2024	3,644	3,475	3,396	3,395	3,508	3,889	4,366	4,621	4,627	4,483	4,109	3,874	3,874	3,890	3,920	4,018	4,166	4,483	4,716	4,559	4,421	4,189	3,942	3,615
12/24/2024	3,369	3,161	3,038	3,001	3,032	3,170	3,498	3,798	4,164	4,474	4,429	4,257	4,043	4,024	4,108	4,211	4,289	4,474	4,642	4,496	4,258	4,032	3,847	3,553
12/25/2024	3,381	3,221	3,140	3,113	3,141	3,196	3,447	3,666	3,943	4,207	4,055	4,151	4,070	4,011	3,908	3,861	3,905	3,997	4,090	4,020	3,960	3,792	3,605	3,282
12/26/2024	3,084	2,915	2,845	2,824	2,873	3,013	3,260	3,580	3,791	3,804	3,831	3,860	3,860	3,865	4,012	4,139	4,296	4,531	4,702	4,604	4,396	4,175	3,868	3,483
12/27/2024	3,232	3,024	2,871	2,849	2,887	2,990	3,212	3,461	3,727	3,948	4,038	4,058	4,067	4,184	4,319	4,481	4,657	4,817	4,926	4,717	4,483	4,274	4,001	3,648
12/28/2024	3,400	3,145	2,990	2,870	2,863	2,909	3,023	3,170	3,461	3,754	4,001	4,243	4,415	4,473	4,489	4,537	4,657	4,847	4,971	4,679	4,473	4,322	4,039	3,688
12/29/2024	3,444	3,174	3,034	2,909	2,871	2,935	3,025	3,207	3,533	3,864	4,056	4,140	4,354	4,503	4,602	4,583	4,577	4,660	4,745	4,546	4,316	4,113	3,829	3,464
12/30/2024	3,197	3,003	2,870	2,820	2,857	2,981	3,284	3,544	3,772	3,986	4,130	4,198	4,236	4,317	4,501	4,721	4,918	5,140	5,216	5,113	4,729	4,471	4,163	3,755
12/31/2024	3,420	3,154	3,016	2,969	2,949	3,073	3,286	3,502	3,796	4,033	4,225	4,355	4,585	4,663	4,724	4,939	5,209	5,365	5,389	5,051	4,665	4,285	3,896	3,579

TYSP Year
Question No.

2025
5

Year	Month	Actual Peak Demand	Demand Response Activated	Estimated Peak Demand	Day	Hour	System-Average Temperature
		(MW)	(MW)	(MW)			(Degrees F)
2024	1	7,365	0	7,365	21	9	47.65
	2	6,659	0	6,659	20	8	55.80
	3	6,562	0	6,562	15	18	74.20
	4	7,425	0	7,425	19	18	76.82
	5	9,068	0	9,068	27	19	83.88
	6	9,448	0	9,448	6	18	84.13
	7	9,468	0	9,468	8	16	85.34
	8	9,269	0	9,269	8	18	86.91
	9	8,881	0	8,881	30	18	82.82
	10	8,407	0	8,407	2	17	82.06
	11	7,163	0	7,163	6	17	80.67
	12	6,911	0	6,911	4	8	53.28
2023	1	7,840	0	7,840	16	8	51.04
	2	6,657	0	6,657	23	17	75.15
	3	7,608	0	7,608	27	18	77.93
	4	7,845	0	7,845	4	18	77.68
	5	8,354	0	8,354	11	17	80.62
	6	9,322	0	9,322	27	18	85.00
	7	9,725	0	9,725	21	17	87.03
	8	10,268	0	10,268	11	18	87.56
	9	9,281	0	9,281	11	18	83.71
	10	7,859	0	7,859	13	17	80.98
	11	6,799	0	6,799	11	16	75.53
	12	5,936	0	5,936	3	15	74.28
2022	1	9,240	0	9,240	30	8	45.12
	2	7,539	0	7,539	1	8	57.81
	3	7,003	0	7,003	18	18	73.65
	4	7,905	0	7,905	6	18	79.37
	5	8,743	0	8,743	23	17	81.55
	6	9,977	0	9,977	15	17	84.79
	7	9,799	0	9,799	29	17	83.96
	8	9,848	0	9,848	1	17	84.13
	9	9,306	0	9,306	6	17	84.17
	10	7,956	0	7,956	11	17	78.48
	11	7,811	0	7,811	1	17	77.58
	12	9,157	0	9,157	25	9	38.36
Notes							
(Include Notes Here)							

Historic Peak Demand

TYSP Year 2025

Question No. 18

Year	Number of PEVs	Number of Public PEV Charging Stations	Number of Public DCFC PEV Charging Stations	Cumulative Impact of PEVs		
				Summer Demand	Winter Demand	Annual Energy
				(MW)	(MW)	(GWh)
2025	82,431	3,282	752	13.8	0.8	52
2026	112,917	4,933	829	29.6	3.9	129
2027	152,824	7,162	864	55.9	9.9	231
2028	205,171	10,189	938	81.9	17.1	358
2029	272,878	14,154	1,062	113.3	25.9	516
2030	357,871	19,139	1,238	152.2	37.3	714
2031	461,273	25,180	1,465	207.9	54.2	988
2032	582,663	32,234	1,739	273.1	75.5	1,314
2033	714,221	39,844	2,042	344.9	100.8	1,682
2034	857,869	48,108	2,380	423.1	128.4	2,085
Notes						
1. Source: Fall 2024 EV Forecast 2. "Number of PEVs" total cumulative PEV vehicles which includes includes Light, Medium, and Heavy Duty Vehicles. 3. "Cumulative Impact of PEVs" includes only net-new vehicles beginning January 2025 as used and provided to load forecasting. This includes energy impacts from light, medium, and heavy duty vehicles (energy is from 1/1/2025). 4. "Number of Public PEV charging stations" includes both L2 and DC charging stations 5."Cumulative Impact of PEV's at the system's coincident peak for Summer and Winter.						

TYSP Year 2025
Question No. 27

[Demand Response Source or All Demand Response Sources]									
Year	Participating Customers			Available Capacity (MW)					
				Summer			Winter		
	Start of Year	Lost	Added	Start of Year	Lost	Added	Start of Year	Lost	Added
2015	410,855	1,376	6,372	752	DNA	29	1,055	DNA	35
2016	415,838	372	8,782	714	DNA	79	1,014	DNA	88
2017	424,246	4,064	9,592	756	DNA	34	1,065	DNA	43
2018	429,750	3,968	6,478	783	DNA	42	1,090	DNA	51
2019	432,277	3,910	6,862	786	DNA	69	1,098	DNA	76
2020	435,224	2,881	2,758	875	DNA	97	1,136	DNA	85
2021	435,102	2,713	1,613	908	DNA	9	1,161	DNA	10
2022	433,981	3,324	772	923	DNA	5	1,171	DNA	5
2023	431,460	617	2,922	903	2	36	1,157	2	31
2024	433,765	5,004	2,589	937	52.4	21	1,186	47	23
Notes									
(Include Notes Here)									

Residential Load Management									
Year	Participating Customers			Available Capacity (MW)					
				Summer			Winter		
	Start of Year	Lost	Added	Start of Year	Lost	Added	Start of Year	Lost	Added
2015	410,396	1,372	6,345	357	2	7	656	3	13
2016	415,369	103	8,634	366	1	10	669	6	19
2017	423,900	4,058	9,561	382	3	11	694	4	20
2018	429,403	3,965	6,424	388	3	7	698	4	13
2019	431,862	3,902	6,847	396	2	7	711	4	14
2020	434,807	2,879	2,735	394	2	3	671	4	6
2021	434,663	2,704	1,604	392	4	2	667	5	3
2022	433,563	3,289	767	390	14	1	665	16	1
2023	431,041	614	2,916	377	1	10	650	1	5
2024	433,343	4,998	2,579	386	4	2	654	8	4
Notes									
A transition from CSS to SAP began Nov 1 2021. The residential transition is ongoing and many of the reports have not been completed Beginning year 2023 customers = SAP/HANA report for participants Jan 1, 2023 - Jan 31, 2023 Capacity at generator based on participant counts Customers lost in 2024 increased due to Switch Replacement Plan									

TYSP Year
Question No.

2025
27

Commercial Load Management									
Year	Participating Customers			Available Capacity (MW)					
				Summer			Winter		
	Start of Year	Lost	Added	Start of Year	Lost	Added	Start of Year	Lost	Added
2015	64	1	0	4	0	0	0	0	0
2016	63	0	0	4	0	0	0	0	0
2017	63	0	0	4	0	0	0	0	0
2018	63	0	0	4	0	0	0	0	0
2019	63	0	0	4	0	0	0	0	0
2020	63	0	0	4	0	0	0	0	0
2021	63	4	0	4	0	0	0	0	0
2022	59	1	0	4	0	0	0	0	0
2023	58	0	0	4	0	0	0	0	0
2024	58	0	0	4	0	0	0	0	0
Notes									
The program closed to new participants in 2000 and several participants have closed their accounts.									

Standby Generation									
Year	Participating Customers			Available Capacity (MW)					
				Summer			Winter		
	Start of Year	Lost	Added	Start of Year	Lost	Added	Start of Year	Lost	Added
2015	260	2	25	108	DNA	20	109	DNA	20
2016	269	269	147	68	DNA	68	68	DNA	68
2017	145	5	28	77	DNA	7	77	DNA	7
2018	147	1	12	82	DNA	3	82	DNA	3
2019	178	3	1	83	DNA	0	83	DNA	0
2020	175	1	5	80	DNA	2	80	DNA	0
2021	179	3	5	81	1	2	80	1	2
2022	183	0	3	82	0	1	81	0	1
2023	186	3	4	83	1	3	82	1	3
2024	187	2	7	85	1	3	84	1	3
Notes									
(Include Notes Here)									

TYSP Year 2025
Question No. 27

Interruptible Service									
Year	Participating Customers			Available Capacity (MW)					
				Summer			Winter		
	Start of Year	Lost	Added	Start of Year	Lost	Added	Start of Year	Lost	Added
2015	131	1	2	277	DNA	3	283	DNA	3
2016	133	0	1	270	DNA	1	270	DNA	1
2017	134	1	3	287	DNA	16	287	DNA	16
2018	133	2	42	303	DNA	32	303	DNA	34
2019	170	5	14	297	DNA	62	297	DNA	62
2020	175	1	18	389	DNA	92	376	DNA	79
2021	193	2	4	395	2	6	381	2	6
2022	172	34	2	398	4.8	3	384	4.8	3
2023	171	0	1	390	0	22	384	0	22
2024	172	2	3	412	2	16	406	2	16
Notes									
34 accounts no longer qualified for Interruptible Service beginning Jan 1 2022 and were removed from the program.									

Curtable Service									
Year	Participating Customers			Available Capacity (MW)					
				Summer			Winter		
	Start of Year	Lost	Added	Start of Year	Lost	Added	Start of Year	Lost	Added
2015	4	0	0	6	DNA	0	7	DNA	0
2016	4	0	0	6	DNA	0	7	DNA	0
2017	4	0	0	6	DNA	0	7	DNA	0
2018	4	0	0	6	DNA	0	7	DNA	0
2019	4	0	0	6	DNA	0	7	DNA	0
2020	4	0	0	8	DNA	0	9	DNA	0
2021	4	0	0	36	DNA	0	33	DNA	0
2022	4	0	0	49	DNA	0	41	DNA	0
2023	4	0	1	49	0	1	41	0	1
2024	5	2	0	50	45	0	42	36	0
Notes									
January 2024 Lost capacity due to the closure of curtable customer called GP Cellulose									

TYSP Year 2025
Question No. 27

Table Footnotes:

- (1) Total available capacity may change as a result of multiple factors including changes in participation, changes in contribution from existing participants, and periodic evaluation of system response.
Thus, changes in total available capacity do not directly correlate to changes in participation.
- (2) Added capacity corresponds to the addition of new participants and those converted from suspended accounts.
- (3) Data is Not Available (DNA) on lost capacity for certain source programs and therefore is listed as DNA in their specific table and for the aggregated ALL Source Table.
- (4) Nov 1 2021, the customer accounting system CSS was moved to Customer Connect (SAP)
- (5) The transtion has resulted in reporting errors affecting all programs, especially residential DR reporting
- (6) The Interruptible Tariff was revised January 1 2022 resulting in 34 participants no longer qualifying for the program
- (7) In 2021 it was discovered that a large Curtailable customer load was not being reported and corrected acoounting for additional reported load.
- (8) The Commerical Load Management program was closed to new participants in 2000 and participation is slowly diminishing
- (9) During 2016 the Emergency Stand-by Tariff was closed and the customers were removed from the program.
The Standby Generation Tariff was modified and the program renewed as non-Emergency Standby Tariff.
- (10) Curtailable Service: it was discovered in 2020 that one account was not included in the CSS reports. The increase in reported MW is due to that.

TYSP Year 2025
Question No. 28

Demand Response Source or All Demand Response Sources														
Year	Summer							Winter						
	Total Events	Customers Activated			Capacity Activated (MW)			Total Events	Customers Activated			Capacity Activated (MW)		
		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day
2015	125	0	0	0	0	0	0	0	0	0	0	0	0	0
2016	114	0	0	0	0	0	0	0	0	0	0	0	0	0
2017	134	0	0	0	0	0	0	0	0	0	0	0	0	0
2018	84	0	0	0	0	0	0	0	0	0	0	0	0	0
2019	98	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	91	0	0	0	0	0	0	0	0	0	0	0	0	0
2021	74	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	86	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	38	0	0	0	0	0	0	0	0	0	0	0	0	0
2024	46	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes														
(Include Notes Here)														

Residential Load Management														
Year	Summer							Winter						
	Total Events	Customers Activated			Capacity Activated (MW)			Total Events	Customers Activated			Capacity Activated (MW)		
		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day
2015	125	0	0	0	0	0	0	0	0	0	0	0	0	0
2016	114	0	0	0	0	0	0	0	0	0	0	0	0	0
2017	134	0	0	0	0	0	0	0	0	0	0	0	0	0
2018	84	0	0	0	0	0	0	0	0	0	0	0	0	0
2019	98	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	91	0	0	0	0	0	0	0	0	0	0	0	0	0
2021	74	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	86	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	38	0	0	0	0	0	0	0	0	0	0	0	0	0
2024	46	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes														
All events did not occur during the peak.														

