

State of Florida



# Public Service Commission

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

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

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**DATE:** February 20, 2025  
**TO:** Adam Teitzman, Commission Clerk, Office of Commission Clerk  
**FROM:** Greg Davis, Engineering Specialist, Division of Engineering *GD LK*  
Phillip Ellis, Public Utilities Supervisor, Division of Engineering *POE*  
**RE:** Docket No. 20250000-OT - Undocketed filings for 2025.

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Please file in the above mentioned docket file the attached document, Staff's Data Request #1, which was sent to each of the Ten-Year Site Plan utilities.

GD/POE/pz

Attachment

**From:** [Patti Zellner](#)  
**To:** ["nanci.nesmith@fpl.com"](#); ["mark.bubriski@fpl.com"](#); ["ashley.anderson@fpl.com"](#); [Robert Pickels](#); [Matthew Bernier](#); ["regdept@tecoenergy.com"](#); ["parusk@tecoenergy.com"](#); ["MSirianni@tecoenergy.com"](#); ["pkbrown@tecoenergy.com"](#); ["Navid.Nowakhtar@fmpa.com"](#); ["Robert.Nelcoski@fmpa.com"](#); ["Susan.Schumann@fmpa.com"](#); ["VerschageJB@gru.com"](#); ["NeihausEW@gru.com"](#); ["fiscml@jea.com"](#); ["BrowRN@JEA.com"](#); ["GOODWG@jea.com"](#); ["landsg@jea.com"](#); ["Shankar.Karki@lakelandelectric.com"](#); ["Cindy.Clemmons@LakelandElectric.com"](#); ["HFraser@ouc.com"](#); ["jridgway@ouc.com"](#); ["BradKushner@nFrontConsulting.com"](#); ["summi022@seminole-electric.com"](#); ["sujmi024@seminole-electric.com"](#); ["sujld024@seminole-electric.com"](#); ["sukar021@seminole-electric.com"](#); ["caleb.crow@talgov.com"](#)  
**Cc:** [Greg Davis](#); [Phillip Ellis](#); [Marissa Ramos](#); [Laura King](#); [Patti Zellner](#); [Segundo Sanchez](#)  
**Subject:** DN 20250000-OT (Undocketed filings for 2025) 2025 Ten-Year Site Plan Review - Staff's Data Request #1  
**Date:** Thursday, February 20, 2025 4:07:09 PM  
**Attachments:** [2025 TYSP.DR 1.Excel Tables.Final.xlsx](#)  
[2025 TYSP.DR 1.Word Document.Final.docx](#)  
[2025 TYSP.Data Request 1.Final.pdf](#)

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February 20, 2025

Dear Utility Representatives,

**Subject:** DN 20250000-OT (Undocketed filings for 2025) 2025 Ten-Year Site Plan Review - Staff's Data Request #1

This year's Ten-Year Site Plan Review process (TYSP Review) will be led by Greg Davis and Phillip Ellis in the Florida Public Service Commission's (FPSC) Division of Engineering. Contact information is as follows:

Greg Davis  
Office: (850) 413-6582  
Email: [GDavis@psc.state.fl.us](mailto:GDavis@psc.state.fl.us)  
and  
Phillip Ellis  
Office: (850) 413-6626  
Email: [PELLIS@psc.state.fl.us](mailto:PELLIS@psc.state.fl.us)

Attached is Staff's Data Request #1, (in PDF and Microsoft WORD format) along with a Microsoft Excel file containing several tables. Please submit your responses to this data request to both the FPSC Division of Engineering and the FPSC Office of Commission Clerk by following the instructions below:

Submission to the FPSC Division of Engineering

1. Please email your responses to **Questions 1 and 2** to Greg and Phillip by **Tuesday, April 1, 2025**.
2. Please email your responses to **all other** questions to Greg and Phillip by **Thursday, May 1, 2025**.
  - a. Please submit all **narrative** responses following their respective questions in a **single Microsoft Word** document, making sure to preserve question order.
  - b. Please submit all **non-narrative** responses (i.e., tables) in a **single Microsoft Excel** document with each sheet/tab labeled to identify its associated question. While multiple sheets/tabs per question are acceptable, please keep the entirety of a table on

the same sheet/tab if possible.

Submission to the FPSC Office of Commission Clerk

1. Please convert and combine the **narrative** and **non-narrative** responses sent to the FPSC Division of Engineering into a **single PDF** document.
2. Please electronically file this PDF document via the Commission's website no later than **Thursday, May 1, 2025**.
  - a. Navigate to [www.floridapsc.com](http://www.floridapsc.com).
  - b. At the top of the page, hover the mouse cursor over the "Clerk's Office" tab.
  - c. Select from the drop-down menu "Electronic Filing Web Form."
  - d. Please complete the form, referencing "Docket No. 20250000-OT."
  - e. Attach to the form the PDF created in Step 1 as the "Primary PDF."
  - f. Submit the form.

If you have any questions, please contact Greg Davis and/or Phillip Ellis.

Sincerely,  
Patti Zellner  
Administrative Assistant  
Division of Engineering  
Phone: (850) 413-6208  
Email: [pzellner@psc.state.fl.us](mailto:pzellner@psc.state.fl.us)

Enclosure

cc: Office of Commission Clerk (20250000-OT – Undocketed filings for 2025)

**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).
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.

#### **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.

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.
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.
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.
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.
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.
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.
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.
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.
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.
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.
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.

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



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.

### 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.
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.

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

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.
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.
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.
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.
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.
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.
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.
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.

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

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.
49. Please describe any actions the Company engages in to encourage production of 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.

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.
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.
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).
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.
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.
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.

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.
- 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.
  - b. Please provide a brief assessment of how these benefits, risks, and operational limitations may change over the current planning period.
  - c. Please identify and describe any plans to periodically update the Commission on the status of your energy storage pilot programs.

### 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.
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.
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.
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.

**Environmental**

62. Please explain if the Company assumes carbon dioxide (CO<sub>2</sub>) 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:
- Please identify the year during the current planning period in which CO<sub>2</sub> compliance costs are first assumed to have a non-zero value.
  - [Investor-Owned Utilities Only]** Please explain if the exclusion of CO<sub>2</sub> compliance costs would result in a different resource plan than that presented in the Company's current planning period TYSP.
  - [Investor-Owned Utilities Only]** Please provide a revised resource plan assuming no CO<sub>2</sub> compliance costs.
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.
64. For the U.S. EPA's Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Utility Generating Units Rule:
- Will your Company be materially affected by the rule?
  - What compliance strategy does the Company anticipate employing for the rule?
  - If the strategy has not been completed, what is the Company's timeline for completing the compliance strategy?
  - Will there be any regulatory approvals needed for implementing this compliance strategy? How will this affect the timeline?
  - 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.
  - If the answer to any of the above questions is not available, please explain why.
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.
- Mercury and Air Toxics Standards (MATS) Rule.
  - Cross-State Air Pollution Rule (CSAPR).
  - Cooling Water Intake Structures (CWIS) Rule.
  - Coal Combustion Residuals (CCR) Rule.
  - Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Utility Generating Units.
  - Affordable Clean Energy Rule or its replacement.
  - Effluent Limitations Guidelines and Standards (ELGS) from the Steam Electric Power Generating Point Source Category.

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.
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.
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.
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.

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

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

### **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.
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.
  - 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?
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.
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.
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.



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.