Seminole Electric
COOPERATIVE, INC.

April 30, 2025

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

Dear Mr. Teitzman:

Pursuant to Staff's email request dated February 20, 2025, Seminole Electric Cooperative, Inc. hereby submits for electronic filing the responses to the 2025 Ten-Year Site Plan – Staff's Data Request #1.

Please contact me if you have any questions or comments.

Sincerely,

Margaret M. Janzen
Director of Energy Supply & Optimization
813-460-0037
mjanzen@seminole-electric.com

Enclosure

cc: J. Joiner
L. Johnson

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

1. Please provide an electronic copy of the Company's Ten-Year Site Plan (TYSP) for the current planning period (2025-2034) in PDF format.

2. Please provide an electronic copy of all schedules and tables in the Company's current planning period TYSP in Excel format.

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)

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).

    Not applicable

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.

    Please see Excel table Historic Peak Demand.

Forecasted Load & Demand

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.

The stations used to calculate Seminole's system-wide temperature are:

- *K40J*
- *KBKV*
- *KBOW*
- *KCTY*
- *KGNV*
- *KJAX*
- *KLEE*
- *KOCF*
- *KSFB*
- *KSGJ*
- *KSRQ*
- *KVDF*
- *KVQQ*
- *KVVG*

Please note that Seminole's system-wide temperature is used for reporting only and is not utilized in the load forecasting process, since each Member Cooperative is forecasted separately. Seminole purchases hourly weather data from AccuWeather for 25 stations in and around the Member service territory. Each Member has a unique combination of weather stations selected to create their weather statistics. The optimal set of weather stations are derived by ranking the predictive power of each station's temperature reading to estimate electricity load and then re-estimating load based on combinatory sets of stations ranked from lowest to highest mean average percentage error (MAPE). The set that achieves the lowest MAPE is chosen as the optimal combination. The analysis is conducted using generalized linear models and combinations are derived by the simple average of hourly station data. Please see 2025 Ten-Year Site Plan section 3.3.2. for additional information.

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.

a. See the Company's 2025 Ten-Year Site Plan, section 3.1 for general forecasting methodology, and sections 3.1.1, 3.1.2 and 3.1.3 for consumer, energy and demand forecast methodology, respectively.

b. See 2025 Ten-Year Site Plan, section 3.3 for forecast assumptions.

c. See 2025 Ten-Year Site Plan section 3.2 for forecast data sources.

d. See 2025 Ten-Year Site Plan section 3.1.6 for details on third party consultant involvement in producing the electric vehicle forecast.

e. On average, the forecast for the number of customers were within +/- 1%, and the forecasts for energy and peak demand were within +/- 4%. We anticipate similar accuracy for the 2025 Ten-Year Site Plan forecast.

f. See 2025 Ten-Year Site Plan, section 3.1.6 for the newly added Electric Vehicles forecast.

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.

Not applicable.

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.

   Not applicable.

   b. If your response is negative, please explain.

   Seminole updated its forecast methodology beginning in 2014 and does not compare error results of forecasts generated before that period. Seminole has developed ex-post forecast error analyses on load forecast studies since 2015. Seminole's "after-the event" evaluation of model error with observed (actual) explanatory variable data removes the error associated with long-term forecasts of weather and economy, providing valuable insight into model improvements. Seminole conducts this analysis with all available information one year after the forecast origin. In other words, we

reforecast the model with actual observed data, rather than the forecast data. This provides an indication of whether load forecast error is due to Seminole's forecasting methodology or simply due to the fact that weather and economy forecasts are never perfect. Seminole conducts this analysis on a monthly resolution, which provides a higher temporal resolution than focusing on one individual observation such as the winter or summer peak, or annual energy and customer growth. Seminole calculates the error between actual load and ex-post load forecasts for each month and the Mean Absolute Percentage Error (MAPE) across all months. MAPE is a widely-used error measure in business forecasting, including load forecasting.

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.

    Not applicable.

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

    Seminole updated its forecast methodology beginning in 2014 and does not compare error results of forecasts generated before that period. Seminole has developed ex-post forecast error analyses on load forecast studies since 2015. Seminole's "after-the event" evaluation of model error with observed (actual) explanatory variable data removes the error associated with long-term forecasts of weather and economy, providing valuable insight into model improvements. Seminole conducts this analysis with all available information one year after the forecast origin. In other words, we reforecast the model with actual observed data, rather than the forecast data. This provides an indication of whether load forecast error is due to Seminole's forecasting methodology or simply due to the fact that weather and economy forecasts are never perfect. Seminole conducts this analysis on a monthly resolution, which provides a higher temporal resolution than focusing on one individual observation such as the winter or summer peak, or annual energy. Seminole calculates the error between actual load and ex-post load forecasts for each month and the Mean Absolute Percentage Error (MAPE) across all months. MAPE is a widely used error measure in business forecasting, including load forecasting.

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.

Some of the Members are capable of reducing their peak demand using voltage reduction. See 2025 Ten-Year Site Plan Schedule 3.1 and 3.2 for the trends. Historically, the trends are increasing slowly due to additional end-use consumers served by substations with voltage reduction capabilities.

In addition, Seminole recently added a Smart Meter program to help reduce peak demands in the future.

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.

Not Applicable.

c. Total Demand, and identify the major factors that contribute to the growth/decline in the trends.

Total Demand has historically increased, largely due to end-use consumer growth along with commercial load growth.

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.

Net firm demand has historically increased, largely due to end-use consumer growth along with commercial load growth.

12. Please explain any <u>current and forecasted</u> 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.

Some of the Members are capable of reducing their peak demand using voltage reduction. See Schedule 3.1 and 3.2 for the trends. The forecasted trends are increasing slowly due to additional end-use consumers served by substations with voltage reduction capabilities.

In addition, Seminole recently added a Smart Meter program to help reduce peak demands in the future. On average, the winter peak demand will be reduced by 1.3 MW year over year, and summer peak demand will be reduced by 1.5 MW year-over-year.

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.

Not Applicable.

c. Total Demand, and identify the major factors that contribute to the growth/decline in the trends.

Total Demand is forecasted to increase, largely due to end-use consumer growth along with commercial load growth.

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.

Net firm demand is forecasted to increase largely due to member-consumer growth along with commercial load growth.

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.

Not applicable.

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.

A former Member, Lee County Electric Cooperative (LCEC), discontinued purchasing power from Seminole in 2014 and began purchasing from Florida Power and Light. The first phase of LCEC's withdrawal from the Seminole system began in 2010. The significant reduction in Seminole's load due to LCEC's departure must be considered when interpreting the results of the load forecast with respect to historical figures.

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.