TYSP Year 2025
Question No. 28

Commercial Load Management														
Year	Summer							Winter						
	Total Events	Customers Activated			Capacity Activated (MW)			Total Events	Customers Activated			Capacity Activated (MW)		
		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day
2015	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2018	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes														
(Include Notes Here)														

StandBy Generation														
Year	Summer							Winter						
	Total Events	Customers Activated			Capacity Activated (MW)			Total Events	Customers Activated			Capacity Activated (MW)		
		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day
2015	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2018	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes														
(Include Notes Here)														

TYSP Year 2025
Question No. 28

Interruptible Service														
Year	Summer							Winter						
	Total Events	Customers Activated			Capacity Activated (MW)			Total Events	Customers Activated			Capacity Activated (MW)		
		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day
2015	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2018	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes														
(Include Notes Here)														

Curtaillible Service														
Year	Summer							Winter						
	Total Events	Customers Activated			Capacity Activated (MW)			Total Events	Customers Activated			Capacity Activated (MW)		
		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day		Average Event	Max Event	Peak Day	Average Event	Max Event	Peak Day
2015	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2016	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2017	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2018	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2023	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2024	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes														
(Include Notes Here)														

TYSP Year 2025
Question No. 29(a)

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Capacity (MW)					
							Gross		Net		Firm	
					Mo	Yr	Sum	Win	Sum	Win	Sum	Win
Anclote	1	PASCO	ST	NG	October	1974	522	534	508	521	508	521
Anclote	2	PASCO	ST	NG	October	1978	512	517	497	504	497	504
Crystal River	4	CITRUS	ST	BIT	December	1982	769	778	712	721	712	721
Crystal River	5	CITRUS	ST	BIT	October	1984	767	778	710	721	710	721
Bartow CC	4	PINELLAS	CC	NG	June	2009	1162	1279	1,142	1,259	1,142	1,200
Citrus CC	PB1	CITRUS	CC	NG	October	2018	825	943	807	925	807	925
Citrus CC	PB2	CITRUS	CC	NG	November	2018	828	947	810	929	810	929
Hines Energy Complex	1	POLK	CC	NG	April	1999	508	528	501	521	501	521
Hines Energy Complex	2	POLK	CC	NG	December	2003	540	557	532	549	532	549
Hines Energy Complex	3	POLK	CC	NG	November	2005	531	543	523	535	523	535
Hines Energy Complex	4	POLK	CC	NG	December	2007	552	552	544	544	544	544
Osprey CC	1	POLK	CC	NG	May	2004	628	623	616	611	245	245
Tiger Bay	1	POLK	CC	NG	August	1997	202	233	199	230	199	230
Bartow Peaker	P1	PINELLAS	GT	DFO	May	1972	41	50	41	50	41	50
Bartow Peaker	P2	PINELLAS	GT	NG	June	1972	41	53	41	53	41	53
Bartow Peaker	P3	PINELLAS	GT	DFO	June	1972	41	51	41	51	41	51
Bartow Peaker	P4	PINELLAS	GT	NG	June	1972	45	58	45	58	45	58
Bayboro	P1	PINELLAS	GT	DFO	April	1973	37	55	37	55	37	55
Bayboro	P2	PINELLAS	GT	DFO	April	1973	19	28	19	28	19	28
Bayboro	P3	PINELLAS	GT	DFO	April	1973	40	54	40	54	40	54
Bayboro	P4	PINELLAS	GT	DFO	April	1973	41	56	41	56	41	56
DeBary	P2	VOLUSIA	GT	DFO	December	1975	45	57	45	57	45	57
DeBary	P3	VOLUSIA	GT	DFO	December	1975	45	59	45	59	45	59
DeBary	P4	VOLUSIA	GT	DFO	December	1975	46	59	46	59	46	59
DeBary	P5	VOLUSIA	GT	DFO	December	1975	45	58	45	58	45	58
DeBary	P6	VOLUSIA	GT	DFO	December	1975	46	59	46	59	46	59
DeBary	P7	VOLUSIA	GT	NG	October	1992	74	93	74	93	74	93
DeBary	P8	VOLUSIA	GT	NG	October	1992	75	94	75	94	75	94
DeBary	P9	VOLUSIA	GT	NG	October	1992	76	94	76	94	76	94
DeBary	P10	VOLUSIA	GT	DFO	October	1992	72	88	72	88	72	88
Intercession City	P1	OSCEOLA	GT	DFO	May	1974	45	61	45	61	45	61
Intercession City	P2	OSCEOLA	GT	DFO	May	1974	46	60	46	60	46	60
Intercession City	P3	OSCEOLA	GT	DFO	May	1974	46	61	46	61	46	61
Intercession City	P4	OSCEOLA	GT	DFO	May	1974	46	62	46	62	46	62

Existing Utility

TYSP Year 2025
Question No. 29(a)

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Capacity (MW)					
							Gross		Net		Firm	
					Mo	Yr	Sum	Win	Sum	Win	Sum	Win
Intercession City	P5	OSCEOLA	GT	DFO	May	1974	45	59	45	59	45	59
Intercession City	P6	OSCEOLA	GT	DFO	May	1974	47	60	47	60	47	60
Intercession City	P7	OSCEOLA	GT	NG	October	1993	78	90	78	90	78	90
Intercession City	P8	OSCEOLA	GT	NG	October	1993	77	88	77	88	77	88
Intercession City	P9	OSCEOLA	GT	NG	October	1993	77	88	77	88	77	88
Intercession City	P10	OSCEOLA	GT	NG	October	1993	74	86	74	86	74	86
Intercession City	P11	OSCEOLA	GT	DFO	January	1997	142	163	140	161	140	161
Intercession City	P12	OSCEOLA	GT	NG	December	2000	73	89	73	89	73	89
Intercession City	P13	OSCEOLA	GT	NG	December	2000	73	91	73	91	73	91
Intercession City	P14	OSCEOLA	GT	NG	December	2000	73	90	73	90	73	90
Suwannee Peaker	P1	SUWANNEE	GT	NG	October	1980	48	65	48	65	48	65
Suwannee Peaker	P2	SUWANNEE	GT	NG	October	1980	48	64	48	64	48	64
Suwannee Peaker	P3	SUWANNEE	GT	NG	November	1980	49	65	49	65	49	65
University of Florida	P1	ALACHUA	GT	NG	January	1994	45	51	44	50	44	50
Econolockhatchee Photovoltaic Array	1	Volusia	PV	SO	1	1989	0.01	0.01	0.01	0.01	0.00	0.00
Osceola	1	Osceola	PV	SO	5	2016	3.6	3.6	3.6	3.6	2.0	0.18
Perry	1	Taylor	PV	SO	7	2016	4.9	4.9	4.9	4.9	2.6	0.24
Suwannee	1	Suwannee	PV	SO	12	2017	8.5	8.5	8.5	8.5	4.6	0.42
Hamilton	1	Hamilton	PV	SO	12	2018	72.7	72.7	72.7	72.7	39.0	3.63
Lake Placid	1	Highlands	PV	SO	12	2019	25.2	25.2	25.2	25.2	13.5	1.26
Trenton	1	Gilchrist	PV	SO	12	2019	73.0	73.0	73.0	73.0	39.2	3.65
St. Petersburg Pier	1	Pinellas	PV	SO	12	2019	0.3	0.3	0.3	0.3	0.2	0.02
Columbia	1	Columbia	PV	SO	3	2020	73.0	73.0	73.0	73.0	39.2	3.65
DeBary	1	Volusia	PV	SO	5	2020	72.7	72.7	72.7	72.7	39.0	3.63
Sante Fe	1	Columbia	PV	SO	3	2021	73.4	73.4	73.4	73.4	39.4	3.67
Twin Rivers	1	Hamilton	PV	SO	3	2021	73.4	73.4	73.4	73.4	39.4	3.67
Duette	1	Manatee	PV	SO	10	2021	73.4	73.4	73.4	73.4	39.4	3.67
Sandy Creek	1	Bay	PV	SO	5	2022	73.8	74.2	73.8	74.2	39.6	3.71
Ft Green	1	Hardee	PV	SO	6	2022	73.8	74.2	73.8	74.2	39.6	3.71
Charlie Creek	1	Hardee	PV	SO	8	2022	73.8	74.2	73.8	74.2	39.6	3.71
Bay Trail	1	Citrus	PV	SO	9	2022	74.2	74.2	74.2	74.2	39.8	3.7
Dolphin Solar	1	Pinellas	PV	SO	8	2022	0.2	0.2	0.2	0.2	0.1	0.0
Hildreth	1	Suwannee	PV	SO	4	2023	74.2	74.5	74.2	74.5	39.8	3.7

Existing Utility

TYSP Year 2025
Question No. 29(a)

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Capacity (MW)					
							Gross		Net		Firm	
					Mo	Yr	Sum	Win	Sum	Win	Sum	Win
High Springs	1	Alachua	PV	SO	4	2023	74.2	74.5	74.2	74.5	39.8	3.7
Hardeetown	1	Levy	PV	SO	4	2023	74.2	74.5	74.2	74.5	39.8	3.7
Bay Ranch	1	Bay	PV	SO	4	2023	74.2	74.5	74.2	74.5	39.8	3.7
John Hopkins	1	Pinellas	PV	SO	11	2023	0.7	0.7	0.7	0.7	0.4	0.0
Hines Floating Solar	1	Polk	PV	SO	11	2023	0.7	0.7	0.7	0.7	0.4	0.0
Mule Creek	1	Bay	PV	SO	3	2024	74.5	74.9	74.5	74.9	40.0	3.75
Winquepin	1	Madison	PV	SO	3	2024	74.5	74.9	74.5	74.9	40.0	3.75
Falmouth	1	Suwannee	PV	SO	6	2024	74.5	74.9	74.5	74.9	40.0	3.75
County Line	1	Alachua	PV	SO	8	2024	74.9	74.9	74.9	74.9	40.2	3.75
Notes												
Capacity for Solar resources include degradation. Distribution Connected Storage included in Existing Storage Table.												

2025 TYSP.SDR_1.Excel Tables_Responses

DEF's Response to Staff DR 1 (3-82)

Page 24 of 56

TYSP Year 2025
Question No. 29(b)

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Capacity (MW)					
							Gross		Net		Firm	
					Mo	Yr	Sum	Win	Sum	Win	Sum	Win
Sundance	1	Madison	PV	SO	7	2025	74.9	74.9	74.9	74.9	25.8	3.7
Half Moon	1	Sumter	PV	SO	1	2026	74.9	74.9	74.9	74.9	25.8	3.7
Rattler	1	Hernando	PV	SO	1	2026	74.9	74.9	74.9	74.9	25.8	3.7
Bailey Mill	1	Jefferson	PV	SO	5	2026	74.9	74.9	74.9	74.9	25.8	3.7
Jumper Creek	1	Sumter	PV	SO	6	2026	74.9	74.9	74.9	74.9	27.3	3.3
Lonesome Camp	1	Osceola	PV	SO	12	2026	74.9	74.9	74.9	74.9	27.3	3.3
Turnpike	1	Osceola	PV	SO	12	2026	74.9	74.9	74.9	74.9	27.3	3.3
Banner	1	Columbia	PV	SO	12	2026	74.5	74.5	74.5	74.5	27.2	3.3
Powerline BESS	1	Citrus	BA	N/A	3	2027	100.0	100.0	100.0	100.0	90.0	90.0
Renewable Energy Center #38	1	Unknown	PV	SO	6	2027	74.9	74.9	74.9	74.9	25.1	3.1
Renewable Energy Center #39	1	Unknown	PV	SO	6	2027	74.9	74.9	74.9	74.9	25.1	3.1
Renewable Energy Center #40	1	Unknown	PV	SO	12	2027	74.9	74.9	74.9	74.9	25.1	3.1
Renewable Energy Center #41	1	Unknown	PV	SO	12	2027	74.9	74.9	74.9	74.9	25.1	3.1
Renewable Energy Center #42	1	Unknown	PV	SO	7	2028	74.9	74.9	74.9	74.9	20.6	3.1
Renewable Energy Center #43	1	Unknown	PV	SO	7	2028	74.9	74.9	74.9	74.9	20.6	3.1
Renewable Energy Center #44	1	Unknown	PV	SO	7	2028	74.9	74.9	74.9	74.9	20.6	3.1
Renewable Energy Center #45	1	Unknown	PV	SO	7	2028	74.9	74.9	74.9	74.9	20.6	3.1
Renewable Energy Center #46	1	Unknown	PV	SO	7	2028	74.9	74.9	74.9	74.9	20.6	3.1
Co-located BESS #47	1	Unknown	BA	N/A	7	2028	100.0	100.0	100.0	100.0	90.0	90.0
Renewable Energy Center #48	1	Unknown	BA	N/A	6	2029	225.0	225.0	225.0	225.0	202.5	202.5
Renewable Energy Center #49	1	Unknown	PV	SO	7	2029	74.9	74.9	74.9	74.9	20.6	3.1
Renewable Energy Center #50	1	Unknown	PV	SO	7	2029	74.9	74.9	74.9	74.9	20.6	3.1
Renewable Energy Center #51	1	Unknown	PV	SO	7	2029	74.9	74.9	74.9	74.9	20.6	3.1
Renewable Energy Center #52	1	Unknown	PV	SO	7	2029	74.9	74.9	74.9	74.9	16.1	3.1
Renewable Energy Center #53	1	Unknown	PV	SO	7	2029	74.9	74.9	74.9	74.9	16.1	3.1
Co-located BESS #54	1	Unknown	BA	N/A	7	2029	100.0	100.0	100.0	100.0	90.0	90.0
Renewable Energy Center #55	1	Unknown	PV	SO	7	2030	74.9	74.9	74.9	74.9	16.1	3.1
Renewable Energy Center #56	1	Unknown	PV	SO	7	2030	74.9	74.9	74.9	74.9	16.1	3.1
Renewable Energy Center #57	1	Unknown	PV	SO	7	2030	74.9	74.9	74.9	74.9	16.1	3.1
Renewable Energy Center #58	1	Unknown	PV	SO	7	2030	74.9	74.9	74.9	74.9	16.1	3.1
Renewable Energy Center #59	1	Unknown	PV	SO	7	2030	74.9	74.9	74.9	74.9	16.1	3.1
Co-located BESS #60	1	Unknown	BA	N/A	7	2030	100.0	100.0	100.0	100.0	90.0	90.0
Renewable Energy Center #61	1	Unknown	PV	SO	7	2031	74.9	74.9	74.9	74.9	16.1	3.1
Renewable Energy Center #62	1	Unknown	PV	SO	7	2031	74.9	74.9	74.9	74.9	11.6	3.1

Planned Utility

2025 TYSP.SDR_1.Excel Tables_Responses

DEF's Response to Staff DR 1 (3-82)

Page 25 of 56

TYSP Year 2025
Question No. 29(b)

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Capacity (MW)					
							Gross		Net		Firm	
					Mo	Yr	Sum	Win	Sum	Win	Sum	Win
Renewable Energy Center #63	1	Unknown	PV	SO	7	2031	74.9	74.9	74.9	74.9	11.6	3.1
Renewable Energy Center #64	1	Unknown	PV	SO	7	2031	74.9	74.9	74.9	74.9	11.6	3.1
Renewable Energy Center #65	1	Unknown	PV	SO	7	2031	74.9	74.9	74.9	74.9	11.6	3.1
Renewable Energy Center #66	1	Unknown	PV	SO	7	2031	74.9	74.9	74.9	74.9	11.6	3.1
Renewable Energy Center #67	1	Unknown	PV	SO	7	2031	74.9	74.9	74.9	74.9	11.6	3.1
Renewable Energy Center #68	1	Unknown	PV	SO	7	2031	74.9	74.9	74.9	74.9	11.6	3.1
Co-located BESS #69	1	Unknown	BA	N/A	7	2031	100.0	100.0	100.0	100.0	90.0	90.0
Renewable Energy Center #70	1	Unknown	PV	SO	7	2032	74.9	74.9	74.9	74.9	11.6	3.1
Renewable Energy Center #71	1	Unknown	PV	SO	7	2032	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #72	1	Unknown	PV	SO	7	2032	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #73	1	Unknown	PV	SO	7	2032	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #74	1	Unknown	PV	SO	7	2032	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #75	1	Unknown	PV	SO	7	2032	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #76	1	Unknown	PV	SO	7	2032	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #77	1	Unknown	PV	SO	7	2032	74.9	74.9	74.9	74.9	7.1	3.1
Co-located BESS #78	1	Unknown	BA	N/A	7	2032	100.0	100.0	100.0	100.0	85.0	85.0
Undesignated CT	P1	Unknown	GT	NG	6	2033	245.5	263.6	245.5	263.6	245.5	263.6
Undesignated CT	P2	Unknown	GT	NG	6	2033	245.5	263.6	245.5	263.6	245.5	263.6
Renewable Energy Center #79	1	Unknown	PV	SO	7	2033	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #80	1	Unknown	PV	SO	7	2033	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #81	1	Unknown	PV	SO	7	2033	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #82	1	Unknown	PV	SO	7	2033	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #83	1	Unknown	PV	SO	7	2033	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #84	1	Unknown	PV	SO	7	2033	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #85	1	Unknown	PV	SO	7	2033	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #86	1	Unknown	PV	SO	7	2033	74.9	74.9	74.9	74.9	7.1	3.1
Co-located BESS #87	1	Unknown	BA	N/A	7	2033	100.0	100.0	100.0	100.0	70.0	70.0
Co-located BESS #88	1	Unknown	BA	N/A	6	2034	300.0	300.0	300.0	300.0	210.0	210.0
Undesignated CT	P3	Unknown	GT	NG	6	2034	224.3	232.5	224.3	232.5	224.3	232.5
Undesignated CT	P4	Unknown	GT	NG	6	2034	224.3	232.5	224.3	232.5	224.3	232.5
Renewable Energy Center #89	1	Unknown	PV	SO	7	2034	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #90	1	Unknown	PV	SO	7	2034	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #91	1	Unknown	PV	SO	7	2034	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #92	1	Unknown	PV	SO	7	2034	74.9	74.9	74.9	74.9	7.1	3.1

Planned Utility

TYSP Year 2025

Question No. 29(b)

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Capacity (MW)					
							Gross		Net		Firm	
					Mo	Yr	Sum	Win	Sum	Win	Sum	Win
Renewable Energy Center #93	1	Unknown	PV	SO	7	2034	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #94	1	Unknown	PV	SO	7	2034	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #95	1	Unknown	PV	SO	7	2034	74.9	74.9	74.9	74.9	7.1	3.1
Renewable Energy Center #96	1	Unknown	PV	SO	7	2034	74.9	74.9	74.9	74.9	7.1	3.1
Co-located BESS #97	1	Unknown	BA	N/A	7	2034	100.0	100.0	100.0	100.0	70.0	70.0
Notes												
Sundance is expected in-service summer 2025. The remaining named units are in various development stages. *DEF modeling derives an equivalent												

TYSP Year 2025

Question No. 33

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Certification Dates (if Applicable)	
							Need	PPSA Certified
					Mo	Yr	(Commission)	
Undesignated CT	P1	Unknown	Gas Turbine	Natural Gas	June	2033	Not Required	Not Required
Undesignated CT	P2	Unknown	Gas Turbine	Natural Gas	June	2033	Not Required	Not Required
Undesignated CT	P3	Unknown	Gas Turbine	Natural Gas	June	2034	Not Required	Not Required
Undesignated CT	P4	Unknown	Gas Turbine	Natural Gas	June	2034	Not Required	Not Required
Notes								
(Include Notes Here)								

Planned PPSA

TYSP Year
Question No.

2025
34

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Final Decision ('Drop Dead') Date	Site Selection		Engineering / Permitting / Procurement		Constuction		Commercial In-Service Date
						Begins	Ends	Begins	Ends	Begins	Ends	
Undesignated CT	P1	Unknown	Gas Turbine	Natural Gas	11/2031	Q2/2026	Q4/2027	Q1/2028	Q2/2032	Q3/2031	Q2/2033	06/2033
Undesignated CT	P2	Unknown	Gas Turbine	Natural Gas	11/2031	Q2/2026	Q4/2027	Q1/2028	Q2/2032	Q3/2031	Q2/2033	06/2033
Undesignated CT	P3	Unknown	Gas Turbine	Natural Gas	11/2032	Q2/2027	Q4/2028	Q1/2029	Q2/2033	Q3/2032	Q2/2033	06/2034
Undesignated CT	P4	Unknown	Gas Turbine	Natural Gas	11/2032	Q2/2027	Q4/2028	Q1/2029	Q2/2033	Q3/2032	Q2/2033	06/2034
Notes												
(Include Notes Here)												

TYSP Year 2025
Question No. 35

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Performance (%)						Average Net Operating Heat Rate (ANOHR)	
							Planned Outage Factor (POF)		Forced Outage Factor (FOF)		Equivalent Availability Factor (EAF)			
					Mo	Yr	Historic	Projected	Historic	Projected	Historic	Projected	Historic	Projected
Anclote	1	Pasco	Steam	Gas	10	1974	12.12	12.12	2.08	2.08	74.36	74.36	11,430	11,430
	2				10	1978	8.91	8.91	5.89	5.89	72.73	72.73	12,011	12,011
Bartow Peaker	P1	Pinellas	Gas Turbine	Gas/Oil	5	1972	5.87	5.87	26.95	26.95	53.13	53.13	15,040	15,040
	P2				6	1972	7.15	7.15	4.02	4.02	68.94	68.94	15,771	15,771
	P3				6	1972	6.13	6.13	31.23	31.23	52.26	52.26	16,665	16,665
	P4				6	1972	6.62	6.62	7.04	7.04	67.06	67.06	14,932	14,932
Bartow CC	4A	Pinellas	Combined Cycle	Gas	6	2009	9.27	9.27	9.91	9.91	71.43	71.43	11,603	11,603
	4B						5.93	5.93	4.05	4.05	75.78	75.78	11,501	11,501
	4C						2.87	2.87	20.25	20.25	71.76	71.76	11,631	11,631
	4D						10.26	10.26	1.46	1.46	81.01	81.01	11,526	11,526
	4S						10.32	10.32	1.49	1.49	78.45	78.45	701	701
Bayboro	P1	Pinellas	Gas Turbine	Oil	4	1973	2.72	2.72	6.24	6.24	77.10	77.10	13,581	13,581
	P2				4	1973	4.63	4.63	9.61	9.61	63.37	63.37	12,095	12,095
	P3				4	1973	2.70	2.70	7.48	7.48	75.10	75.10	11,958	11,958
	P4				4	1973	1.24	1.24	11.42	11.42	67.08	67.08	11,808	11,808
Citrus CC	1A	Citrus	Combined Cycle	Gas	10	2018	9.51	9.51	3.53	3.53	77.34	77.34	10,524	10,524
	1B						9.50	9.50	0.95	0.95	78.41	78.41	10,558	10,558
	1S						8.81	8.81	1.09	1.09	84.84	84.84	770	770
	2A				11	2018	10.31	10.31	0.77	0.77	78.20	78.20	10,452	10,452
	2B						10.13	10.13	1.88	1.88	77.80	77.80	10,511	10,511
	2S						7.99	7.99	0.64	0.64	86.05	86.05	691	691
Crystal River	4	Citrus	Steam	Coal	12	1982	5.59	5.59	10.63	10.63	74.09	74.09	11,068	11,068
	5				10	1984	5.55	5.55	1.62	1.62	80.07	80.07	10,757	10,757
DeBary	P2	Volusia	Gas Turbine	Gas/Oil	3	1976	3.92	3.92	1.85	1.85	71.44	71.44	15,150	15,150
	P3				12	1975	0.15	0.15	5.79	5.79	66.05	66.05	14,906	14,906
	P4				4	1976	3.44	3.44	4.73	4.73	69.33	69.33	16,118	16,118
	P5				12	1975	0.03	0.03	10.16	10.16	61.92	61.92	14,934	14,934
	P6				4	1976	3.63	3.63	14.60	14.60	61.38	61.38	14,638	14,638
	P7				10	1992	3.37	3.37	2.81	2.81	77.68	77.68	14,051	14,051
	P8				10	1992	3.70	3.70	20.06	20.06	61.08	61.08	13,277	13,277
	P9				10	1992	0.08	0.08	8.53	8.53	45.52	45.52	14,041	14,041
	P10				10	1992	6.62	6.62	3.77	3.77	46.47	46.47	14,030	14,030
Hines Energy Complex	1A	Polk	Combined Cycle	Gas	4	1999	14.17	14.17	3.28	3.28	77.51	77.51	11,427	11,427

Unit Performance

TYSP Year 2025
Question No. 35

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Performance (%)						Average Net Operating Heat Rate (ANOHR)	
							Planned Outage Factor (POF)		Forced Outage Factor (FOF)		Equivalent Availability Factor (EAF)			
					Mo	Yr	Historic	Projected	Historic	Projected	Historic	Projected	Historic	Projected
	1B						13.54	13.54	4.16	4.16	78.70	78.70	11,570	11,570
	1S						13.48	13.48	1.56	1.56	80.55	80.55	-	-
	2A				12	2003	12.77	12.77	1.70	1.70	83.85	83.85	11,874	11,874
	2B						12.73	12.73	1.27	1.27	82.46	82.46	11,908	11,908
	2S						12.57	12.57	1.04	1.04	78.11	78.11	-	-
	3A				11	2005	17.91	17.91	3.08	3.08	71.35	71.35	11,513	11,513
	3B						17.50	17.50	2.18	2.18	74.04	74.04	11,336	11,336
	3S						17.48	17.48	1.61	1.61	75.79	75.79	-	-
	4A				12	2007	4.39	4.39	1.75	1.75	89.97	89.97	11,220	11,220
	4B						4.35	4.35	11.83	11.83	80.34	80.34	11,294	11,294
	4S						4.08	4.08	1.13	1.13	84.91	84.91	-	-
Intercession City	P1	Osceola	Gas Turbine	Gas/Oil	5	1974	7.98	7.98	-	-	72.48	72.48	14,365	14,365
	P2				5	1974	11.14	11.14	0.23	0.23	67.29	67.29	14,538	14,538
	P3				5	1974	5.70	5.70	1.05	1.05	66.66	66.66	15,475	15,475
	P4				5	1974	5.17	5.17	1.00	1.00	54.97	54.97	14,887	14,887
	P5				5	1974	7.29	7.29	2.18	2.18	74.54	74.54	14,316	14,316
	P6				5	1974	7.51	7.51	2.73	2.73	72.10	72.10	14,296	14,296
	P7				10	1993	2.38	2.38	0.80	0.80	72.35	72.35	13,571	13,571
	P8				10	1993	8.71	8.71	2.13	2.13	59.78	59.78	14,127	14,127
	P9				10	1993	15.59	15.59	0.79	0.79	52.69	52.69	13,642	13,642
	P10				10	1993	11.10	11.10	0.46	0.46	49.86	49.86	14,061	14,061
	P11				1	1997	1.95	1.95	11.07	11.07	72.77	72.77	12,596	12,596
	P12				12	2000	11.80	11.80	0.80	0.80	73.52	73.52	13,348	13,348
	P13				12	2000	5.82	5.82	0.62	0.62	77.58	77.58	13,591	13,591
	P14				12	2000	10.43	10.43	0.44	0.44	74.48	74.48	13,823	13,823
Osprey CC	1A	Polk	Combined Cycle	Gas	5	2004	16.62	16.62	2.37	2.37	72.52	72.52	11,915	11,915
	1B						17.99	17.99	3.17	3.17	70.26	70.26	11,935	11,935
	1S						16.65	16.65	0.56	0.56	67.12	67.12	772	772
Suwannee Peaker	P1	Suwannee	Gas Turbine	Gas/Oil	10	1980	3.24	3.24	4.20	4.20	53.42	53.42	14,485	14,485
	P2				10	1980	7.28	7.28	0.09	0.09	55.65	55.65	14,094	14,094
	P3				11	1980	5.02	5.02	1.06	1.06	67.21	67.21	14,058	14,058
Tiger Bay	1A	Polk	Combined Cycle	Gas	8	1997	2.84	2.84	4.91	4.91	79.94	79.94	11,964	11,964
	1S						2.86	2.86	5.05	5.05	84.22	84.22	-	-

Unit Performance

TYSP Year 2025
Question No. 35

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Performance (%)						Average Net Operating Heat Rate (ANOHR)	
							Planned Outage Factor (POF)		Forced Outage Factor (FOF)		Equivalent Availability Factor (EAF)			
					Mo	Yr	Historic	Projected	Historic	Projected	Historic	Projected	Historic	Projected
University of Florida	P1	Alachua	Gas Turbine	Gas	1	1994	9.80	9.80	0.93	0.93	81.89	81.89	8,302	8,302
Notes														
Historical - average of past three years (2022, 2023, 2024)														
Solar Resources have an EAF of 95%														

TYSP Year 2025
Question No. 36

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Capacity Factor (%)										
							Actual	Projected									
					Mo	Yr	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Ancote	1~2	Pasco	Steam	Gas	10	1974	18.0	13.1	14.3	12.3	15.3	11.6	10.2	9.0	6.4	4.5	6.9
Crystal River	4~5	Citrus	Steam	Coal	12	1982	25.8	18.1	14.3	12.7	12.6	10.9	10.0	11.2	10.7	11.8	12.6
Bartow CC	4	Pinellas	Combined Cycle	Gas	5	1972	56.8	66.9	68.1	59.4	60.4	59.9	63.3	62.9	59.8	56.5	60.0
Citrus CC	1~2	Citrus	Combined Cycle	Gas	10	2018	75.0	83.3	81.3	86.6	82.5	84.6	82.5	76.3	79.2	77.3	75.9
Hines Energy Complex	1~4	Polk	Combined Cycle	Gas	4	1999	65.1	59.1	55.0	56.1	54.8	54.1	53.5	50.2	46.7	46.2	45.5
Osprey CC	1	Polk	Combined Cycle	Gas	5	2004	58.7	59.1	72.7	65.4	64.0	69.5	68.4	67.0	64.6	61.3	59.2
Tiger Bay	1	Polk	Combined Cycle	Gas	8	1997	50.5	45.4	61.4	50.8	53.1	35.9	32.8	31.9	23.2	26.1	24.8
Bartow Peaker	1~4	Pinellas	Gas Turbine	Gas/Oil	5	1972	1.1	0.3	0.4	0.6	0.4	0.4	0.1	0.0	0.2	0.1	0.1
Bayboro	1~4	Pinellas	Gas Turbine	Oil	4	1973	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DeBary	2~10	Volusia	Gas Turbine	Gas/Oil	3	1976	0.8	1.1	1.0	1.0	1.0	0.8	0.3	0.2	0.4	0.6	0.2
Intercession City	1~14	Osceola	Gas Turbine	Gas/Oil	5	1974	3.3	1.3	1.1	1.1	0.8	0.6	0.2	0.1	0.2	0.4	0.2
New CT	1~2	N/A	Gas Turbine	Gas	6	2034		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
New CT - S	1~2	N/A	Gas Turbine	Gas	1	2034		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0
Suwannee Peaker	1~3	Suwannee	Gas Turbine	Gas/Oil	10	1980	4.3	1.7	2.0	1.6	1.1	1.1	0.7	0.6	0.8	1.2	1.1
University of Florida	1	Alachua	Gas Turbine	Gas	1	1994	86.3	85.0	86.6	84.9	86.1	86.3	85.3	85.4	85.8	85.6	85.8
Solar Bailey Mill	1	Jefferson	PV		3	2026		0.0	25.4	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Solar Banner	1	Columbia	PV		10	2026		0.0	16.5	24.4	24.4	24.4	24.4	24.4	24.4	24.4	24.4
Solar Bay Ranch	1	Bay	PV		5	2023	29.1	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	25.3
Solar Bay Trail	1	Citrus	PV		11	2022	22.2	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	25.8	25.0
Solar Charlie Creek	1	Hardee	PV		8	2022	22.8	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	23.8	22.9
Solar Columbia	1	Columbia	PV		4	2020	22.7	24.0	24.0	24.0	24.0	24.0	24.0	24.0	23.8	22.9	22.0
Solar County Line	1	Gilchrist	PV		10	2024		26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0
Solar Debarry	1	Volusia	PV		5	2020	18.0	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.3	20.6	19.7
Solar Duette	1	Manatee	PV		11	2021	23.8	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	23.8	23.0
Solar Falmouth	1	Suwannee	PV		8	2024		26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0
Solar Fort Green	1	Hardee	PV		6	2022	24.3	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	25.8	25.1
Solar Half Moon	1	Sumter	PV		1	2026		0.0	26.4	25.7	25.7	25.7	25.7	25.7	25.7	25.7	25.7
Solar Hamilton	1	Hamilton	PV		1	2019	23.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	23.9	23.2	22.3

Unit Dispatch

TYSP Year 2025

Question No. 36

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Capacity Factor (%)										
							Actual	Projected									
					Mo	Yr	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Solar Hardeetown	1	Levy	PV		5	2023	22.4	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	25.3
Solar High Spring	1	Alachua	PV		5	2023	22.5	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	25.3
Solar Hildreth	1	Suwannee	PV		5	2023	25.6	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	25.3
Solar Jumper Creek	1	Sumter	PV		7	2026		0.0	26.3	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
Solar Lake Placid	1	Highlands	PV		12	2019	17.9	26.0	26.6	26.6	26.6	26.6	26.6	26.6	26.5	25.9	24.9
Solar Lonesome Camp	1	Osceola	PV		1	2027		0.0	18.3	27.1	27.1	27.1	27.1	27.1	27.1	27.1	27.1
Solar Mule Creek	1	Bay	PV		3	2024		26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	25.3
Solar Osc Perry Suw	1	Osceola Taylor Suwannee	PV		11	2017	16.8	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.3	21.0
Solar Rattler	1	Hernando	PV		1	2026		0.0	26.3	26.3	26.2	26.3	26.3	26.3	26.2	26.3	26.3
Solar Sandy Creek	1	Bay	PV		6	2022	23.5	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	23.6	22.8
Solar Santa Fe	1	Columbia	PV		3	2021	22.3	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	23.5	22.5
Solar St Pete Pier	1	Pinellas	PV		12	2019		21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.4	21.0	20.5
Solar Sundance	1	Madison	PV		9	2025		23.6	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2	26.2
Solar Trenton	1	Gilchrist	PV		1	2020	22.1	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	23.4	22.5
Solar Turnpike	1	Osceola	PV		10	2026		0.0	18.2	27.0	27.0	27.0	27.0	27.0	27.0	27.0	27.0
Solar Twin Rivers	1	Hamilton	PV		4	2021	23.8	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	23.6	22.7
Solar Winquepin	1	Madison	PV		3	2024		26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	25.5
Solar Generic	1~37	N/A	PV		7	2027		0.0	0.0	24.9	26.1	26.2	26.3	26.2	26.3	26.3	26.4
SPS - Solar Generic	1~14	N/A	PV		7	2028		0.0	0.0	0.0	26.0	27.3	27.5	27.6	27.7	27.8	27.8
SPS - Battery Generic	1~14	N/A	Storage		7	2028		0.0	0.0	0.0	14.1	14.5	15.2	15.3	15.4	15.7	15.8
Powerline	1~2	Citrus	Storage		3	2027		0.0	0.0	8.8	9.9	9.5	9.8	9.8	10.0	10.6	10.9
Battery 4 Hours	1~3	N/A	Storage		6	2034		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.7
Battery 4 Hours 225MW	1	N/A	Storage		2	2029		0.0	0.0	0.0	0.0	16.7	17.6	17.8	17.9	18.5	18.8
Notes																	
(Include Notes Here)																	