       See 2025 Ten-Year Site Plan section 3.3.2 for weather-related information.

    b. Please specify the source(s) of the weather data used in the aforementioned forecasting models.

       See 2025 Ten-Year Site Plan section 3.3.2 for details on AccuWeather, the source of the weather data.

    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.

       See Ten-Year Site Plan section 3.3.2 for details on weather information.

    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.

           See Ten-Year Site Plan section 3.3.2 for weather information.

       (2) How many years' historical weather data was used in the process of these models' calibration and/or validation.

           See Ten-Year Site Plan section 3.3.2 for weather information.

    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.

       See Ten-Year Site Plan section 3.3.2 for weather information.

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.

Not applicable.

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.

See Ten-Year Site Plan section 3.1.5 for description of how Seminole accounts for customer-owned generation.

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.

Annual Solar Impact	
Year	***GWh_ac***
2025	*130*
2026	*252*
2027	*418*
2028	*653*
2029	*815*
2030	*883*
2031	*948*
2032	*1,019*
2033	*1,088*
2034	*1,168*

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.

Not applicable.

Plug-in Electric Vehicles (PEVs)

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.

Please see Excel tables. Currently, Seminole forecasts only incremental PEVs and their impact on the system.

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.

Currently, Seminole does not have a program addressing the impact of PEV specifically.

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)

Historical PEV count and load trends are accounted for in the data used to forecast the 2025 Ten-Year Site Plan; however, it is not isolated and accounted for separately in historical data. PEV's historical impact on the Seminole system is minimal at this time.

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)

See Ten-Year Site Plan section 3.1.6 for a description of how Seminole accounts for electric vehicle energy consumption and demand forecasts. Currently, Seminole does forecast for incremental PEV counts, but not PEV charging installation counts.
Overall, the PEV count trend is slowly increasing due to the penetration of PEVs in more urban areas of the Members' territory. PEV's current and forecasted impact on the Seminole system is minimal at this time.

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?

Not applicable.

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.
Not applicable.

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.

No, the Company has not conducted any research on factors influencing the adoption of PEVs.

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.

Not applicable.

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

Not applicable.

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.

Not applicable.

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.

Not applicable.

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.

Not applicable.

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.

    Please see Excel tables.

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

    Please see Excel tables.

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

    Seminole's capacity expansion plan includes the addition of a new advanced, large-frame one-on-one natural gas combined cycle unit (Shady Hills Energy Center or SHEC) located in Pasco County. The new facility has a winter capacity of 575 MW. Construction began in 2023, and it is expected to be commercially in-service in late 2026.

    At this time, with respect to the Unnamed Combined Cycle Unit and the two Unnamed Combustion Turbine Units, it has not been determined if the capacity need will be met via self-build, acquisition, and/or purchased power alternatives. The ultimate method, type, size and location (if necessary) will be determined subsequent to the completion of a request-for-proposals as part of Seminole's Integrated Resource Planning that is underway.

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?

    There were no planned utility-owned renewable resources cancelled, delayed, or reduced in scope within the past year.

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.

There were no impacts of any recent federal actions on permitting for renewable generation within the past year.

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.

    Please see Excel tables.

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.

    Please see Excel tables.

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.

    Please see Excel tables.

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.

    Please see Excel tables.

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.

    Not applicable.

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.

    Not applicable.

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.

    The Company did not plan any solar or energy storage facilities co-located with other uses. Although co-location can be beneficial, there were certain factors such as technical feasibility, grid integration challenges, and long-term reliability considerations, which led Seminole to explore other options to satisfy its operational needs.

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.

    Please see Excel tables.

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.

    Please see Excel tables.

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.

    a. 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.

       Please see Excel tables.

    b. 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.

       Please see Excel tables.

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

Not applicable.

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?

There were no planned long-term power purchase agreements that have been cancelled, delayed, or reduced in scope within the past year.

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.

    Please see Excel tables.

    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.

    Please see Excel tables.

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

Not applicable.

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?

There were no long-term power sale agreements cancelled, expired, or modified within the past year.

Renewable Generation

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.

Please see Excel tables.

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

The Company does not have specific programs regarding renewable energy within its service territory.

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.

    The Company does not have specific programs regarding the funding of renewable energy.

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.

Seminole has no battery installations installed.

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.

Not applicable.

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).

Not applicable.

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.

Not applicable.

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.

Please see Excel tables.

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.

Please see Excel tables.

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.

Seminole began investigating storage technologies but does not yet have any energy storage technology pilot programs on its system.

a. 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.

Not applicable.

b. Please provide a brief assessment of how these benefits, risks, and operational limitations may change over the current planning period.

Not applicable.

c. Please identify and describe any plans to periodically update the Commission on the status of your energy storage pilot programs.

Not applicable.

<u>Reliability</u>

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.

Please see Excel tables.

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.

The seasonal firm capacity contribution of Seminole's solar facilities was determined based upon industry knowledge, experience and long-range, hourly forecasts of solar energy production for its solar facilities. Seminole recognizes that its winter and summer peak demand periods are not concurrent with expected peak sun hours. For the winter season, 0% of Seminole's total installed solar capacity is included as firm capacity in the calculation of its reserve margin, as the peak hour is expected to occur in the morning at a time when there is little to no sunlight. For the summer season, 40% of Seminole's total installed solar capacity is included as firm capacity in the calculation of its reserve margin, as the peak hour is expected to occur in the evening while solar energy production is in decline. The contract term for Seminole's four FRP solar sites began in December 2024 and using data from this short period, there is a slight shift in the peak hour demand, net of solar generation, from the output of these facilities. Seminole continues to evaluate actual operation of its solar sites as we move into the summer months and may revise the firm capacity contribution values in the future based upon operational experience.

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.

Not applicable.

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.

Seminole utilizes solar generation sources in its system portfolio; however, only a portion of the total installed capacity is considered in the calculation of its reserve margins, as noted in the response to Question #59. Seminole does not currently use energy storage technologies to provide firm capacity from its solar generation sources but is considering it.

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.

Seminole does not have operational experience with energy storage technologies.

Environmental

62. Please explain if the Company assumes carbon dioxide (CO_2) 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:

Seminole does not currently assume CO_2 compliance costs in the resource planning process used to generate the resource plan presented in the current planning period TYSP.

a. Please identify the year during the current planning period in which CO2 compliance costs are first assumed to have a non-zero value.

Not applicable.

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.

Not applicable.

c. **[Investor-Owned Utilities Only]** Please provide a revised resource plan assuming no CO2 compliance costs.

Not applicable.

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.