TYSP Year 2025
Question No. 38

Facility Name	Unit No.	County Location	Solar Type (Fixed/Tracking)	Energy Storage Type	Facility In-Service Date		Unit Capacity (MW)				Land Use (Acres)	Commission Approval		Cost Recovery Mechanism
					Mo	Yr	Sum	Win	Sum	Win		Order No.	Approval Date	
Econolockhatchee PV Array	1	Volusia	Fixed	-	1	1989	0.0	0.0	0.0	0.0	<1	N/A	N/A	ECCR-Technology Development
Osceola	1	Osceola	Fixed	-	5	2016	3.6	3.6	2.0	0.2	~20	N/A	N/A	In IRP under Rate Settlement
Perry	1	Taylor	Fixed	-	7	2016	4.9	4.9	2.6	0.2	~25	N/A	N/A	In IRP under Rate Settlement
Suwannee	1	Suwannee	Fixed	-	12	2017	8.5	8.5	4.6	0.4	~45	N/A	N/A	In IRP under Rate Settlement
Hamilton	1	Hamilton	Tracking	-	12	2018	72.7	72.7	39.0	3.6	~565	PSC-2019-0159-FOF-EI	4/30/2019	2017 Second RRSSA -SoBRA 1
Lake Placid	1	Highlands	Tracking	see below	12	2019	25.2	25.2	13.5	1.3	~380	PSC-2019-0292-FOF-EI	7/22/2019	2017 Second RRSSA -SoBRA 2
Trenton	1	Gilchrist	Tracking	-	12	2019	73.0	73.0	39.2	3.7	~735	PSC-2019-0292-FOF-EI	7/22/2019	2017 Second RRSSA -SoBRA 2
St. Petersburg Pier	1	Pinellas	Fixed	-	12	2019	0.3	0.3	0.2	0.0	N/A	N/A	N/A	In IRP under Rate Settlement
Columbia	1	Columbia	Tracking	-	3	2020	73.0	73.0	39.2	3.7	~580	PSC-2019-0159-FOF-EI	4/30/2019	2017 Second RRSSA -SoBRA 1
DeBary	1	Volusia	Fixed	-	5	2020	72.7	72.7	39.0	3.6	~445	PSC-2019-0292-FOF-EI	7/22/2019	2017 Second RRSSA -SoBRA 2
Sante Fe	1	Columbia	Tracking	-	3	2021	73.4	73.4	39.4	3.7	~607	PSC-2021-0088-TRF-EI	2/22/2021	2017 Second RRSSA -SoBRA 3
Twin Rivers	1	Hamilton	Tracking	-	3	2021	73.4	73.4	39.4	3.7	~515	PSC-2021-0088-TRF-EI	2/22/2021	2017 Second RRSSA -SoBRA 3
Duette	1	Manatee	Tracking	-	10	2021	73.4	73.4	39.4	3.7	~520	PSC-2021-0088-TRF-EI	2/22/2021	2017 Second RRSSA -SoBRA 3
Jennings BESS	1	Hamilton	N/A	Li-NMC	10	2021	5.5	5.5	5.5	5.5	<1	PSC-20170451-AS-EU	11/20/2017	2017 Second RRSSA -Battery Pilot
Co-located Lake Placid BESS	1	Highlands	N/A	Li-LFP	12	2021	17.3	17.3	17.3	17.3	~2	PSC-20170451-AS-EU	11/20/2017	2017 Second RRSSA -Battery Pilot
Trenton BESS	1	Trenton	N/A	Li-NMC	12	2021	11.0	11.0	11.0	11.0	~1	PSC-20170451-AS-EU	11/20/2017	2017 Second RRSSA -Battery Pilot
Cape San Blas BESS	1	Gulf	N/A	Li-NMC	2	2022	5.5	5.5	5.5	5.5	<1	PSC-20170451-AS-EU	11/20/2017	2017 Second RRSSA -Battery Pilot
Micanopy BESS	1	Alachua	N/A	Li-NMC	4	2022	8.3	8.3	8.3	8.3	<1	PSC-20170451-AS-EU	11/20/2017	2017 Second RRSSA -Battery Pilot
Sandy Creek	1	Bay	Tracking	-	5	2022	73.8	74.2	39.6	3.7	~625	PSC-2021-0088-TRF-EI	2/22/2021	2017 RRSSA-SoBRA 3+2021 RS**
Ft Green	1	Hardee	Fixed	-	6	2022	73.8	74.2	39.6	3.7	~790	PSC-2021-0059A-S-EI	9/23/2022	Clean Energy Connection
Charlie Creek	1	Hardee	Tracking	-	8	2022	73.8	74.2	39.6	3.7	~605	PSC-2021-0088-TRF-EI	2/22/2021	2017 Second RRSSA -SoBRA 3
Dolphin Solar	1	Pinellas	Fixed	-	8	2022	0.2	0.2	0.1	0.0	0	N/A	N/A	In IRP under Rate Settlement
Bay Trail	1	Citrus	Tracking	-	9	2022	74.2	74.2	39.8	3.7	0	PSC-2021-0059A-S-EI	9/23/2022	Clean Energy Connection
Hildreth	1	Suwannee	Tracking	-	4	2023	74.2	74.5	39.8	3.7	~710	PSC-2021-0059A-S-EI	9/23/2022	Clean Energy Connection
High Springs	1	Alachua	Tracking	-	4	2023	74.2	74.5	39.8	3.7	~655	PSC-2021-0059A-S-EI	9/23/2022	Clean Energy Connection
Hardeetown	1	Levy	Tracking	-	4	2023	74.2	74.5	39.8	3.7	~550	PSC-2021-0059A-S-EI	9/23/2022	Clean Energy Connection
Bay Ranch	1	Bay	Tracking	-	4	2023	74.2	74.5	39.8	3.7	~720	PSC-2021-0059A-S-EI	9/23/2022	Clean Energy Connection
John Hopkins BESS Microgrid	1	Pinellas	N/A	Li-LFP	8	2023	2.5	2.5	2.2	2.2	<1	PSC-20170451-AS-EU	11/20/2017	2017 Second RRSSA -Battery Pilot
John Hopkins MS	1	Pinellas	Fixed	see below	11	2023	0.7	0.7	0.4	0.0	0	PSC-20170451-AS-EU	11/20/2017	2017 Second RRSSA -Battery Pilot
Hines Floating Solar	1	Polk	Floating	-	11	2023	0.7	0.7	0.4	0.0	N/A	PSC-2021-0202A-AS-EI	6/28/2021	2021 Rate Settlement -Vision FL
Mule Creek	1	Bay	Tracking	-	3	2024	74.5	74.9	40.0	3.7	~710	PSC-2021-0059A-S-EI	9/23/2022	Clean Energy Connection
Winquepin	1	Madison	Tracking	-	3	2024	74.5	74.9	40.0	3.7	~530	PSC-2021-0059A-S-EI	9/23/2022	Clean Energy Connection
Falmouth	1	Suwannee	Tracking	-	6	2024	74.5	74.9	40.0	3.7	~775	PSC-2021-0059A-S-EI	9/23/2022	Clean Energy Connection
County Line	1	Gilchrist	Tracking	-	8	2024	74.9	74.9	40.2	3.7	~615	PSC-2021-0059A-S-EI	9/23/2022	Clean Energy Connection
Suwannee BESS	1	Suwannee	N/A	Non-Li	5	2025	5.0	5.0	4.5	4.5	~1	PSC-2021-0202A-AS-EI	6/28/2021	2021 Rate Settlement -Vision FL
Sundance	1	Madison	Tracking	-	7	2025	74.9	74.9	25.8	3.7	~500-600	Docket 20250034	Pending	2024 Rate Settlement -SoBRA 1
Half Moon	1	Sumter	Tracking	-	1	2026	74.9	74.9	25.8	3.7	~500-600	Docket 20250034	Pending	2024 Rate Settlement -SoBRA 1
Rattler	1	Hernando	Tracking	-	1	2026	74.9	74.9	25.8	3.7	~500-600	Docket 20250034	Pending	2024 Rate Settlement -SoBRA 1
Bailey Mill	1	Jefferson	Tracking	-	5	2026	74.9	74.9	25.8	3.7	~500-600	Docket 20250034	Pending	2024 Rate Settlement -SoBRA 1
Jumper Creek	1	Sumter	Tracking	-	6	2026	74.9	74.9	27.3	3.3	~500-600	Pending	Pending	2024 Rate Settlement-SoBRA
Lonesome Camp	1	Osceola	Tracking	-	12	2026	74.9	74.9	27.3	3.3	~500-600	Pending	Pending	2024 Rate Settlement-SoBRA
Turnpike	1	Osceola	Tracking	-	12	2026	74.9	74.9	27.3	3.3	~500-600	Pending	Pending	2024 Rate Settlement-SoBRA
Banner	1	Columbia	Tracking	-	12	2026	74.5	74.5	27.2	3.3	~500-600	Pending	Pending	2024 Rate Settlement-SoBRA
Powerline BESS	1	Citrus	N/A	Li-LFP	3	2027	100.0	100.0	90.0	90.0	~10	PSC-2024-0472-AS-EI	Pending	2024 Rate Settlement
Renewable Energy Center #38	1	Unknown	Tracking	-	6	2027	74.9	74.9	25.1	3.1	~500-600	Pending	Pending	2024 Rate Settlement-SoBRA
Renewable Energy Center #39	1	Unknown	Tracking	-	6	2027	74.9	74.9	25.1	3.1	~500-600	Pending	Pending	2024 Rate Settlement-SoBRA
Renewable Energy Center #40	1	Unknown	Tracking	-	12	2027	74.9	74.9	25.1	3.1	~500-600	Pending	Pending	2024 Rate Settlement-SoBRA
Renewable Energy Center #41	1	Unknown	Tracking	-	12	2027	74.9	74.9	25.1	3.1	~500-600	Pending	Pending	2024 Rate Settlement-SoBRA
Renewable Energy Center #42	1	Unknown	Tracking	-	7	2028	74.9	74.9	20.6	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #43	1	Unknown	Tracking	-	7	2028	74.9	74.9	20.6	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #44	1	Unknown	Tracking	-	7	2028	74.9	74.9	20.6	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #45	1	Unknown	Tracking	-	7	2028	74.9	74.9	20.6	3.1	~500-600	Pending	Pending	Pending

TYSP Year
Question No.

2025
38

Facility Name	Unit No.	County Location	Solar Type (Fixed/Tracking)	Energy Storage Type	Facility In-Service Date		Unit Capacity (MW)				Land Use (Acres)	Commission Approval		Cost Recovery Mechanism
					Mo	Yr	Sum	Win	Sum	Win		Order No.	Approval Date	
Renewable Energy Center #46	1	Unknown	Tracking	-	7	2028	74.9	74.9	20.6	3.1	~500-600	Pending	Pending	Pending
Co-located BESS #47	1	Unknown		-	7	2028	100.0	100.0	90.0	90.0	~10	Pending	Pending	Pending
Renewable Energy Center #48	1	Unknown	N/A	Pending	6	2029	225.0	225.0	202.5	202.5	~23	Pending	Pending	Pending
Renewable Energy Center #49	1	Unknown	Tracking	-	7	2029	74.9	74.9	20.6	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #50	1	Unknown	Tracking	-	7	2029	74.9	74.9	20.6	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #51	1	Unknown	Tracking	-	7	2029	74.9	74.9	20.6	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #52	1	Unknown	Tracking	-	7	2029	74.9	74.9	16.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #53	1	Unknown	Tracking	-	7	2029	74.9	74.9	16.1	3.1	~500-600	Pending	Pending	Pending
Co-located BESS #54	1	Unknown	N/A	Pending	7	2029	100.0	100.0	90.0	90.0	~10	Pending	Pending	Pending
Renewable Energy Center #55	1	Unknown	Tracking	-	7	2030	74.9	74.9	16.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #56	1	Unknown	Tracking	-	7	2030	74.9	74.9	16.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #57	1	Unknown	Tracking	-	7	2030	74.9	74.9	16.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #58	1	Unknown	Tracking	-	7	2030	74.9	74.9	16.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #59	1	Unknown	Tracking	-	7	2030	74.9	74.9	16.1	3.1	~500-600	Pending	Pending	Pending
Co-located BESS #60	1	Unknown	N/A	Pending	7	2030	100.0	100.0	90.0	90.0	~10	Pending	Pending	Pending
Renewable Energy Center #61	1	Unknown	Tracking	-	7	2031	74.9	74.9	16.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #62	1	Unknown	Tracking	-	7	2031	74.9	74.9	11.6	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #63	1	Unknown	Tracking	-	7	2031	74.9	74.9	11.6	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #64	1	Unknown	Tracking	-	7	2031	74.9	74.9	11.6	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #65	1	Unknown	Tracking	-	7	2031	74.9	74.9	11.6	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #66	1	Unknown	Tracking	-	7	2031	74.9	74.9	11.6	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #67	1	Unknown	Tracking	-	7	2031	74.9	74.9	11.6	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #68	1	Unknown	Tracking	-	7	2031	74.9	74.9	11.6	3.1	~500-600	Pending	Pending	Pending
Co-located BESS #69	1	Unknown	N/A	Pending	7	2031	100.0	100.0	90.0	90.0	~10	Pending	Pending	Pending
Renewable Energy Center #70	1	Unknown	Tracking	-	7	2032	74.9	74.9	11.6	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #71	1	Unknown	Tracking	-	7	2032	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #72	1	Unknown	Tracking	-	7	2032	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #73	1	Unknown	Tracking	-	7	2032	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #74	1	Unknown	Tracking	-	7	2032	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #75	1	Unknown	Tracking	-	7	2032	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #76	1	Unknown	Tracking	-	7	2032	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #77	1	Unknown	Tracking	-	7	2032	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Co-located BESS #78	1	Unknown	N/A	Pending	7	2032	100.0	100.0	85.0	85.0	~10	Pending	Pending	Pending
Renewable Energy Center #79	1	Unknown	Tracking	-	7	2033	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #80	1	Unknown	Tracking	-	7	2033	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #81	1	Unknown	Tracking	-	7	2033	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #82	1	Unknown	Tracking	-	7	2033	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #83	1	Unknown	Tracking	-	7	2033	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #84	1	Unknown	Tracking	-	7	2033	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #85	1	Unknown	Tracking	-	7	2033	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #86	1	Unknown	Tracking	-	7	2033	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Co-located BESS #87	1	Unknown	Tracking	-	7	2033	100.0	100.0	70.0	70.0	~10	Pending	Pending	Pending
Co-located BESS #88	1	Unknown	N/A	Pending	6	2034	300.0	300.0	210.0	210.0	~30	Pending	Pending	Pending
Renewable Energy Center #89	1	Unknown	Tracking	-	7	2034	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #90	1	Unknown	Tracking	-	7	2034	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #91	1	Unknown	Tracking	-	7	2034	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #92	1	Unknown	Tracking	-	7	2034	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #93	1	Unknown	Tracking	-	7	2034	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #94	1	Unknown	Tracking	-	7	2034	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #95	1	Unknown	Tracking	-	7	2034	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Renewable Energy Center #96	1	Unknown	Tracking	-	7	2034	74.9	74.9	7.1	3.1	~500-600	Pending	Pending	Pending
Co-located BESS #97	1	Unknown	N/A	Pending	7	2034	100.0	100.0	70.0	70.0	~10	Pending	Pending	Pending

TYSP Year 2025
Question No. 38

Facility Name	Unit No.	County Location	Solar Type	Energy Storage Type	Facility In-Service Date		Unit Capacity (MW)				Land Use	Commission Approval		Cost Reocvery Mechanism
			Net				Firm		Order No.	Approval Date				
			(Fixed/Tracking)		Mo	Yr	Sum	Win	Sum	Win	(Acres)			
Notes														
Battery Energy Storage Systems are denoted as (BESS). **Only 56.6 MW of Sandy Creek was approved under 2017 RRSSA -SoBRA 3, the remaining 18.3 MW approved under 2021 Rate Settlement.														

TYSP Year 2025
Question No. 40

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Planned Modification (if any)	Eligible Modifications			Potential Issues
					Mo	Yr		Fuel Switching	Combined Cycle Conversion	Other (Explain)	
HINES	4	POLK	CC	Natural Gas	4	2025	Gas Turbine Heat Rate Upgrade			Gas Turbine Heat Rate Upgrade	N/A
TIGER BAY	1	POLK	CC	Natural Gas	11	2025					N/A
CITRUS	PB1	CITRUS	CC	Natural Gas	11	2025					N/A
CITRUS	PB2	CITRUS	CC	Natural Gas	4	2026					N/A
HINES	3	POLK	CC	Natural Gas	5	2026					N/A
HINES	4	POLK	CC	Natural Gas	11	2026					N/A
Notes											
(Include Notes Here)											

TYSP Year 2025

Question No. 41

Transmission Line	Line Length	Nominal Voltage	Certification Dates		In-Service Date
	(Miles)		Need Approved	TLSA Certified	
N/A	N/A	N/A	N/A	N/A	N/A
Notes					
DEF has no proposed transmission lines for the current planning period that require certification under the Transmission Line Siting Act, nor are there any that have already been approved, but are not yet in-service.					

TYSP Year 2025
Question No. 42(a)

Contract Information						Provide If Associated with Specific Unit(s)													
Seller Name	Date Contract Approved	Contract Terms				Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Capacity (MW)						
		Firm Capacity (MW)		Delivery Dates									Gross		Net		Firm		
		Sum	Win	Start	End						Mo	Yr	Sum	Win	Sum	Win	Sum	Win	
Traditional																			
Northern Star Generation	7/1/1991	104	104	12/16/1995	12/31/2025	Orange Cogen	1	Polk	CC	NG	6	1995	104	104	104	104	104	104	
Northern Star Generation	Ongoing through the Fuel Clause	655	699	6/1/2012	5/31/2027	Vandolah Power	1-4	Hardee	GT	NG	6	2002	655	699	655	699	655	699	
Renewable																			
Pasco County	1995	23	23	1/1/1995	12/31/2024	Pasco County Resource Recovery	ST	Pasco	ST	MSW	1	1991	23	23	23	23	23	23	
Pinellas County	9/27/1989	55	55	1/1/1995	12/31/2024	Pinellas County Resource Recovery	ST	Pinellas	ST	MSW	5	1983	55	55	55	55	55	55	
Lake County	N/A	N/A	N/A	7/1/2014	N/A	Lake County Resource Recovery	ST	Lake	ST	MSW	3	1991	N/A	N/A	N/A	N/A	N/A	N/A	
Dade County	N/A	N/A	N/A	1/1/2014	N/A	Metro-Dade County Resource Recovery	ST	Dade	ST	MSW	11	1985	N/A	N/A	N/A	N/A	N/A	N/A	
Lee County	N/A	N/A	N/A	1/1/2017	N/A	Lee County Resource Recovery	ST	Lee	ST	MSW	11	1994	N/A	N/A	N/A	N/A	N/A	N/A	
PCS Phosphate	N/A	N/A	N/A	1/1/1980	N/A	Swift Creek	ST	Hamilton	ST	WH	1	1980	N/A	N/A	N/A	N/A	N/A	N/A	
G2 Energy Marion	N/A	N/A	N/A	1/1/2024	N/A	G2 Marion, LLC	CT	Marion	CT	LNG	1	2009	N/A	N/A	N/A	N/A	N/A	N/A	
Notes																			
(Include Notes Here)																			

TYSP Year 2025
Question No. 42(b)

Contract Information						Provide If Associated with Specific Unit(s)													
Seller Name	Date Contract Approved	Contract Terms				Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Capacity (MW)						
		Firm Capacity		Delivery Dates									Gross		Net		Firm		
		Sum	Win	Start	End						Mo	Yr	Sum	Win	Sum	Win	Sum	Win	
Traditional																			
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Renewable																			
Pasco County	N/A	N/A	N/A	1/1/2024	N/A	Pasco County Resource Recovery	ST	Pasco	ST	MSW	8	1998	N/A	N/A	N/A	N/A	N/A	N/A	
Pinellas County	N/A	N/A	N/A	1/1/2024	N/A	Pinellas County Resource Recovery	ST	Pinellas	ST	MSW	5	1983	N/A	N/A	N/A	N/A	N/A	N/A	
Notes																			
There are no planned PPAs delivering traditional generation during the current planning period. Pasco County Resource Recovery and Pinellas County Resource Recovery entered into As Available Tariff Agreements which commenced on 1/1/2025 and are evergreen.																			

TYSP Year 2025
Question No. 45(a)

Contract Information						Provide If Associated with Specific Unit(s)												
Buyer Name	Date Contract Approved	Contract Terms				Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Capacity (MW)					
		Firm Capacity (MW)		Delivery Dates									Gross		Net		Firm	
		Sum	Win	Start	End						Mo	Yr	Sum	Win	Sum	Win	Sum	Win
Seminole	12/18/2009	200-500	200-500	6/1/2016	12/31/2024	N/A	N/A	N/A	Nat Gas	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Seminole	1/1/1997	0.014	0.014	6/1/1987	Evergreen	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Seminole	8/29/2016	0	50-600	1/1/2021	3/31/2027	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Seminole	9/21/2017	50-400	50-400	1/1/2021	12/31/2030	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Seminole	9/21/2017	50-400	50-400	1/1/2021	12/31/2035	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Reedy Creek	8/27/2014	141	81	1/1/2016	12/31/2024	N/A	N/A	N/A	Nat Gas	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tampa Electric	1/16/2019	0-515	0-515	1/26/2019	12/31/2025	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Notes																		
(Include Notes Here)																		

TYSP Year 2025
Question No. 45(b)

Contract Information						Provide If Associated with Specific Unit(s)													
Buyer Name	Date Contract Approved	Contract Terms				Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Capacity (MW)						Land Use
		Firm Capacity (MW)		Delivery Dates									Gross		Net		Firm		
		Sum	Win	Start	End						Mo	Yr	Sum	Win	Sum	Win	Sum	Win	
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Notes																			
(Include Notes Here)																			

TYSP Year
Question No.

2025
48

Renewable Source	Annual Renewable Generation (GWh)										
	Actual	Projected									
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Utility - Firm	2,789	3,244	3,946	4,702	5,640	6,488	7,344	8,441	9,827	11,133	12,401
Utility - Non-Firm	0	0	0	0	0	0	0	0	0	0	0
Utility - Co-Firing	0	0	0	0	0	0	0	0	0	0	0
Purchase - Firm	559	0	0	0	0	0	0	0	0	0	0
Purchase - Non-Firm	6	500	581	643	724	780	860	920	1,001	1,057	1,133
Purchase - Co-Firing	0	0	0	0	0	0	0	0	0	0	0
Customer - Owned	1,360	1,549	1,822	2,097	2,363	2,600	2,839	3,077	3,323	3,559	3,796
Total	4,714	5,292	6,349	7,442	8,727	9,868	11,043	12,438	14,152	15,749	17,331
Notes											
(Include Notes Here)											

TYSP Year 2025
Question No. 55

Facility or Project Name	Unit No.	County Location	Energy Storage Type	Battery Chemistry (if applicable)	Land Use	Facility In-Service or Project Start Date		Unit Capacity (MW)						Storage Capacity	Conversion Efficiency
					(Acres)			Gross		Net		Firm			
						Mo	Yr	Sum	Win	Sum	Win	Sum	Win	(MWh)	(MWh)
USF Microgrid Energy Storage Pilot		Pinellas	Battery Energy Storage System	Lithium Ion	0.1	7	2018	0.25	0.25	0.25	0.25	0.23	0.23	0.48	88.0%
Trenton		Gilchrist	Battery Energy Storage System	Lithium Ion	0.5	12	2021	11	11	11	11	9.9	9.9	15.6	83.2%
Lake Placid Bess		Highlands	Battery Energy Storage System	Lithium Ion	3	12	2021	17.3	17.3	17.3	17.3	15.57	15.6	50.3	83.5%
Cape San Blas		Gulf	Battery Energy Storage System	Lithium Ion	0.5	2	2022	5.5	5.5	5.5	5.5	4.95	4.95	20.5	83.5%
Jennings		Hamilton	Battery Energy Storage System	Lithium Ion	0.5	4	2022	5.5	5.5	5.5	5.5	4.95	4.95	8.5	84.0%
Duke/UCF Long-Duration Energy Storage Project		Orange	Battery Energy Storage System	Vanadium Flow	0.1	7	2022	0.01	0.01	0.01	0.01	0.009	0.01	0.04	75.0%
Micanopy		Alachua	Battery Energy Storage System	Lithium Ion	0.5	8	2022	8.25	8.25	8.25	8.25	7.425	7.43	18.2	83.5%
John Hopkins Microgrid		Pinellas	Battery Energy Storage System	Lithium Ion	1	11	2023	2.48	2.48	2.48	2.48	2.232	2.23	23.5	83.5%
Suwannee Long Duration Energy Storage		Suwannee	Battery Energy Storage System	Sodium Sulfur	2	5	2025	5	5	5	5	4.5	4.5	40	80.0%
Notes															
(Include Notes Here)															

TYSP Year
Question No.

2025
56

Facility or Project Name	Unit No.	County Location	Energy Storage Type	Battery Chemistry (if applicable)	Land Use	Facility In-Service or Project Start Date		Unit Capacity (MW)						Storage Capacity	Conversion Efficiency
								Gross		Net		Firm			
					(Acres)	Mo	Yr	Sum	Win	Sum	Win	Sum	Win	(MWh)	(MWh)
Powerline	1	Citrus	Battery Energy Storage System	Lithium Ion	~1 ACRE / 10 MW	3	2027	100	100	100	100	90	90	200	85%
Co-located BESS #47	1	Undetermined	Battery Energy Storage System	Lithium Ion	~1 ACRE / 10 MW	7	2028	100	100	100	100	90	90	400	85%
Renewable Energy Center #48	1	Pinellas	Battery Energy Storage System	Lithium Ion	~1 ACRE / 10 MW	6	2029	225	225	225	225	202.5	202.5	900	85%
Co-located BESS #54	1	Undetermined	Battery Energy Storage System	Lithium Ion	~1 ACRE / 10 MW	7	2029	100	100	100	100	90	90	400	85%
Co-located BESS #60	1	Undetermined	Battery Energy Storage System	Lithium Ion	~1 ACRE / 10 MW	7	2030	100	100	100	100	90	90	400	85%
Co-located BESS #69	1	Undetermined	Battery Energy Storage System	Lithium Ion	~1 ACRE / 10 MW	7	2031	100	100	100	100	90	90	400	85%
Co-located BESS #78	1	Undetermined	Battery Energy Storage System	Lithium Ion	~1 ACRE / 10 MW	7	2032	100	100	100	100	85	85	400	85%
Co-located BESS #87	1	Undetermined	Battery Energy Storage System	Lithium Ion	~1 ACRE / 10 MW	7	2033	100	100	100	100	70	70	400	85%
Co-located BESS #88	1	Undetermined	Battery Energy Storage System	Lithium Ion	~1 ACRE / 10 MW	6	2034	300	300	300	300	210	210	1200	85%
Co-located BESS #97	1	Undetermined	Battery Energy Storage System	Lithium Ion	~1 ACRE / 10 MW	7	2034	100	100	100	100	70	70	400	85%
Notes															
(Include Notes Here)															

TYSP Year
Question No.

2025
58

Loss of Load Probability, Reserve Margin, and Expected Unserved Energy						
Base Case Load Forecast						
Year	Loss of Load Probability (Days/Yr)	Annual Isolated Reserve Margin (%) (Including Firm Purchases)	Expected Unserved Energy (MWh)	Loss of Load Probability (Days/Yr)	Annual Assisted Reserve Margin (%) (Including Firm Purchases)	Expected Unserved Energy (MWh)
2025	Duke Energy Florida is required to maintain a 20% Reserve Margin, therefore no LOLP study was conducted					
2026						
2027						
2028						
2029						
2030						
2031						
2032						
2033						
2034						

TYSP Year
Question No.

2025
60

Peak Summer Day Hourly Dispatch (MW)												
Hour	Customer Oriented		Power Transactions		Energy Storage		Generation Resources					
	Load	Demand Response	Sales	Purchases	Charging	Discharging	Nuclear	Natural Gas	Coal	Oil	Other	Solar
1	5,865	-	224	60	-	-	-	5,606	200	-	-	-
2	5,417	-	206	60	-	-	-	5,157	200	-	-	-
3	5,094	-	193	60	-	-	-	4,834	200	-	-	-
4	4,901	-	186	60	156	-	-	4,797	200	-	-	-
5	4,820	-	182	60	212	-	-	4,772	200	-	-	-
6	5,018	-	190	60	15	-	-	4,772	200	-	-	-
7	6,408	-	245	60	-	325	-	5,823	200	-	-	-
8	5,824	-	222	60	-	-	-	5,318	200	-	-	246
9	6,153	-	235	60	668	-	-	4,047	200	-	-	2,515
10	6,593	-	253	60	875	-	-	3,125	200	-	-	4,083
11	7,095	-	273	60	875	-	-	3,080	200	-	-	4,631
12	7,674	-	296	60	810	-	-	3,462	200	-	-	4,763
13	8,232	-	318	60	526	-	-	4,038	200	-	-	4,460
14	8,777	-	340	60	128	-	-	4,191	200	-	-	4,453
15	9,190	-	356	60	-	-	-	4,879	200	-	-	4,051
16	9,909	-	385	60	-	-	-	6,576	560	-	-	2,713
17	10,015	-	389	60	-	-	-	6,790	710	-	-	2,456
18	10,323	-	401	60	-	336	-	7,034	710	-	-	2,183
19	9,560	-	371	60	-	664	-	7,120	710	-	-	1,006
20	9,197	-	356	60	-	875	-	7,413	710	-	-	139
21	8,741	-	338	60	-	875	-	7,080	710	-	-	16
22	8,125	-	314	60	-	550	-	6,806	710	-	-	-
23	7,389	-	284	60	-	-	-	6,619	710	-	-	-
24	6,603	-	253	60	-	-	-	5,983	560	-	-	-

Firm Solar

Peak Winter Day Hourly Dispatch (MW)												
Hour	Customer Oriented		Power Transactions		Energy Storage		Generation Resources					
	Total Load	Demand	Sales	Purchases	Charging	Discharging	Nuclear	Natural Gas	Coal	Oil	Other	Solar
1	7,555	-	292	60	-	-	-	6,053	1,442	-	-	-
2	7,528	-	291	60	-	-	-	6,026	1,442	-	-	-
3	7,700	-	298	60	-	87	-	6,111	1,442	-	-	-
4	7,865	-	305	60	-	187	-	6,176	1,442	-	-	-
5	8,251	-	320	60	-	69	-	6,680	1,442	-	-	-
6	8,876	-	345	60	-	458	-	6,755	1,442	161	-	-
7	9,989	-	390	60	-	590	-	7,737	1,442	161	-	-
8	10,268	-	401	60	-	825	-	7,711	1,442	161	-	70
9	10,076	-	393	60	-	84	-	6,563	1,281	-	-	2,089
10	9,219	-	359	60	-	-	-	4,956	561	-	-	3,643
11	8,285	-	322	60	-	-	-	4,309	335	-	-	3,581
12	7,551	-	292	60	50	-	-	3,565	335	-	-	3,642
13	6,910	-	267	60	564	-	-	3,531	335	-	-	3,549
14	6,355	-	245	60	770	-	-	3,102	335	-	-	3,629
15	5,989	-	230	60	825	-	-	2,701	335	-	-	3,718
16	5,973	-	229	60	816	-	-	2,826	335	-	-	3,568
17	6,228	-	240	60	622	-	-	4,016	335	-	-	2,440
18	6,872	-	265	60	-	-	-	5,547	962	-	-	304
19	7,763	-	301	60	-	634	-	5,616	1,442	-	-	11
20	7,904	-	306	60	-	775	-	5,616	1,442	-	-	11
21	7,795	-	302	60	-	667	-	5,616	1,442	-	-	11
22	7,610	-	295	60	-	658	-	5,616	1,276	-	-	-
23	7,099	-	274	60	-	50	-	5,547	1,442	-	-	-
24	6,705	-	259	60	-	158	-	5,433	1,055	-	-	-

Firm Solar

TYSP Year

2025

Question No.