In 2024, Seminole operated in accordance with required regulatory permits and did not experience any material curtailments in operations as a result of existing environmental regulations. Within the planning period (2029-2032), the continuing operability and availability of Seminole Generating Station Unit 2 (SGS-2) could potentially be negatively impacted by wastewater limitations (ELGs) and greenhouse gas emission standards (111d-GHGs) finalized by EPA in 2024. However, the Trump Administration has signaled its intent to repeal and/or replace both sets of rules well in advance of initial compliance dates.

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?

Seminole's newest combined cycle facility (SCCF) along with the combined cycle facility under construction (SHEC) are subject to, and compliant with, Clean Air Act 111(b) standards finalized in 2015. Accordingly, unless and/or until new generating

facilities are planned, Seminole is not materially affected by revised 111(b) rules finalized in 2024. Of note, the Trump Administration has signaled its intent to repeal and/or replace the 2024 rules.

b. What compliance strategy does the Company anticipate employing for the rule?

Not applicable

c. If the strategy has not been completed, what is the Company's timeline for completing the compliance strategy?

Not applicable

d. Will there be any regulatory approvals needed for implementing this compliance strategy? How will this affect the timeline?

Not applicable

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.

Not applicable

f. If the answer to any of the above questions is not available, please explain why.

Not applicable

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.

Reliability impacts are not expected due to the most recent MATS Rule (2024).

b. Cross-State Air Pollution Rule (CSAPR).

As of compliance year 2017, Florida sources are not subject to CSAPR.

c. Cooling Water Intake Structures (CWIS) Rule.

Reliability impacts are not expected from the CWIS Rule.

d. Coal Combustion Residuals (CCR) Rule.

Reliability impacts are not expected from the CCR Rule (2015) nor the CCRMU Rule (2024).

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

Reliability impacts are not expected due to the most recent 111b Rules. (See #64 Response)

f. Affordable Clean Energy Rule or its replacement.

Future reliability impacts are undetermined with respect to the most recent 111d Rules, but not expected pursuant to the announced intentions of the current EPA. (See #63 Response)

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

Future reliability impacts are undetermined with respect to the most recent ELG Rules, but not expected pursuant to the announced intentions of the current EPA. (See #63 Response)

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.

Please see Excel tables.

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.

Please see Excel tables.

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.

Please see Excel tables.

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.

Not applicable.

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.

Please see Excel tables.

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.

Please see Excel tables.

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

Seminole utilizes recognized, authoritative independent third-party commodity price forecasts and/or NYMEX natural gas and oil commodity prices as a starting point for projecting the delivered price of fuel to its generating resources. Seminole also utilizes authoritative independent third-party forecasts for escalation or economic market indices to adjust future prices of fuel related service costs, such as transportation or contractual fuel price adjustments. Forecasts are then adjusted to include known and measurable conditions from Seminole's long-term fuel supply, storage, and transportation agreements.

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).

Seminole does not have any significant changes to what was presented in Sections 5.3 and 5.4 of its 2025 Ten-Year Site Plan.

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.

Please see table below. Prices are in $/MMBtu.

	2024 Forecast	2024 Actual	Delta
Natural Gas	$4.54	$4.25	-$0.29
Coal	$3.64	$3.95	$0.31
Distillate Oil	$31.49	$21.08	-$10.41

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.

There were no notable changes in the forecast of fuel prices used in the current TYSP compared to the prior TYSP.

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

Seminole maintains a diverse portfolio of active, industry standard natural gas contracts (GISB/NAESB) with approximately 50 suppliers, marketers and other Florida utilities that provide natural gas commodity and/or may have available transportation capacity for resale. Seminole maintains a balanced portfolio of long-term (1 to 10 years) natural gas supply arrangements for a portion of its projected baseload requirements and relies on shorter-term transactions to obtain the remaining requirements. Seminole has contracted for an aggregate amount of approximately 74,000 dth/day of onshore, upstream pipeline capacity on Transco's Mobile Bay South Lateral, Sabal Trail Transmission, and Southeast Supply Header to interconnects with the Florida Gas Transmission ("FGT") and/or Gulfstream Natural Gas System ("Gulfstream") interstate pipelines that ultimately serve Seminole's generation facilities. Seminole currently has agreements for 253,000 dth/day of firm natural gas transportation capacity that supply Seminole's generation facilities. Seminole also contracts for firm gas storage service to provide for year-round storage capacity for 750,000 dth to supplement its supply purchases during periods of scarcity.

For natural gas transportation, aside from those mentioned above, Seminole holds various contracts for interruptible transportation capacity on both FGT and Gulfstream pipelines, as well as interruptible transportation service.

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.

    Not applicable.

b. Excel Tables File (Planned Data Centers), including for data centers that are planned during the current planning period.

Not applicable.

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)?
    a. 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.

    There are two data centers included in the load forecast utilized in the 2025 Ten-Year Site Plan. They are projected to come online in 2029 and 2030 and are projected to ramp up to a combined total of about 237 MW of additional demand by 2034 with an estimated 2,076 GWH of annual energy impact.

    b. 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?

    Not applicable.

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.

    There has been increasing interest by data centers and developers in several Member service territories. Due to the rapid ramp rate and substantial energy needs of data centers, and the relatively new business model in Florida, there is concern about meeting these needs in a timely and risk-mitigated manner. As such, Seminole has taken the following actions: first, Seminole has begun issuing quarterly surveys with each Member to identify potential new large loads. This quarterly check-in allows for more frequent and up-to-date line-of-sight of future load needs. Additionally, Seminole has implemented a Large Load intake process that requires large load, such as data centers, that are ready to formally request new service, to provide study deposits, project details and specifications, and financial guarantees to enable the securing of resources needed at the earliest, most affordable and risk mitigated manner to insulate Members from potential stranded cost and reliability impacts. These steps enable Seminole to make informed decisions and timely investments to meet future demand.

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.

Not applicable.

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

Seminole does not employ artificial intelligence in its operation, customer service, cybersecurity management, or in the creation of the load forecast utilized for the 2025 Ten-Year Site Plan. Seminole is currently assessing its enterprise-wide artificial intelligence policy associated with approved usage.

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.

The Company is in the early planning stages for a Hybrid Solar/Battery Energy Storage System (BESS) plant.