64(e)

Year	Estimated Cost of Standards of Performance for Greenhouse Gas Emissions Rule for New Sources Impacts (Present-Year \$ millions)			
	Capital Costs	O&M Costs	Fuel Costs	Total Costs
2025	0	0	0	0
2026	0	0	0	0
2027	0	0	0	0
2028	0	0	0	0
2029	0	0	0	0
2030	0	0	0	0
2031	0	0	0	0
2032	0	0	0	0
2033	0	0	0	0
2034	0	0	0	0
Notes				
(Include Notes Here)				

TYSP Year 2025
Question No. 66

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit		Estimated EPA Rule Impacts: Operational Effects						
							Net		ELGS	ACE or replacement	MATS	CSAPR/CAIR	CWIS	CCR	
					Mo	Yr	Sum	Win						Non-Hazardous Waste	Special Waste
Anclote	1	Pasco	Steam	NG	Oct	1974	508	521	NA	NA	Convert to NG	Convert to NG	Impacted	NA	NA
Anclote	2	Pasco	Steam	NG	Oct	1978	497	504	NA	NA	Convert to NG	Convert to NG	Impacted	NA	NA
P L Bartow	CC	Pinellas	CC	NG	Jun	2009	1142	1200	NA	NA	NA	Dispatch Changes	Impacted	NA	NA
Citrus Combined Cycle	CC	Citrus	CC	NG	Oct	2018	1617	1854	NA	NA	NA	NA	Compliant as Constructed	NA	NA
Crystal River	4	Citrus	Steam	Coal	Dec	1982	712	721	Impacted	Impacted	Reagent, CEMS	FGD, SCR, Dispatch	Impacted	Impacted	NA
Crystal River	5	Citrus	Steam	Coal	Oct	1984	710	721	Impacted	Impacted	Reagent, CEMS	FGD, SCR, Dispatch	Impacted	Impacted	NA
Osprey	CC	Polk	CC	NG	May	2004	245	245	NA	NA	NA	NA	NA	NA	NA
Hines	1-4	Polk	CC	NG	Aug	1998	2100	2149	NA	NA	NA	Dispatch Changes	NA	NA	NA
Notes															
(Include Notes Here)															

TYSP Year
Question No.

2025
67

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Capacity (MW)		Estimated EPA Rule Impacts: Cost Effects						
							Net		ELGS	ACE or replacement	MATS	CSAPR/CAIR	CWIS	CCR	
					Mo	Yr	Sum	Win						Non-Hazardous Waste	Special Waste
Anclote	1	Pasco	Steam	Natural Gas	Oct	1974	508	521	N/A	N/A	0	0	15-130	N/A	N/A
Anclote	2	Pasco	Steam	Natural Gas	Oct	1978	497	504			0	0		N/A	N/A
P.L. Bartow	CC	Pinellas	CC	Natural Gas	Jun	2009	1142	1200	N/A	N/A	0	0	20 - 50	N/A	N/A
Crystal River	4	Citrus	Steam	Coal	Dec	1982	712	721	TBD	TBD	0	0	1 - 3	TBD	0
Crystal River	5	Citrus	Steam	Coal	Oct	1984	710	721			0	0			0
Notes															
(Include Notes Here)															

TYSP Year 2025
Question No. 68

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Capacity		Estimated EPA Rule Impacts: Unit Availability						
							Net		ELGS	ACE or replacement	MATS	CSAPR/ CAIR	CWIS	CCR	
					Mo	Yr	Sum	Win						Non-Hazardous Waste	Special Waste
Anclote	1	Pasco	Steam	NG	Oct	1974	508	521	NA	NA	NA	NA	TBD	NA	NA
Anclote	2	Pasco	Steam	NG	Oct	1978	497	504	NA	NA	NA	NA	TBD	NA	NA
P L Bartow	CC	Pinellas	CC	NG	Jun	2009	1142	1200	NA	NA	NA	NA	TBD	NA	NA
Citrus CC	CC	Citrus	CC	NG	Oct	2018	1617	1854	NA	NA	NA	NA	NA	NA	NA
Crystal River	4	Citrus	Steam	Coal	Dec	1982	712	721	NA	TBD	NA	NA	NA	TBD	NA
Crystal River	5	Citrus	Steam	Coal	Oct	1984	710	721	NA	TBD	NA	NA	NA	TBD	NA
Osprey	CC	Polk	CC	NG	May	2004	245	245	NA	NA	NA	NA	NA	NA	NA
Hines	1-4	Polk	CC	NG	Aug	1998	2100	2149	NA	NA	NA	NA	NA	NA	NA
Notes															
(Include Notes Here)															

TYSP Year
Question No.

2025
70

Year		Firm Purchase Rates		Non-Firm Purchase Rates		As-Available Energy Rates		
		Annual Average	Escalation Rate	Annual Average	Escalation Rate	Annual Average	On-Peak Average	Off-Peak Average
		(\$/MWh)	(%)	(\$/MWh)	(%)	(\$/MWh)	(\$/MWh)	(\$/MWh)
Actual	2015	72.15		43.00		26.03	28.74	23.74
	2016	37.98	-0.47	31.82	-0.26	25.97	29.79	22.73
	2017	43.78	0.15	33.00	0.04	28.97	32.44	26.03
	2018	46.91	0.07	46.95	0.42	30.84	34.80	27.49
	2019	40.12	1.72	36.76	-0.22	23.71	27.22	20.73
	2020	35.80	0.09	31.32	-0.15	18.57	21.22	16.33
	2021	52.19	0.13	53.11	0.70	34.45	40.53	29.30
	2022	85.75	0.14	105.54	0.99	61.67	73.74	51.45
	2023	53.76	0.06	60.49	-0.43	24.47	28.56	21.00
	2024	39.60	0.09	61.68	0.02	21.80	25.32	18.81
Projected	2025	46.96	0.07	33.07	-0.46	29.15	32.70	26.15
	2026	47.62	-0.08	38.66	0.17	32.21	36.23	28.80
	2027	48.76	0.10	41.93	0.08	32.72	37.40	28.76
	2028			42.71	0.02	32.02	36.51	28.22
	2029			36.62	-0.14	29.82	33.39	26.80
	2030			32.31	-0.12	28.81	31.04	26.92
	2031			34.05	0.05	30.63	32.28	29.23
	2032			38.73	0.14	33.92	35.30	32.76
	2033			41.75	0.08	37.11	38.21	36.18
	2034			42.55	0.02	39.72	40.69	38.89
Notes								
Firm Purchase Rates don't include capacity payments								

TYSP Year 2025

Question No. 71

Year		Uranium		Coal		Natural Gas		Residual Oil		Distillate Oil		Hydrogen		Other (Specify)	
		GWh	\$/MMBTU	GWh	\$/MMBTU	GWh	\$/MMBTU	GWh	\$/MMBTU	GWh	\$/MMBTU	GWh	\$/MMBTU	GWh	\$/MMBTU
Actual	2015	-	-	9,718	3.72	25,227	4.67	-	-	72.85	22.30	-	-	-	-
	2016	-	-	8,885	3.62	24,807	4.09	-	-	77.00	18.66	-	-	-	-
	2017	-	-	8,722	3.44	27,307	4.26	-	-	62.00	16.43	-	-	-	-
	2018	-	-	8,422	3.20	28,687	4.52	-	-	90.00	19.80	-	-	-	-
	2019	-	-	4,322	3.66	35,170	3.93	-	-	33.05	20.36	-	-	-	-
	2020	-	-	3,287	3.66	36,327	3.37	-	-	33.06	22.28	-	-	-	-
	2021	-	-	5,042	3.03	34,517	5.28	-	-	61.41	20.27	-	-	-	-
	2022	-	-	4,375	4.58	36,423	8.50	-	-	145.95	22.63	-	-	-	-
	2023	-	-	3,829	4.61	35,526	4.16	-	-	28.88	26.51	-	-	-	-
	2024	-	-	3,262	4.41	37,494	3.74	-	-	29.53	25.75	-	-	-	-
Projected	2025	-	-	2,269	2.95	36,924	3.41	-	-	6.47	15.65	-	-	-	-
	2026	-	-	1,789	3.60	38,080	3.79	-	-	8.65	15.80	-	-	-	-
	2027	-	-	1,590	3.68	37,635	3.83	-	-	29.60	16.07	-	-	-	-
	2028	-	-	1,585	3.77	37,060	3.76	-	-	24.49	16.53	-	-	-	-
	2029	-	-	1,372	3.84	36,708	3.69	-	-	15.93	17.11	-	-	-	-
	2030	-	-	1,252	3.98	36,332	3.79	-	-	4.89	17.53	-	-	-	-
	2031	-	-	1,400	4.08	34,435	4.12	-	-	2.38	17.85	-	-	-	-
	2032	-	-	1,350	4.23	33,423	4.64	-	-	5.36	18.08	-	-	-	-
	2033	-	-	1,475	4.38	32,280	5.18	-	-	1.41	18.43	-	-	-	-
	2034	-	-	657	4.46	32,440	5.35	-	-	3.29	18.70	-	-	-	-
Notes															
(Include Notes Here)															

TYSP Year 2025

Question No. 77(a)

Table I: Current Data Center Information										
Data Centers Currently Located in Utility Service Area										
Total No. of Data Centers	Customer Class Served	Total Energy Usage in 2024	Impact to Summer Peak Demand	Impact to Winter Peak Demand	Seasonality Observed, if any	For each of the Data Centers				
							Type of Data Center*	Energy Used in 2024	Hours of Peak Usage**	Impact to Peak Demand
		(MWHs)	(MWs)	(MWs)				(MWHs)		(MWs)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
5	B2B	48,000	14.5	7	N/A	1	Colocation	7,815	1:00	1.69
						2	Colocation/cloud	7,958	1:15	1.78
						3	Colocation/cloud	5,892	1:15	1.28
						4	Colocation	10,733	1:00	
						5	Colocation/cloud	2,179	2:15	0.48
* Examples of the data center types: colocation, enterprise, cloud, edge, and micro data.										
** Based on military time 1 - 24.										

TYSP Year
Question No.

2025
77(b)

Table II: Planned Data Center Information						
Planned Data Centers in Your Service Area						
	Type of Data Center*	Customer Class Served	Expected In-Service Date	Expected Annual Energy Usage	Expected Impact to Summer Peak Demand	Expected Impact to Winter Peak Demand
				(MWHs)	(MWs)	(MWs)
	(1)	(2)	(3)	(4)	(5)	(6)
1	Hybrid Cloud Solutions (Colocation & Cloud)	B2B	4Q 2025	8	5	4
2						
3						
...						
* Examples of the data center types: colocation, enterprise, cloud, edge, and micro data.						

TYSP Year	2025
Staff's Data Request #	1
Question No.	17
Part	b.

Year	Cumulative Customer Owned/Leased Renewable Generation											
	Residential Energy Impact (MWh)	Commercial Energy Impact (MWh)	Industrial Energy Impact (MWh)	Total Energy Impact (MWh)	Residential Summer Demand (MW)	Residential Winter Demand (MW)	Commercial Summer Demand (MW)	Commercial Winter Demand (MW)	Industrial Summer Demand (MW)	Industrial Winter Demand (MW)	Total Summer Demand (MW)	Total Winte Demand (MW)
2025	(134,590)	(7,121)	(364)	(142,074)	(38.89)	(0.4)	(2.0)	(0.0)	(0.1)	0.0	(41.0)	(0.4)
2026	(394,104)	(20,570)	(1,047)	(415,722)	(97.61)	(4.7)	(5.0)	(0.3)	(0.2)	(0.0)	(102.8)	(5.0)
2027	(655,194)	(33,953)	(1,727)	(690,874)	(96.19)	(9.1)	(5.1)	(0.5)	(0.2)	(0.0)	(101.5)	(9.7)
2028	(906,014)	(47,372)	(2,409)	(955,795)	(130.07)	(13.5)	(7.0)	(0.8)	(0.3)	(0.0)	(137.4)	(14.4)
2029	(1,129,888)	(60,519)	(3,077)	(1,193,484)	(161.34)	(17.4)	(8.9)	(1.0)	(0.4)	(0.1)	(170.6)	(18.5)
2030	(1,355,650)	(72,810)	(3,748)	(1,432,208)	(192.66)	(21.2)	(10.6)	(1.3)	(0.5)	(0.1)	(203.8)	(22.6)
2031	(1,582,277)	(84,243)	(4,414)	(1,670,934)	(224.15)	(25.0)	(12.2)	(1.5)	(0.6)	(0.1)	(237.0)	(26.6)
2032	(1,815,529)	(95,840)	(5,089)	(1,916,457)	(255.98)	(28.9)	(13.8)	(1.7)	(0.7)	(0.1)	(270.5)	(30.7)
2033	(2,040,304)	(106,937)	(5,737)	(2,152,978)	(287.74)	(32.8)	(15.4)	(1.9)	(0.8)	(0.1)	(304.0)	(34.8)
2034	(2,265,295)	(118,200)	(6,394)	(2,389,889)	(318.88)	(36.6)	(17.0)	(2.2)	(0.9)	(0.1)	(336.8)	(38.9)
Notes												
The negative values indicate that customer owned PV is a reduction to projected load; the data for summer demand is for hour ending 5 PM for 2025 and 2026 and from hour ending 6 PM for all other years												

TYSP Year 2025
Staff's Data Request # 1
Question No. 17
Part c.

Year	Cumulative Customer Owned/Leased Renewable Generation Counts			
	Residential Customers	Commercial Customers	Industrial Customers	Total Customers
2025	115,187	883	3	116,073
2026	133,238	979	5	134,222
2027	151,454	1,075	7	152,536
2028	167,722	1,171	9	168,902
2029	183,680	1,267	11	184,958
2030	199,658	1,351	13	201,022
2031	215,874	1,435	15	217,324
2032	232,311	1,519	17	233,847
2033	248,688	1,603	19	250,310
2034	264,672	1,687	21	266,380
Notes				

DUKE ENERGY FLORIDA
TYSP Forecast Error Evaluation Form
Data is NOT weather adjusted

Year	Actual Sys NEL (GWH)	Net Energy for Load (NEL) Forecast GWH																				
	TYSP 2004	TYSP 2005	TYSP 2006	TYSP 2007	TYSP 2008	TYSP 2009	TYSP 2010	TYSP 2011	TYSP 2012	TYSP 2013	TYSP 2014	TYSP 2015	TYSP 2016	TYSP 2017	TYSP 2018	TYSP 2019	TYSP 2020	TYSP 2021	TYSP 2022	TYSP 2023	TYSP 2024	
2004	45,268	45,161																				
2005	46,878	45,745	46,722																			
2006	46,041	47,120	46,993	46,167																		
2007	47,633	48,044	48,329	47,759	48,194																	
2008	47,658	49,047	49,446	49,076	49,468	48,734																
2009	44,124	50,147	50,299	50,148	50,609	49,768	48,556															
2010	46,160	51,263	51,998	52,006	52,516	51,615	48,765	43,819														
2011	42,490	52,356	53,052	53,219	53,776	52,913	49,846	42,750	42,047													
2012	41,214	53,478	54,278	54,434	55,017	54,695	52,485	44,443	44,253	41,534												
2013	40,772	54,608	55,516	55,704	56,321	56,045	53,647	45,877	45,637	40,973	40,786											
2014	40,975		56,999	56,948	57,732	56,905	52,759	46,458	46,367	42,552	41,565	39,801										
2015	42,280			58,211	59,074	58,166	53,117	46,815	46,794	43,633	42,549	40,490	41,426									
2016	42,854				60,460	59,448	53,644	46,477	46,176	43,596	43,421	41,098	41,947	41,277								
2017	42,919					60,836	54,612	46,343	46,128	43,823	43,824	41,375	42,365	41,932	41,475							
2018	44,224						55,614	46,932	46,674	44,533	44,452	41,995	42,779	42,417	41,887	43,060						
2019	44,801							47,922	47,814	45,854	45,037	43,013	43,572	43,044	42,520	43,331	43,206					
2020	44,814								48,390	46,576	45,654	43,998	44,069	43,559	43,127	44,063	43,620	43,645				
2021	45,064									47,180	46,179	44,419	44,322	43,895	43,463	44,555	43,949	43,939	43,103			
2022	46,141										46,689	44,870	44,681	44,289	43,751	45,088	44,519	44,591	44,980	43,440		
2023	44,049											45,459	45,080	44,679	44,089	45,515	44,466	44,536	44,424	43,432	42,897	
2024	44,200												45,544	44,982	44,428	46,057	44,813	44,880	45,010	43,750	44,352	43,418
Year	Actual NEL (GWH)	DEF System Net Energy For Load Forecast Variances - %																				
		TYSP 2004	TYSP 2005	TYSP 2006	TYSP 2007	TYSP 2008	TYSP 2009	TYSP 2010	TYSP 2011	TYSP 2012	TYSP 2013	TYSP 2014	TYSP 2015	TYSP 2016	TYSP 2017	TYSP 2018	TYSP 2019	TYSP 2020	TYSP 2021	TYSP 2022	TYSP 2023	TYSP 2024
2004	45,268	0.2%																				
2005	46,878	2.5%	0.3%																			
2006	46,041	-2.3%	-2.0%	-0.3%																		
2007	47,633	-0.9%	-1.4%	-0.3%	-1.2%																	
2008	47,658	-2.8%	-3.6%	-2.9%	-3.7%	-2.2%																
2009	44,124	-12.0%	-12.3%	-12.0%	-12.8%	-11.3%	-9.1%															
2010	46,160	-10.0%	-11.2%	-11.2%	-12.1%	-10.6%	-5.3%	5.3%														
2011	42,490	-18.8%	-19.9%	-20.2%	-21.0%	-19.7%	-14.8%	-0.6%	1.1%													
2012	41,214	-22.9%	-24.1%	-24.3%	-25.1%	-24.6%	-21.5%	-7.3%	-6.9%	-0.8%												
2013	40,772	-25.3%	-26.6%	-26.8%	-27.6%	-27.3%	-24.0%	-11.1%	-10.7%	-0.5%	0.0%											
2014	40,975		-28.1%	-28.0%	-29.0%	-28.0%	-22.3%	-11.8%	-11.6%	-3.7%	-1.4%	2.9%										
2015	42,280			-27.4%	-28.4%	-27.3%	-20.4%	-9.7%	-9.6%	-3.1%	-0.6%	4.4%	2.1%									
2016	42,854				-29.1%	-27.9%	-20.1%	-7.8%	-7.2%	-1.7%	-1.3%	4.3%	2.2%	3.8%								
2017	42,919					-29.5%	-21.4%	-7.4%	-7.0%	-2.1%	-2.1%	3.7%	1.3%	2.4%	3.5%							
2018	44,224						-20.5%	-5.8%	-5.3%	-0.7%	-0.5%	5.3%	3.4%	4.3%	5.6%	2.7%						
2019	44,801							-6.5%	-6.3%	-2.3%	-0.5%	4.2%	2.8%	4.1%	5.4%	3.4%	3.7%					
2020	44,814								-7.4%	-3.8%	-1.8%	1.9%	1.7%	2.9%	3.9%	1.7%	2.7%	2.7%				
2021	45,064									-4.5%	-2.4%	1.5%	1.7%	2.7%	3.7%	1.1%	2.5%	2.6%	4.6%			
2022	46,141										-1.2%	2.8%	3.3%	4.2%	5.5%	2.3%	3.6%	3.5%	2.6%	6.2%		
2023	44,049											-3.1%	-2.3%	-1.4%	-0.1%	-3.2%	-0.9%	-1.1%	-0.8%	1.4%	2.7%	
2024	44,200												-3.0%	-1.7%	-0.5%	-4.0%	-1.4%	-1.5%	-1.8%	1.0%	-0.3%	1.8%

DUKE ENERGY FLORIDA
TYSP Forecast Error Evaluation Form

	Actual	DEF System Customer Forecast																				
Year	System Customers	TYSP 2004	TYSP 2005	TYSP 2006	TYSP 2007	TYSP 2008	TYSP 2009	TYSP 2010	TYSP 2011	TYSP 2012	TYSP 2013	TYSP 2014	TYSP 2015	TYSP 2016	TYSP 2017	TYSP 2018	TYSP 2019	TYSP 2020	TYSP 2021	TYSP 2022	TYSP 2023	TYSP 2024
2004	1,548,617	1,540,101																				
2005	1,583,387	1,567,693	1,574,447																			
2006	1,620,354	1,595,069	1,603,600	1,608,403																		
2007	1,632,359	1,623,037	1,632,925	1,639,122	1,645,969																	
2008	1,638,929	1,651,611	1,662,016	1,669,301	1,679,343	1,662,325																
2009	1,630,166	1,680,503	1,690,993	1,699,499	1,712,064	1,694,687	1,639,432															
2010	1,634,191	1,708,932	1,719,780	1,729,379	1,744,641	1,727,055	1,649,751	1,629,536														
2011	1,642,376	1,736,295	1,748,339	1,758,708	1,777,280	1,759,469	1,670,011	1,642,845	1,642,842													
2012	1,695,713	1,762,757	1,776,709	1,787,722	1,810,126	1,791,810	1,696,126	1,663,026	1,663,023	1,651,398												
2013	1,671,220	1,788,650	1,804,949	1,816,528	1,843,147	1,824,240	1,726,408	1,688,549	1,688,549	1,669,205	1,673,018											
2014	1,695,711		1,833,114	1,845,178	1,876,090	1,856,553	1,757,554	1,715,811	1,715,811	1,696,574	1,696,482	1,692,614										
2015	1,721,551			1,873,800	1,908,680	1,888,544	1,788,202	1,743,531	1,743,531	1,729,077	1,723,531	1,718,930	1,719,415									
2016	1,748,131				1,940,633	1,918,178	1,817,295	1,770,640	1,770,640	1,758,211	1,750,008	1,745,332	1,745,429	1,748,147								
2017	1,775,472					1,947,284	1,844,978	1,797,062	1,797,062	1,786,510	1,777,249	1,771,848	1,772,592	1,776,705	1,778,929							
2018	1,802,714						1,871,706	1,823,014	1,823,014	1,813,830	1,805,116	1,797,281	1,800,353	1,805,008	1,809,791	1,806,086						
2019	1,831,269							1,848,690	1,848,690	1,840,809	1,833,202	1,821,256	1,828,216	1,833,370	1,840,246	1,835,638	1,832,032					
2020	1,863,385								1,874,295	1,867,682	1,861,162	1,844,727	1,855,717	1,861,625	1,870,068	1,865,057	1,857,355	1,856,728				
2021	1,878,278									1,894,632	1,888,704	1,867,398	1,882,508	1,889,404	1,898,760	1,894,148	1,886,392	1,883,227	1,893,024			
2022	1,933,061										1,915,812	1,889,454	1,908,539	1,916,504	1,926,509	1,922,333	1,915,022	1,910,532	1,923,069	1,936,334		
2023	1,968,221											1,910,206	1,933,889	1,943,000	1,953,422	1,949,980	1,943,546	1,938,607	1,952,290	1,973,754	1,975,742	
2024	2,009,470												1,958,651	1,969,029	1,979,613	1,976,930	1,971,768	1,966,893	1,980,697	2,010,971	2,013,982	1,996,557
	Actual	DEF System Customer Forecast Variances - %																				
Year	System Customers	TYSP 2004	TYSP 2005	TYSP 2006	TYSP 2007	TYSP 2008	TYSP 2009	TYSP 2010	TYSP 2011	TYSP 2012	TYSP 2013	TYSP 2014	TYSP 2015	TYSP 2016	TYSP 2017	TYSP 2018	TYSP 2019	TYSP 2020	TYSP 2021	TYSP 2022	TYSP 2023	TYSP 2024
2004	1,548,617	0.6%																				
2005	1,583,387	1.0%	0.6%																			
2006	1,620,354	1.6%	1.0%	0.7%																		
2007	1,632,359	0.6%	0.0%	-0.4%	-0.8%																	
2008	1,638,929	-0.8%	-1.4%	-1.8%	-2.4%	-1.4%																
2009	1,630,166	-3.0%	-3.6%	-4.1%	-4.8%	-3.8%	-0.6%															
2010	1,634,191	-4.4%	-5.0%	-5.5%	-6.3%	-5.4%	-0.9%	0.3%														
2011	1,642,376	-5.4%	-6.1%	-6.6%	-7.6%	-6.7%	-1.7%	0.0%	0.0%													
2012	1,695,713	-3.8%	-4.6%	-5.1%	-6.3%	-5.4%	0.0%	2.0%	2.0%	2.7%												
2013	1,671,220	-6.6%	-7.4%	-8.0%	-9.3%	-8.4%	-3.2%	-1.0%	-1.0%	0.1%	-0.1%											
2014	1,695,711		-7.5%	-8.1%	-9.6%	-8.7%	-3.5%	-1.2%	-1.2%	-0.1%	0.0%	0.2%										
2015	1,721,551			-8.1%	-9.8%	-8.8%	-3.7%	-1.3%	-1.3%	-0.4%	-0.1%	0.2%	0.1%									
2016	1,748,131				-9.9%	-8.9%	-3.8%	-1.3%	-1.3%	-0.6%	-0.1%	0.2%	0.2%	0.0%								
2017	1,775,472					-8.8%	-3.8%	-1.2%	-1.2%	-0.6%	-0.1%	0.2%	0.2%	-0.1%	-0.2%							
2018	1,802,714						-3.7%	-1.1%	-1.1%	-0.6%	-0.1%	0.3%	0.1%	-0.1%	-0.4%	-0.2%						
2019	1,831,269							-0.9%	-0.9%	-0.5%	-0.1%	0.5%	0.2%	-0.1%	-0.5%	-0.2%	0.0%					
2020	1,863,385								-0.6%	-0.2%	0.1%	1.0%	0.4%	0.1%	-0.4%	-0.1%	0.3%	0.4%				
2021	1,878,278									-0.9%	-0.6%	0.6%	-0.2%	-0.6%	-1.1%	-0.8%	-0.4%	-0.3%	-0.8%			
2022	1,933,061										0.9%	2.3%	1.3%	0.9%	0.3%	0.6%	0.9%	1.2%	0.5%	-0.2%		
2023	1,968,221											3.0%	1.8%	1.3%	0.8%	0.9%	1.3%	1.5%	0.8%	-0.3%		
2024	2,009,470												2.6%	2.1%	1.5%	1.6%	1.9%	2.2%	1.5%	-0.1%	-0.2%	

DUKE ENERGY FLORIDA
TYSP Forecast Error Evaluation Form
Data is NOT weather adjusted
DEF Retail Summer Peak Forecast, No DR Activated

Year	Actual Retail Summer Peak (MW)	TYSP 2004	TYSP 2005	TYSP 2006	TYSP 2007	TYSP 2008	TYSP 2009	TYSP 2010	TYSP 2011	TYSP 2012	TYSP 2013	TYSP 2014	TYSP 2015	TYSP 2016	TYSP 2017	TYSP 2018	TYSP 2019	TYSP 2020	TYSP 2021	TYSP 2022	TYSP 2023	TYSP 2024
2004	8,058	7,942																				
2005	8,565	8,122	8,154																			
2006	8,432	8,303	8,357	8,352																		
2007	8,861	8,486	8,554	8,576	8,816																	
2008	8,524	8,672	8,727	8,786	9,044	8,746																
2009	8,643	8,863	8,899	8,986	9,247	8,953	8,631															
2010	8,328	9,047	9,089	9,181	9,453	9,138	8,687	8,428														
2011	8,343	9,224	9,278	9,376	9,661	9,340	8,837	8,461	8,488													
2012	7,946	9,395	9,465	9,568	9,864	9,544	9,021	8,562	8,564	8,536												
2013	8,195	9,561	9,651	9,759	10,069	9,747	9,267	8,723	8,705	8,611	8,732											
2014	8,404		9,836	9,946	10,270	9,941	9,465	8,822	8,791	8,759	8,871	8,705										
2015	8,446			10,142	10,479	10,146	9,667	8,905	8,870	8,972	9,038	8,944	8,843									
2016	8,779				10,698	10,326	9,813	8,956	8,933	9,146	9,199	9,207	9,073	9,018								
2017	8,520					10,506	9,991	9,042	9,027	9,330	9,381	9,477	9,235	9,140	8,866							
2018	8,492						10,163	9,137	9,120	9,503	9,561	9,626	9,387	9,315	8,992	8,691						
2019	8,985							9,238	9,215	9,689	9,756	9,806	9,576	9,485	9,107	8,813	8,791					
2020	8,746								9,314	9,872	9,950	9,959	9,775	9,615	9,244	8,907	8,858	8,781				
2021	8,671									10,050	10,136	9,952	9,934	9,746	9,336	9,000	8,917	8,820	8,693			
2022	8,932										10,310	10,067	10,090	9,874	9,427	9,094	8,993	8,893	8,862	8,746		
2023	9,492											10,173	10,241	9,999	9,519	9,189	9,058	8,933	8,955	8,756	8,612	
2024	8,863												10,390	10,121	9,611	9,300	9,139	8,979	9,055	8,824	9,054	9,121

Year	Actual Retail Summer Peak (MW)	TYSP 2004	TYSP 2005	TYSP 2006	TYSP 2007	TYSP 2008	TYSP 2009	TYSP 2010	TYSP 2011	TYSP 2012	TYSP 2013	TYSP 2014	TYSP 2015	TYSP 2016	TYSP 2017	TYSP 2018	TYSP 2019	TYSP 2020	TYSP 2021	TYSP 2022	TYSP 2023	TYSP 2024
2004	8,058	1.5%																				
2005	8,565	5.4%	5.0%																			
2006	8,432	1.5%	0.9%	1.0%																		
2007	8,861	4.4%	3.6%	3.3%	0.5%																	
2008	8,524	-1.7%	-2.3%	-3.0%	-5.7%	-2.5%																
2009	8,643	-2.5%	-2.9%	-3.8%	-6.5%	-3.5%	0.1%															
2010	8,328	-8.0%	-8.4%	-9.3%	-11.9%	-8.9%	-4.1%	-1.2%														
2011	8,343	-9.6%	-10.1%	-11.0%	-13.6%	-10.7%	-5.6%	-1.4%	-1.7%													
2012	7,946	-15.4%	-16.0%	-17.0%	-19.4%	-16.7%	-11.9%	-7.2%	-7.2%	-6.9%												
2013	8,195	-14.3%	-15.1%	-16.0%	-18.6%	-15.9%	-11.6%	-6.1%	-5.9%	-4.8%	-6.2%											
2014	8,404		-14.6%	-15.5%	-18.2%	-15.5%	-11.2%	-4.7%	-4.4%	-4.1%	-5.3%	-3.5%										
2015	8,446			-16.7%	-19.4%	-16.8%	-12.6%	-5.2%	-4.8%	-5.9%	-6.6%	-5.6%	-4.5%									
2016	8,779				-17.9%	-15.0%	-10.5%	-2.0%	-1.7%	-4.0%	-4.6%	-4.6%	-3.2%	-2.7%								
2017	8,520					-18.9%	-14.7%	-5.8%	-5.6%	-8.7%	-9.2%	-10.1%	-7.7%	-6.8%	-3.9%							
2018	8,492						-16.4%	-7.1%	-6.9%	-10.6%	-11.2%	-11.8%	-9.5%	-8.8%	-5.6%	-2.3%						
2019	8,985							-2.7%	-2.5%	-7.3%	-7.9%	-8.4%	-6.2%	-5.3%	-1.3%	2.0%	2.2%					
2020	8,746								-6.1%	-11.4%	-12.1%	-12.2%	-10.5%	-9.0%	-5.4%	-1.8%	-1.3%	-0.4%				
2021	8,671									-13.7%	-14.5%	-12.9%	-12.7%	-11.0%	-7.1%	-3.7%	-2.8%	-1.7%	-0.3%			
2022	8,932										-13.4%	-11.3%	-11.5%	-9.5%	-5.3%	-1.8%	-0.7%	0.4%	0.8%	2.1%		
2023	9,492											-6.7%	-7.3%	-5.1%	-0.3%	3.3%	4.8%	6.3%	6.0%	8.4%	10.2%	
2024	8,863												-14.7%	-12.4%	-7.8%	-4.7%	-3.0%	-1.3%	-2.1%	0.4%	-2.1%	-2.8%