TYSP Year 2025

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Financial Assumptions			
Base Case			
AFUDC Rate		(%)	4.56
Capitalization Ratios	Debt	(%)	N/A
	Preferred	(%)	N/A
	Equity	(%)	N/A
Rate of Return	Debt	(%)	N/A
	Preferred	(%)	N/A
	Equity	(%)	N/A
Income Tax rate	State	(%)	N/A
	Federal	(%)	N/A
	Effective	(%)	N/A
Other Tax Rate:		(%)	N/A
Discount Rate:		(%)	N/A
Tax - Depreciation Rate:		(%)	N/A

Financial Escalation Assumptions				
Year	General Inflation (%)	Plant Construction Cost (%)	Fixed O&M Cost (%)	Variable O&M Cost (%)
2025	2.413%	2.413%	2.413%	2.413%
2026	2.334%	2.334%	2.334%	2.334%
2027	2.219%	2.219%	2.219%	2.219%
2028	2.196%	2.196%	2.196%	2.196%
2029	2.203%	2.203%	2.203%	2.203%
2030	2.189%	2.189%	2.189%	2.189%
2031	2.161%	2.161%	2.161%	2.161%
2032	2.124%	2.124%	2.124%	2.124%
2033	2.141%	2.141%	2.141%	2.141%
2034	2.200%	2.200%	2.200%	2.200%

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
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12/31/2024																									

TYSP Year 2025
Question No. 5

Year	Month	Actual Peak Demand	Demand Response Activated	Estimated Peak Demand	Day	Hour	System-Average Temperature
		(MW)	(MW)	(MW)			(Degrees F)
2024	1	3415	71	3486	21	9	38
	2	2842	72	2914	20	8	42
	3	2493	70	2563	15	18	82
	4	2967	66	3033	19	18	85
	5	3633	79	3712	27	18	91
	6	3787	86	3873	9	18	93
	7	3671	75	3746	8	15	90
	8	3693	73	3766	8	18	90
	9	3515	70	3585	1	17	88
	10	3217	66	3283	4	17	86
	11	2681	55	2736	11	16	82
	12	3350	68	3418	4	8	37
2023	1	3503	73	3576	15	9	39
	2	2413	67	2480	24	17	83
	3	2860	74	2934	26	18	85
	4	2944	66	3010	4	18	86
	5	3132	70	3202	20	17	87
	6	3582	83	3665	27	18	91
	7	3723	75	3798	21	18	94
	8	3945	78	4023	13	17	94
	9	3464	69	3533	6	18	90
	10	2959	60	3019	5	17	87
	11	2788	56	2844	29	8	41
	12	2651	61	2712	31	9	48
2022	1	3915	67	3982	30	8	29
	2	3060	68	3128	10	8	39
	3	2487	62	2549	13	10	42
	4	2734	55	2789	26	18	83
	5	3278	64	3342	30	17	88
	6	3648	75	3723	23	17	95
	7	3584	64	3648	31	18	92
	8	3522	61	3583	2	17	91
	9	3406	60	3466	6	17	91
	10	2734	48	2782	16	17	86
	11	2656	46	2702	1	17	86
	12	3886	70	3956	25	9	31

Notes

(Include Notes Here)

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	944	N/A	N/A	1	0	22
2026	1,406	N/A	N/A	1	0	39
2027	1,876	N/A	N/A	1	0	55
2028	2,337	N/A	N/A	2	0	70
2029	2,797	N/A	N/A	2	0	85
2030	3,275	N/A	N/A	2	0	100
2031	3,830	N/A	N/A	2	0	116
2032	4,407	N/A	N/A	2	0	134
2033	5,005	N/A	N/A	2	0	154
2034	5,647	N/A	N/A	3	0	175
Notes						
Currently, Seminole forecasts only incremental PEV and their impact on the system.						

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	N/A								
2016									
2017									
2018									
2019									
2020									
2021									
2022									
2023									
2024									
Notes									
(Include Notes Here)									

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	N/A														
2016															
2017															
2018															
2019															
2020															
2021															
2022															
2023															
2024															
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
MIDULLA GENERATING STATION	4	HARDEE	GT	NG	12	2006	54	62	54	62	54	62
MIDULLA GENERATING STATION	5	HARDEE	GT	NG	12	2006	54	62	54	62	54	62
MIDULLA GENERATING STATION	6	HARDEE	GT	NG	12	2006	54	62	54	62	54	62
MIDULLA GENERATING STATION	7	HARDEE	GT	NG	12	2006	54	62	54	62	54	62
MIDULLA GENERATING STATION	8	HARDEE	GT	NG	12	2006	27	31	27	31	27	31
MIDULLA GENERATING STATION	CT1	HARDEE	CT	NG	1	2002	171	208	169	206	169	206
MIDULLA GENERATING STATION	CT2	HARDEE	CT	NG	1	2002	171	208	169	206	169	206
MIDULLA GENERATING STATION	ST	HARDEE	CA	WH	1	2002	188	190	186	188	186	188
SEMINOLE GENERATING STATION	2	PUTNAM	ST	BIT	12	1984	680	688	634	640	634	640
SEMINOLE CC FACILITY	CTG1	PUTNAM	CT	NG	4	2023	359	373	353	367	353	367
SEMINOLE CC FACILITY	CTG2	PUTNAM	CT	NG	4	2023	361	375	355	369	355	369
SEMINOLE CC FACILITY	STG3	PUTNAM	CA	WH	4	2023	401	389	394	382	394	382
MGS SOLAR	1	HARDEE	PV	SUN	8	2017	0.9	0	0.9	0	0.9	0
SHADY HILLS POWER COMPANY	1	PASCO	CT	NG	1	2002	164	176	163	175	163	*175
SHADY HILLS POWER COMPANY	2	PASCO	CT	NG	1	2002	164	176	163	175	163	*175
SHADY HILLS POWER COMPANY	3	PASCO	CT	NG	1	2002	164	176	163	175	163	*175
Notes												
* The total firm capacity for Shady Hills CT 1-3 is 0 MW in Winters 2025-2026 & 2026-2027 to reflect current transmission limitations.												

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
SHADY HILLS ENERGY CENTER	1	Pasco	CC	NG	12	2026	546	575	546	575	546	575
UNNAMED CT	1	UNKNOWN	CT	NG	12	2028	393.2	453	393.2	453	393.2	453
UNNAMED CT	2	UNKNOWN	CT	NG	12	2030	393.2	453	393.2	453	393.2	453
UNNAMED CC	1	UNKNOWN	CC	NG	12	2032	559.4	619.6	559.4	619.6	559.4	619.6
Notes												
(Include Notes Here)												

TYSP Year 2025
Question No. 33

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Certification Dates (if Applicable)	
							Need (Commission)	PPSA Certified
					Mo	Yr		
SHADY HILLS ENERGY CENTER	1	Pasco	CC	NG	12	2026	5/8/2018	12/3/2018
Unnamed CT	1	NA	CT	NG	12	2028	N/A	N/A
Unnamed CT	2	NA	CT	NG	12	2030	N/A	N/A
Unnamed CC	1	NA	CC	NG	12	2032	N/A	N/A
Notes								
(Include Notes Here)								

TYSP Year 2025
Question No. 34

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Final Decision ('Drop Dead') Date	Site Selection		Engineering / Permitting / Procurement		Construction		Commercial In-Service Date
						Begins	Ends	Begins	Ends	Begins	Ends	
Unnamed CT	1	NA	CT	NG	*	*	Dec-27	*	Dec-27	Dec-27	Dec-28	Dec-28
Unnamed CT	2	NA	CT	NG	*	*	Dec-29	*	Dec-29	Dec-29	Dec-30	Dec-30
Unnamed CC	1	NA	CC	NG	*	*	Dec-29	*	Dec-29	Dec-29	Dec-32	Dec-32
Notes												
* Seminole is currently analyzing an Integrated Resource Plan; thus, these projects and dates are subject to change depending upon those results. Also, the Company is monitoring supply chain constraints that could have an impact on in-service dates.												