Year	Actual Retail Winter Peak (MW)	DEF Retail Winter Peak Forecast, No DR Activated																				
	TYSP 2004	TYSP 2005	TYSP 2006	TYSP 2007	TYSP 2008	TYSP 2009	TYSP 2010	TYSP 2011	TYSP 2012	TYSP 2013	TYSP 2014	TYSP 2015	TYSP 2016	TYSP 2017	TYSP 2018	TYSP 2019	TYSP 2020	TYSP 2021	TYSP 2022	TYSP 2023	TYSP 2024	
2004	7,585	8,676																				
2005	8,627	8,842	8,865																			
2006	8,679	9,009	9,035	9,066																		
2007	7,607	9,171	9,214	9,252	9,426																	
2008	8,454	9,336	9,386	9,456	9,701	9,447																
2009	9,085	9,506	9,556	9,632	9,881	9,578	9,371															
2010	10,686	9,677	9,723	9,810	10,059	9,754	9,345	9,159														
2011	8,909	9,839	9,890	9,984	10,244	9,931	9,427	9,122	9,173													
2012	7,817	9,995	10,049	10,149	10,422	10,102	9,561	9,203	9,247	9,045												
2013	7,201	10,145	10,208	10,312	10,601	10,282	9,761	9,343	9,379	9,056	9,224											
2014	7,671		10,367	10,477	10,781	10,450	9,927	9,438	9,464	9,141	9,309	9,070										
2015	8,438			10,641	10,951	10,616	10,087	9,523	9,542	9,316	9,443	8,881	9,222									
2016	7,649				11,174	10,783	10,217	9,571	9,604	9,488	9,585	9,133	9,399	9,227								
2017	6,837					10,939	10,378	9,641	9,695	9,650	9,739	9,385	9,517	9,353	8,941							
2018	9,249						10,531	9,737	9,785	9,815	9,904	9,654	9,630	9,460	9,063	8,985						
2019	6,707							9,836	9,877	9,984	10,086	9,807	9,782	9,608	9,174	9,118	8,949					
2020	7,794								9,971	10,148	10,261	9,926	9,942	9,764	9,313	9,211	9,054	9,191				
2021	7,629									10,312	10,434	10,029	10,064	9,886	9,411	9,435	9,157	9,322	8,720			
2022	8,202										10,598	10,143	10,184	10,005	9,507	9,508	9,229	9,419	8,912	8,889		
2023	8,110											10,224	10,302	10,123	9,600	9,602	9,285	9,494	9,041	8,925	8,663	
2024	6,859												10,416	10,240	9,697	9,697	9,374	9,603	9,170	8,997	8,974	9,142
	Actual	DEF Retail Winter Peak Forecast Variances - %																				
Year	Retail Winter Peak (MW)	TYSP 2004	TYSP 2005	TYSP 2006	TYSP 2007	TYSP 2008	TYSP 2009	TYSP 2010	TYSP 2011	TYSP 2012	TYSP 2013	TYSP 2014	TYSP 2015	TYSP 2016	TYSP 2017	TYSP 2018	TYSP 2019	TYSP 2020	TYSP 2021	TYSP 2022	TYSP 2023	TYSP 2024
2004	7,585	-12.6%																				
2005	8,627	-2.4%	-2.7%																			
2006	8,679	-3.7%	-3.9%	-4.3%																		
2007	7,607	-17.1%	-17.4%	-17.8%	-19.3%																	
2008	8,454	-9.4%	-9.9%	-10.6%	-12.9%	-10.5%																
2009	9,085	-4.4%	-4.9%	-5.7%	-8.1%	-5.2%	-3.1%															
2010	10,686	10.4%	9.9%	8.9%	6.2%	9.6%	14.3%	16.7%														
2011	8,909	-9.5%	-9.9%	-10.8%	-13.0%	-10.3%	-5.5%	-2.3%	-2.9%													
2012	7,817	-21.8%	-22.2%	-23.0%	-25.0%	-22.6%	-18.2%	-15.1%	-15.5%	-13.6%												
2013	7,201	-29.0%	-29.5%	-30.2%	-32.1%	-30.0%	-26.2%	-22.9%	-23.2%	-20.5%	-21.9%											
2014	7,671		-26.0%	-26.8%	-28.8%	-26.6%	-22.7%	-18.7%	-18.9%	-16.1%	-17.6%	-15.4%										
2015	8,438			-20.7%	-22.9%	-20.5%	-16.3%	-11.4%	-11.6%	-9.4%	-10.6%	-5.0%	-8.5%									
2016	7,649				-31.5%	-29.1%	-25.1%	-20.1%	-20.4%	-19.4%	-20.2%	-16.2%	-18.6%	-17.1%								
2017	6,837					-37.5%	-34.1%	-29.1%	-29.5%	-29.2%	-29.8%	-27.2%	-28.2%	-26.9%	-23.5%							
2018	9,249						-12.2%	-5.0%	-5.5%	-5.8%	-6.6%	-4.2%	-4.0%	-2.2%	2.1%	2.9%						
2019	6,707							-31.8%	-32.1%	-32.8%	-33.5%	-31.6%	-31.4%	-30.2%	-26.9%	-26.4%	-25.1%					
2020	7,794								-21.8%	-23.2%	-24.0%	-21.5%	-21.6%	-20.2%	-16.3%	-15.4%	-13.9%	-15.2%				
2021	7,629									-26.0%	-26.9%	-23.9%	-24.2%	-22.8%	-18.9%	-19.1%	-16.7%	-18.2%	-12.5%			
2022	8,202										-22.6%	-19.1%	-19.5%	-18.0%	-13.7%	-13.7%	-11.1%	-12.9%	-8.0%	-7.7%		
2023	8,110											-20.7%	-21.3%	-19.9%	-15.5%	-15.5%	-12.7%	-14.6%	-10.3%	-9.1%	-6.4%	
2024	6,859												-34.1%	-33.0%	-29.3%	-29.3%	-26.8%	-28.6%	-25.2%	-23.8%	-23.6%	-25.0%

DUKE ENERGY FLORIDA
TYSP Forecast Error Evaluation Form
Data is NOT weather adjusted

Year	Act System	DEF System Summer Peak Forecast, No DR Activated																				
	Summer Pk (MW)	TYSP 2004	TYSP 2005	TYSP 2006	TYSP 2007	TYSP 2008	TYSP 2009	TYSP 2010	TYSP 2011	TYSP 2012	TYSP 2013	TYSP 2014	TYSP 2015	TYSP 2016	TYSP 2017	TYSP 2018	TYSP 2019	TYSP 2020	TYSP 2021	TYSP 2022	TYSP 2023	TYSP 2024
2004	9,125	8,716																				
2005	9,681	8,812	9,102																			
2006	9,689	9,193	9,350	9,458																		
2007	10,449	9,414	9,617	9,758	10,137																	
2008	10,036	9,576	9,820	10,008	10,382	10,089																
2009	10,261	9,711	9,962	10,187	10,439	10,144	10,242															
2010	9,600	9,899	10,302	10,538	10,722	10,402	10,220	9,715														
2011	9,277	10,047	10,496	10,748	10,948	10,622	10,358	9,571	9,436													
2012	9,026	10,187	10,695	10,964	11,160	10,983	10,713	9,841	9,610	9,629												
2013	8,776	10,356	10,902	11,165	11,389	11,210	10,983	10,025	9,761	9,415	9,669											
2014	9,218		11,106	11,375	11,739	11,403	11,000	9,915	9,766	9,464	9,742	9,509										
2015	9,218			11,589	11,962	11,621	11,225	10,004	9,848	9,677	9,911	9,750	9,655									
2016	9,646				12,196	11,817	11,400	10,161	9,762	9,701	10,176	9,865	9,720	9,533								
2017	9,293					12,016	11,602	10,301	9,859	9,986	10,275	10,064	9,986	9,770	9,617							
2018	9,271						11,801	10,452	9,954	10,159	10,455	10,213	10,139	9,893	9,745	9,497						
2019	9,970							10,859	10,301	10,595	10,650	10,643	10,580	10,319	10,111	9,817	9,770					
2020	9,647								10,403	10,778	10,844	10,796	10,780	10,450	10,209	9,872	9,797	9,731				
2021	9,681									10,856	10,930	10,823	10,689	10,098	10,051	9,816	9,880	9,783	9,434			
2022	9,977										11,104	10,948	10,845	10,234	10,142	9,911	9,956	9,856	9,942	9,650		
2023	10,268											11,063	10,996	10,367	10,234	10,006	9,720	9,595	9,617	9,417	9,073	
2024	9,468												11,145	10,495	10,326	10,119	9,801	9,641	9,717	9,485	9,715	9,851
Year	Actual	DEF System Summer Peak Forecast Variances - %																				
	Summer Peak (MW)	TYSP 2004	TYSP 2005	TYSP 2006	TYSP 2007	TYSP 2008	TYSP 2009	TYSP 2010	TYSP 2011	TYSP 2012	TYSP 2013	TYSP 2014	TYSP 2015	TYSP 2016	TYSP 2017	TYSP 2018	TYSP 2019	TYSP 2020	TYSP 2021	TYSP 2022	TYSP 2023	TYSP 2024
2004	9,125	4.7%																				
2005	9,681	9.9%	6.4%																			
2006	9,689	5.4%	3.6%	2.4%																		
2007	10,449	11.0%	8.7%	7.1%	3.1%																	
2008	10,036	4.8%	2.2%	0.3%	-3.3%	-0.5%																
2009	10,261	5.7%	3.0%	0.7%	-1.7%	1.2%	0.2%															
2010	9,600	-3.0%	-6.8%	-8.9%	-10.5%	-7.7%	-6.1%	-1.2%														
2011	9,277	-7.7%	-11.6%	-13.7%	-15.3%	-12.7%	-10.4%	-3.1%	-1.7%													
2012	9,026	-11.4%	-15.6%	-17.7%	-19.1%	-17.8%	-15.7%	-8.3%	-6.1%	-6.3%												
2013	8,776	-15.3%	-19.5%	-21.4%	-22.9%	-21.7%	-20.1%	-12.5%	-10.1%	-6.8%	-9.2%											
2014	9,218		-17.0%	-19.0%	-21.5%	-19.2%	-16.2%	-7.0%	-5.6%	-2.6%	-5.4%	-3.1%										
2015	9,218			-20.5%	-22.9%	-20.7%	-17.9%	-7.9%	-6.4%	-4.7%	-7.0%	-5.5%	-4.5%									
2016	9,646				-20.9%	-18.4%	-15.4%	-5.1%	-1.2%	-0.6%	-5.2%	-2.2%	-0.8%	1.2%								
2017	9,293					-22.7%	-19.9%	-9.8%	-5.7%	-6.9%	-9.6%	-7.7%	-6.9%	-4.9%	-3.4%							
2018	9,271						-21.4%	-11.3%	-6.9%	-8.7%	-11.3%	-9.2%	-8.6%	-6.3%	-4.9%	-2.4%						
2019	9,970							-8.2%	-3.2%	-5.9%	-6.4%	-6.3%	-5.8%	-3.4%	-1.4%	1.6%	2.0%					
2020	9,647								-7.3%	-10.5%	-11.0%	-10.6%	-10.5%	-7.7%	-5.5%	-2.3%	-1.5%	-0.9%				
2021	9,681									-10.8%	-11.4%	-10.6%	-9.4%	-4.1%	-3.7%	-1.4%	-2.0%	-1.0%	2.6%			
2022	9,977										-10.1%	-8.9%	-8.0%	-2.5%	-1.6%	0.7%	0.2%	1.2%	0.4%	3.4%		
2023	10,268											-7.2%	-6.6%	-1.0%	0.3%	2.6%	5.6%	7.0%	6.8%	9.0%	13.2%	
2024	9,468												-15.0%	-9.8%	-8.3%	-6.4%	-3.4%	-1.8%	-2.6%	-0.2%	-2.5%	-3.9%

Act System		DEF System Winter Peak Forecast, No DR Activated																				
	Winter Peak	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP
Year	(MW)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
2004	8,748	10,084																				
2005	10,226	10,350	10,636																			
2006	10,146	10,446	10,537	10,479																		
2007	9,182	10,885	11,021	10,992	11,137																	
2008	10,282	11,007	11,211	11,190	11,490	11,482																
2009	11,313	11,155	11,412	11,526	11,608	11,293	11,388															
2010	12,860	11,373	11,772	11,898	12,071	11,753	11,445	11,009														
2011	10,534	11,531	11,996	12,096	12,326	12,004	11,604	10,895	10,798													
2012	8,722	11,689	12,214	12,340	12,663	12,484	11,989	11,222	10,919	10,437												
2013	8,032	11,876	12,438	12,565	12,978	12,800	12,325	11,496	11,080	10,249	10,133											
2014	8,329		12,662	12,791	13,237	12,898	12,240	11,093	11,113	9,946	10,251	9,965										
2015	9,473			12,999	13,499	13,154	12,486	11,182	11,243	10,621	10,888	10,257	10,603									
2016	8,513				13,813	13,411	12,704	11,235	11,359	10,794	11,032	10,511	10,743	10,571								
2017	7,538					13,655	12,951	11,410	11,352	10,806	11,133	10,473	10,714	10,550	10,138							
2018	10,320						13,189	11,561	11,495	10,971	11,298	10,742	10,828	10,658	10,261	10,236						
2019	7,248							11,716	11,889	11,390	11,480	10,895	10,980	10,806	10,372	10,316	10,174					
2020	8,407								12,037	11,554	11,655	11,264	11,390	11,172	10,721	10,619	10,435	10,577				
2021	8,308									11,718	11,828	11,367	11,363	10,894	10,070	10,154	9,870	10,035	9,376			
2022	9,240										11,992	11,466	11,483	11,013	10,166	10,317	10,243	10,433	10,564	9,938		
2023	7,840											11,561	11,601	11,131	10,259	10,411	9,998	10,207	10,306	10,189	9,275	
2024	7,365												11,715	11,248	10,356	10,506	10,087	10,316	10,435	10,261	10,238	9,994
	Actual	DEF System Winter Peak Forecast Variances - %																				
	Winter	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP	TYSP
Year	Peak (MW)	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
2004	8,748	-13.2%																				
2005	10,226	-1.2%	-3.9%																			
2006	10,146	-2.9%	-3.7%	-3.2%																		
2007	9,182	-15.6%	-16.7%	-16.5%	-17.6%																	
2008	10,282	-6.6%	-8.3%	-8.1%	-10.5%	-10.5%																
2009	11,313	1.4%	-0.9%	-1.8%	-2.5%	0.2%	-0.7%															
2010	12,860	13.1%	9.2%	8.1%	6.5%	9.4%	12.4%	16.8%														
2011	10,534	-8.6%	-12.2%	-12.9%	-14.5%	-12.2%	-9.2%	-3.3%	-2.4%													
2012	8,722	-25.4%	-28.6%	-29.3%	-31.1%	-30.1%	-27.2%	-22.3%	-20.1%	-16.4%												
2013	8,032	-32.4%	-35.4%	-36.1%	-38.1%	-37.3%	-34.8%	-30.1%	-27.5%	-21.6%	-20.7%											
2014	8,329		-34.2%	-34.9%	-37.1%	-35.4%	-32.0%	-24.9%	-25.1%	-16.3%	-18.7%	-16.4%										
2015	9,473			-27.1%	-29.8%	-28.0%	-24.1%	-15.3%	-15.7%	-10.8%	-13.0%	-7.6%	-10.7%									
2016	8,513				-38.4%	-36.5%	-33.0%	-24.2%	-25.1%	-21.1%	-22.8%	-19.0%	-20.8%	-19.5%								
2017	7,538					-44.8%	-41.8%	-33.9%	-33.6%	-30.2%	-32.3%	-28.0%	-29.6%	-28.5%	-25.6%							
2018	10,320						-21.8%	-10.7%	-10.2%	-5.9%	-8.7%	-3.9%	-4.7%	-3.2%	0.6%	0.8%						
2019	7,248							-38.1%	-39.0%	-36.4%	-36.9%	-33.5%	-34.0%	-32.9%	-30.1%	-29.7%						
2020	8,407								-30.2%	-27.2%	-27.9%	-25.4%	-26.2%	-24.7%	-21.6%	-20.8%	-19.4%	-20.5%				
2021	8,308									-29.1%	-29.8%	-26.9%	-26.9%	-23.7%	-17.5%	-18.2%	-15.8%	-17.2%	-11.4%			
2022	9,240										-22.9%	-19.4%	-19.5%	-16.1%	-9.1%	-10.4%	-9.8%	-11.4%	-12.5%	-7.0%		
2023	7,840											-32.2%	-32.4%	-29.6%	-23.6%	-24.7%	-21.6%	-23.2%	-23.9%	-23.1%	-15.5%	
2024	7,365												-37.1%	-34.5%	-28.9%	-29.9%	-27.0%	-28.6%	-29.4%	-28.2%	-28.1%	-26.3%