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
MIDULLA GENERATING STATION	4	HARDEE	GT	NG	12	2006	5.52%	1.18%	0.55%	5.00%	89.43%	93.82%	11,547.33	11,464.25
MIDULLA GENERATING STATION	5	HARDEE	GT	NG	12	2006	3.62%	1.18%	0.54%	5.00%	90.02%	93.82%	11,547.33	11,464.25
MIDULLA GENERATING STATION	6	HARDEE	GT	NG	12	2006	3.94%	1.18%	0.78%	5.00%	82.44%	93.82%	11,547.33	11,464.25
MIDULLA GENERATING STATION	7	HARDEE	GT	NG	12	2006	3.80%	1.18%	4.35%	5.00%	63.64%	93.82%	11,547.33	11,464.25
MIDULLA GENERATING STATION	8	HARDEE	GT	NG	12	2006	3.50%	1.18%	0.44%	5.00%	83.77%	93.82%	11,547.33	11,464.25
MIDULLA GENERATING STATION	CT1	HARDEE	CT	NG	1	2002	14.15%	4.93%	7.62%	0.10%	77.68%	94.97%	7,089.00	7,207.31
MIDULLA GENERATING STATION	CT2	HARDEE	CT	NG	1	2002	12.67%	4.11%	9.36%	0.40%	77.35%	95.49%	7,089.00	7,069.97
MIDULLA GENERATING STATION	ST	HARDEE	CA	WH	1	2002	12.67%	4.93%	9.36%	0.10%	77.35%	94.97%	7,089.00	7,138.64
SEMINOLE GENERATING STATION	2	PUTNAM	ST	BIT	12	1984	15.26%	11.42%	3.11%	4.00%	81.63%	84.58%	10,533.67	10,129.38
SEMINOLE CC FACILITY	CTG1	PUTNAM	CT	NG	4	2023	9.01%	4.13%	0.65%	0.00%	90.14%	95.87%	6,327.50	6,430.50
SEMINOLE CC FACILITY	CTG2	PUTNAM	CT	NG	4	2023	8.93%	7.42%	0.25%	2.50%	90.57%	90.08%	6,327.50	6,284.05
SEMINOLE CC FACILITY	STG3	PUTNAM	CA	WH	4	2023	6.01%	4.13%	0.15%	0.00%	89.99%	95.87%	6,327.50	6,357.27
MGS SOLAR	1	HARDEE	PV	SUN	8	2017	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SHADY HILLS POWER COMPANY	1	PASCO	CT	NG	1	2002	4.50%	0.90%	0.04%	3.00%	92.93%	96.10%	9,763.00	10,729.46
SHADY HILLS POWER COMPANY	2	PASCO	CT	NG	1	2002	4.44%	0.90%	0.01%	3.00%	95.35%	96.10%	9,627.00	10,754.25
SHADY HILLS POWER COMPANY	3	PASCO	CT	NG	1	2002	4.08%	0.90%	0.07%	3.00%	95.64%	96.10%	8,337.00	10,709.17
Shady Hills Energy Center	1	Pasco	CC	NG	12	2026	N/A	3.72%	N/A	3.00%	N/A	93.28%	N/A	6,429.75
UNNAMED CC	1	N/A	CC	NG	12	2032	N/A	4.49%	N/A	2.70%	N/A	92.81%	N/A	6,637.90

UNNAMED CT	1	N/A	CT	NG	12	2028	N/A	0.00%	N/A	6.70%	N/A	93.30%	N/A	9,186.24
UNNAMED CT	2	N/A	CT	NG	12	2030	N/A	0.00%	N/A	6.70%	N/A	93.30%	N/A	9,104.13
Notes														
(Include Notes Here)														

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
MIDULLA GENERATING STATION	4	HARDEE	GT	NG	12	2006	0.03%	0.09%	0.23%	0.26%	0.09%	0.02%	0.10%	0.01%	0.00%	0.02%	0.04%
MIDULLA GENERATING STATION	5	HARDEE	GT	NG	12	2006	0.02%	0.00%	0.00%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.01%	0.00%
MIDULLA GENERATING STATION	6	HARDEE	GT	NG	12	2006	0.03%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MIDULLA GENERATING STATION	7	HARDEE	GT	NG	12	2006	0.05%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MIDULLA GENERATING STATION	8	HARDEE	GT	NG	12	2006	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
MIDULLA GENERATING STATION	CT1	HARDEE	CT	NG	1	2002	57.42%	69.81%	61.08%	44.04%	48.46%	57.51%	66.28%	65.45%	65.84%	64.98%	66.62%
MIDULLA GENERATING STATION	CT2	HARDEE	CT	NG	1	2002	57.42%	69.81%	61.08%	44.04%	48.46%	57.51%	66.28%	65.45%	65.84%	64.98%	66.62%
MIDULLA GENERATING STATION	ST	HARDEE	CA	WH	1	2002	57.42%	69.81%	61.08%	44.04%	48.46%	57.51%	66.28%	65.45%	65.84%	64.98%	66.62%
SEMINOLE GENERATING STATION	2	PUTNAM	ST	BIT	12	1984	40.61%	45.17%	61.09%	47.29%	46.34%	48.83%	49.11%	49.06%	48.45%	32.20%	35.40%
SEMINOLE CC FACILITY	CTG1	PUTNAM	CT	NG	4	2023	86.39%	82.29%	83.63%	82.16%	83.15%	78.23%	79.06%	84.58%	80.49%	86.45%	81.48%
SEMINOLE CC FACILITY	CTG2	PUTNAM	CT	NG	4	2023	86.81%	82.29%	83.63%	82.16%	83.15%	78.23%	79.06%	84.58%	80.49%	86.45%	81.48%
SEMINOLE CC FACILITY	STG3	PUTNAM	CA	WH	4	2023	84.00%	82.29%	83.63%	82.16%	83.15%	78.23%	79.06%	84.58%	80.49%	86.45%	81.48%
MGS SOLAR	1	HARDEE	PV	SUN	8	2017	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
SHADY HILLS ENERGY CENTER	1	Pasco	CC	NG	12	2026	N/A	N/A	85.30%	75.90%	75.92%	78.17%	76.02%	77.53%	78.26%	79.03%	81.24%
SHADY HILLS POWER COMPANY	1	PASCO	CT	NG	1	2002	9.46%	1.70%	0.85%	0.32%	1.24%	0.27%	1.18%	0.47%	0.40%	0.68%	1.13%
SHADY HILLS POWER COMPANY	2	PASCO	CT	NG	1	2002	8.41%	4.60%	2.82%	0.39%	3.80%	1.35%	2.36%	1.15%	1.41%	1.65%	3.00%
SHADY HILLS POWER COMPANY	3	PASCO	CT	NG	1	2002	8.05%	0.64%	0.13%	0.10%	0.55%	0.11%	0.35%	0.09%	0.07%	0.14%	1.12%

UNNAMED CC	1	N/A	CC	NG	12	2032	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	54.13%	60.97%	60.07%
UNNAMED CT	1	N/A	CT	NG	12	2028	N/A	N/A	N/A	N/A	0.00%	18.02%	21.28%	25.85%	30.38%	22.47%	29.57%
UNNAMED CT	2	N/A	CT	NG	12	2030	N/A	N/A	N/A	N/A	N/A	N/A	3.42%	11.23%	15.13%	9.70%	15.21%

Notes

(Include Notes Here)

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					
			(Fixed/Tracking)		Mo	Yr	Sum	Win	Sum	Win	(Acres)	Order	Approval Date	
N/A														
Notes														
(Include Notes Here)														

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)	
N/A											
Notes											
(Include Notes Here)											

TYSP Year 2025
Question No. 41

Transmission Line	Line Length	Nominal Voltage	Certification Dates		In-Service Date
	(Miles)	(kV)	Need Approved	TLSA Certified	
N/A					
Notes					
(Include Notes Here)					

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
Hardee Power Partners	9/30/2014	220.18	220.18	01/13	12/32	Hardee	CC1	Hardee	CC	NG	1	1993	222	269	220	267	220	267
Hardee Power Partners	9/30/2014	70.87	70.87	01/13	12/32	Hardee	CT 2A	Hardee	CT	NG	1	1993	71	90	70	89	70	62*
Hardee Power Partners	9/30/2014	70.87	70.87	01/13	12/32	Hardee	CT 2B	Hardee	CT	NG	5	2000	71	90	70	89	70	62*
Oleander Power Project	12/20/2023	169.8	169.8	01/22	12/27	Oleander CT	2	Brevard	CT	NG	6	2002	153	182	153	182	153	182
Oleander Power Project	12/20/2023	169.8	169.8	01/22	12/27	Oleander CT	3	Brevard	CT	NG	7	2002	153	182	153	182	153	182
Oleander Power Project	3/1/2021	169.8	169.8	01/23	12/24	Oleander CT	4	Brevard	CT	NG	8	2002	154	183	153	182	169.8	169.8
Hillsborough County, Florida	6/5/2013	38	38	03/10	02/25	Hillsborough WTE	1	Hillsborough	ST	MSW	4	1987	38	38	38	38	38	38
City of Tampa, Florida	3/31/2012	20	20	08/11	07/26	McKay Bay WTE	1	Hillsborough	ST	MSW	6	1985	20	20	20	20	20	20
FRP GILCHRIST COUNTY SOLAR, LLC	10/19/2023	29.8	0	12/24	12/49	Gilchrist	1	Gilchrist	PV	SUN	11	2024	74.5	74.5	74.5	74.5	29.8	0
FRP TUPELO SOLAR, LLC	10/19/2023	29.8	0	12/24	12/49	Tupelo	1	Putnam	PV	SUN	11	2024	74.5	74.5	74.5	74.5	29.8	0
FRP GADSDEN COUNTY SOLAR, LLC	10/19/2023	29.8	0	12/24	12/49	Gadsden	1	Gadsden	PV	SUN	11	2024	74.5	74.5	74.5	74.5	29.8	0
FRP COLUMBIA COUNTY SOLAR, LLC	10/19/2023	29.8	0	12/24	12/49	Columbia	1	Columbia	PV	SUN	11	2024	74.5	74.5	74.5	74.5	29.8	0

Notes

* The firm capacity for Hardee CT 2A and CT 2B have been reduced by 27 MW in Winter to reflect current transmission limitations.
- System product purchases are not included in the table above, but can be provided at the PSC's request.

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 (MW)		Delivery Dates									Gross		Net		Firm	
		Sum	Win	Start	End						Mo	Yr	Sum	Win	Sum	Win	Sum	Win
N/A																		
Notes																		
(Include Notes Here)																		

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
Tampa Electric Company*	11/27/2024	0	200	12/1/2024	2/28/2025	Shady Hills Power Company	N/A	Pasco	CT	NG	1	2002	164	176	163	175	163	175
Notes																		
Sale of firm capacity was made on contingent on the Shady Hills Power Company facility which includes three (3) combustion turbines. The unit capacities listed represent one (1) combustion turbine.																		

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	(Acres)
The Energy Authority	12/20/2024	0	100	1/1/2025	2/28/2025	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	N/A
Notes																			
(Include Notes Here)																			

TYSP Year 2025
Question No. 48

Renewable Source	Annual Renewable Generation (GWh)										
	Actual	Projected									
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
Utility - Firm	0	0	0	0	0	0	0	0	0	0	0
Utility - Non-Firm	2	3	3	3	3	3	3	3	3	3	3
Utility - Co-Firing	0	0	0	0	0	0	0	0	0	0	0
Purchase - Firm	263	159	78	0	0	0	0	0	0	0	0
Purchase - Non-Firm	120	733	729	725	724	718	714	711	709	704	700
Purchase - Co-Firing	0	0	0	0	0	0	0	0	0	0	0
Customer - Owned	34	130	252	418	653	815	883	948	1019	1088	1168
Total	419	1025	1062	1146	1380	1536	1600	1662	1731	1795	1871
Notes											
For “customer – owned” currently, Seminole forecasts only incremental Solar Generation and its impact on the system.											

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 Efficency
								Gross		Net		Firm			
					(Acres)	Mo	Yr	Sum	Win	Sum	Win	Sum	Win	(MWh)	(MWh)
N/A															
Notes															
(Include Notes Here)															

TYSP Year 2025
Question No. 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 Efficency
								Gross		Net		Firm			
					(Acres)	Mo	Yr	Sum	Win	Sum	Win	Sum	Win	(MWh)	(MWh)
N/A															
Notes															
(Include Notes Here)															

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	0.012	21%	0	0.012	21%	0
2026	0.017	21%	3550	0.017	21%	3550
2027	0.005	21%	0	0.005	21%	0
2028	0.002	20%	0	0.002	20%	0
2029	0.004	22%	0	0.004	22%	0
2030	0.004	20%	0	0.004	20%	0
2031	0.004	20%	0	0.004	20%	0
2032	0.004	20%	0	0.004	20%	0
2033	0.019	20%	0	0.019	20%	0
2034	0.026	20%	0	0.026	20%	0

TYSP Year 2025
Question No. 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	N/A											
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												

Peak Winter Day Hourly Dispatch (MW)												
Hour	Customer Oriented		Power Transactions		Energy Storage		Generation Resources					
	Total Load	Demand Response	Sales	Purchases	Charging	Discharging	Nuclear	Natural Gas	Coal	Oil	Other	Solar
1	N/A											
2												
3												
4												
5												
6												
7												

8												
9												
10												
11												
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24												

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	Not Applicable			
2026				
2027				
2028				
2029				
2030				
2031				
2032				
2033				
2034				
Notes				
(Include Notes Here)				

TYSP Year 2025
Question No. 66

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Capacity (MW) Net		Estimated EPA Rule Impacts: Operational Effects						
														CCR	
					Mo	Yr	Sum	Win	ELGS	ACE or replacement	MATS	CSAPR/ CAIR	CWIS	Non-Hazardous Waste	Special Waste
SGS	2	Putnam	Wall Fired Boiler	Coal	12	1984	634	640	Potential 2029 (See Notes)	Potential 2032 (See Notes)	Expected as Minimal 2027 (See Notes)	N/A	None	None	None
SCCF	CT1	Putnam	Combuston Turbine (Combined Cycle)	Natural Gas	4	2023	549.5	558.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SCCF	CT2	Putnam	Combuston Turbine (Combined Cycle)	Natrual Gas	4	2023	549.5	558.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MGS	1	Hardee	Combuston Turbine (Combined Cycle)	Natural Gas / Distillate Oil	1	2002	262	300	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MGS	2	Hardee	Combuston Turbine (Combined Cycle)	Natural Gas / Distillate Oil	1	2002	262	300	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MGS	4 A&B	Hardee	Combuston Turbines (Simple Cycle)	Natural Gas / Distillate Oil	12	2006	54	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MGS	5 A&B	Hardee	Combuston Turbines (Simple Cycle)	Natural Gas / Distillate Oil	12	2006	54	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MGS	6 A&B	Hardee	Combuston Turbines (Simple Cycle)	Natural Gas / Distillate Oil	12	2006	54	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MGS	7 A&B	Hardee	Combuston Turbines (Simple Cycle)	Natural Gas / Distillate Oil	12	2006	54	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MGS	8B	Hardee	Combuston Turbine (Simple Cycle)	Natural Gas / Distillate Oil	12	2006	27	31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SHADY HILLS POWER COMPANY	1	Pasco	Combuston Turbine (Simple Cycle)	Natural Gas / Distillate Oil	1	2002	163	175	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SHADY HILLS POWER COMPANY	2	Pasco	Combuston Turbine (Simple Cycle)	Natural Gas / Distillate Oil	1	2002	163	175	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SHADY HILLS POWER COMPANY	3	Pasco	Combuston Turbine (Simple Cycle)	Natural Gas / Distillate Oil	1	2002	163	175	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Notes															
ELG, 111(d) GHG, and MATS Rules of 2024 are all expected to be repealed and/or replacd in advance of listed potential operational effects. Full scope of potential effects for ELG and 111(d) GHG have not been assessed by Seminole at this time. Effects of MATS Rule expected to be minimal.															

TYSP Year 2025
Question No. 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
SGS	2	Putnam	Wall Fired Boiler	Coal	12	1984	634	640	Potential 2029 (See Notes)	Potential 2032 (See Notes)	Potential 2027 (See Notes)	N/A	None	Potential Date TBD (See Notes)	None
SCCF	CT1	Putnam	Combuston Turbine (Combined	Natural Gas	4	2023	549.5	558.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SCCF	CT2	Putnam	Combuston Turbine (Combined	Natrual Gas	4	2023	549.5	558.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MGS	1	Hardee	Combuston Turbine (Combined	Natural Gas / Distillate Oil	1	2002	262	300	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MGS	2	Hardee	Combuston Turbine (Combined	Natural Gas / Distillate Oil	1	2002	262	300	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MGS	4 A&B	Hardee	Combuston Turbines (Simple Cycle)	Natural Gas / Distillate Oil	12	2006	54	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MGS	5 A&B	Hardee	Combuston Turbines (Simple Cycle)	Natural Gas / Distillate Oil	12	2006	54	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MGS	6 A&B	Hardee	Combuston Turbines (Simple Cycle)	Natural Gas / Distillate Oil	12	2006	54	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MGS	7 A&B	Hardee	Combuston Turbines (Simple Cycle)	Natural Gas / Distillate Oil	12	2006	54	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MGS	8B	Hardee	Combuston Turbine (Simple Cycle)	Natural Gas / Distillate Oil	12	2006	27	31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SHADY HILLS POWER COMPANY	1	Pasco	Combuston Turbine (Simple Cycle)	Natural Gas / Distillate Oil	1	2002	163	175	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SHADY HILLS POWER COMPANY	2	Pasco	Combuston Turbine (Simple Cycle)	Natural Gas / Distillate Oil	1	2002	163	175	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SHADY HILLS POWER COMPANY	3	Pasco	Combuston Turbine (Simple Cycle)	Natural Gas / Distillate Oil	1	2002	163	175	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Notes															

ELG, 111(d) GHG, MATS, and CCRMU Rules of 2024 are all expected to be repealed and/or replacd in advance of listed potential cost impacts. Full scope of costs for ELG, 111(d) GHG, and CCRMU have not been assessed by Seminole at this time. Cost of MATS Rule expected to be minimal.

TYSP Year 2025
Question No. 68

Facility Name	Unit No.	County Location	Unit Type	Primary Fuel	Commercial In-Service		Unit Capacity (MW) Net		Estimated EPA Rule Impacts: Unit Availability						
														CCR	
					Mo	Yr	Sum	Win	ELGS	ACE or replacement	MATS	CSAPR/ CAIR	CWIS	Non-Hazardous Waste	Special Waste
SGS	2	Putnam	Wall Fired Boiler	Coal	12	1984	634	640	Potential 2029 (See Notes)	Potential 2032 (See Notes)	Operability Impacts Not Expected	N/A	None	Operability Impacts Not Expected	None
SCCF	CT1	Putnam	Combuston Turbine (Combined Cycle)	Natural Gas	4	2023	549.5	558.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SCCF	CT2	Putnam	Combuston Turbine (Combined Cycle)	Natrual Gas	4	2023	549.5	558.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MGS	1	Hardee	Combuston Turbine (Combined Cycle)	Natural Gas / Distillate Oil	1	2002	262	300	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MGS	2	Hardee	Combuston Turbine (Combined Cycle)	Natural Gas / Distillate Oil	1	2002	262	300	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MGS	4 A&B	Hardee	Combuston Turbines (Simple Cycle)	Natural Gas / Distillate Oil	12	2006	54	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MGS	5 A&B	Hardee	Combuston Turbines (Simple Cycle)	Natural Gas / Distillate Oil	12	2006	54	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MGS	6 A&B	Hardee	Combuston Turbines (Simple Cycle)	Natural Gas / Distillate Oil	12	2006	54	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MGS	7 A&B	Hardee	Combuston Turbines (Simple Cycle)	Natural Gas / Distillate Oil	12	2006	54	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MGS	8B	Hardee	Combuston Turbine (Simple Cycle)	Natural Gas / Distillate Oil	12	2006	27	31	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SHADY HILLS POWER COMPANY	1	Pasco	Combuston Turbine (Simple Cycle)	Natural Gas / Distillate Oil	1	2002	163	175	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SHADY HILLS POWER COMPANY	2	Pasco	Combuston Turbine (Simple Cycle)	Natural Gas / Distillate Oil	1	2002	163	175	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SHADY HILLS POWER COMPANY	3	Pasco	Combuston Turbine (Simple Cycle)	Natural Gas / Distillate Oil	1	2002	163	175	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Notes															
ELG, 111(d) GHG, MATS, and CCRMU Rules of 2024 are all expected to be repealed and/or replacd in advance of listed potential availability impacts. Full scope of impacts for ELG and 111(d) GHG, Rules have not been assessed by Seminole at															

TYSP Year 2025
Question No. 70

Year		Firm Purchase Rates		Non-Firm Purchase Rates		As-Available Energy Rates		
		Annual Average ($/MWh)	Escalation Rate (%)	Annual Average ($/MWh)	Escalation Rate (%)	Annual Average ($/MWh)	On-Peak Average ($/MWh)	Off-Peak Average ($/MWh)
Actual	2015	93.89	N/A	30.96	N/A	37.56	40.36	31.78
	2016	86.69	-8%	38.55	25%	34.37	34.86	33.38
	2017	85.50	-1%	38.22	-1%	29.59	31.52	25.73
	2018	93.73	10%	38.69	1%	33.28	35.20	29.44
	2019	84.10	-10%	32.20	-17%	28.43	29.91	25.46
	2020	73.25	-13%	22.90	-29%	24.46	25.39	22.59
	2021	82.22	12%	34.64	51%	38.56	42.36	30.95
	2022	94.63	15%	80.21	132%	76.04	84.30	59.51
	2023	65.39	-31%	34.98	-56%	34.98	37.04	30.85
	2024	70.61	8%	32.26	-8%	34.96	37.59	29.70
Projected	2025	75.47	6.88%	36.03	11.67%	37.05	40.94	29.25
	2026	86.01	13.98%	37.42	3.87%	42.75	47.78	32.68
	2027	92.80	7.89%	36.20	-3.26%	36.18	39.65	29.26
	2028	92.58	-0.24%	36.51	0.84%	36.30	39.98	28.94
	2029	83.16	-10.17%	37.25	2.04%	38.72	42.28	31.59
	2030	84.28	1.34%	37.25	0.00%	40.58	44.63	32.49
	2031	74.45	-11.66%	36.87	-1.02%	41.57	45.03	34.66
	2032	76.76	3.11%	37.12	0.67%	44.48	48.23	36.97
	2033	54.96	-28.40%	34.89	-6.01%	35.70	38.83	29.43
	2034	67.97	23.68%	35.74	2.45%	40.30	43.89	33.11

Notes

(Include Notes Here)

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	0	0	7,803	3.55	5,333	4.71	0	N/A	36	15.09	0	0	0	0
	2016	0	0	7,488	3.53	6,015	4.20	0	N/A	37	11.27	0	0	0	0
	2017	0	0	7,528	3.42	6,180	4.62	0	N/A	36	13.19	0	0	0	0
	2018	0	0	7,623	3.50	6,642	4.43	0	N/A	37	16.08	0	0	0	0
	2019	0	0	6,959	3.29	7,510	3.85	0	N/A	31	15.60	0	0	0	0
	2020	0	0	6,591	3.34	8,445	3.29	0	N/A	38	11.27	0	0	0	0
	2021	0	0	6,508	3.18	8,501	4.27	0	N/A	43	14.89	0	0	0	0
	2022	0	0	6,046	3.23	9,797	6.39	0	N/A	24	26.99	0	0	0	0
	2023	0	0	4,896	3.07	10,975	4.60	0	N/A	18	22.98	0	0	0	0
	2024	0	0	2,197	3.95	14,765	4.25	0	N/A	14	21.08	0	0	0	0
Projected	2025	0	0	2,506	3.31	14,015	5.63	0	N/A	8	28.67	0	0	0	0
	2026	0	0	3,390	3.30	13,697	6.30	0	N/A	11	27.05	0	0	0	0
	2027	0	0	2,620	3.58	14,940	6.22	0	N/A	9	25.44	0	0	0	0
	2028	0	0	2,577	3.68	15,302	5.97	0	N/A	9	23.91	0	0	0	0
	2029	0	0	2,709	3.78	16,204	5.71	0	N/A	9	24.09	0	0	0	0
	2030	0	0	2,725	3.88	17,064	5.60	0	N/A	9	24.23	0	0	0	0
	2031	0	0	2,723	3.99	18,124	5.44	0	N/A	9	24.22	0	0	0	0
	2032	0	0	2,696	4.09	18,699	5.34	0	N/A	9	24.33	0	0	0	0
	2033	0	0	1,787	4.21	20,239	5.39	0	N/A	6	24.33	0	0	0	0
	2034	0	0	1,965	4.33	20,694	5.50	0	N/A	6	24.46	0	0	0	0
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										
						For each of the Data Centers				
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		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)
N/A						1				
						2				
						3				
						...				

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

** Based on military time 1 - 24.

TYSP Year 2025
Question No. 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 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	N/A					
2						
3						
…						

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