GUNSTER
FLORIDA'S LAW FIRM FOR BUSINESS

Writer's Direct Dial Number: (850) 521-1706
Writer's E-Mail Address: bkeating@gunster.com

October 22, 2024

BY E-FILING

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

Re: **Docket No. 20240099-EI - Petition for rate increase by Florida Public Utilities Company**

Dear Mr. Teitzman:

Attached, for electronic filing, on behalf of Florida Public Utilities Company, please find the Company's Responses to Staff's Fourth Set of Data Requests.

Sincerely,

Beth Keating
Gunster, Yoakley & Stewart, P.A.
215 South Monroe St., Suite 601
Tallahassee, FL 32301
(850) 521-1706

Cc: (Service List)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for rate increase by Florida Public Utilities Company.	DOCKET NO. 20240099-EI

FPUC'S RESPONSES TO STAFF'S FOURTH SET OF DATA REQUESTS

1. Please provide the data shown in MFR Schedule F-7 in Excel format with cells and formulas unlocked.

Company Response:

Please refer to the blue tabs with the suffix "MFR" in the attached Excel Spreadsheet DR 4.1 for the data in MFR Schedule F-7.

2. Please refer to FPUC witness Taylor's direct testimony, page 7, lines 3-5. Witness Taylor states, "The projections of normal UPC developed from the regression analysis, and normal HDD and CDD, were multiplied by Company-provided customer count forecasts to calculate projected Normal usage in kWh."

   a) Please explain how the "Company-provided" customer count forecasts, as shown on MFR Schedule F-7, page 17 of 21, were derived.

   b) If regression modeling was utilized when developing FPUC's customer forecast, please explain how the regression equations were developed. Include in your response the selection of independent variables and how they were applied to specific rate classes and business units. Please also include summary statistics for

each equation.

c) Please explain and provide a numeric example, using the residential class, of FPUC's following customer forecast adjustment statement in MFR Schedule F-5, Page 1: "Forecasts of the number of customers in each service classification were developed using a time trend based on 2020 to 2023 data and adjusted *with a forecasted number of customers by class.*" (italics added)

d) MFR Schedule F-7 provides model description of UPC models. To the extent FPUC prepared "adjustment" forecasts of number of customers by class not based on time trend, as indicated in MFR Schedule F-5, Page 1, please provide the same detail pertaining to such customer forecast models as was provided for FPUC's UPC models, or provide detail based on whatever modeling methodology was used.

e) For FPUC's UPC models, explain why FPUC determined not to include economic variables, as it did in last rate proceeding (Docket No. 20140025-EI), such as real personal income, or electricity price in its models.

f) Why did FPUC use a time trend model for projecting customer growth rather than taking an econometric approach, as it did in last rate proceeding (Docket No. 20140025-EI), using typical drivers of change in customers such as population, real personal income, etc.

Company Response:

a. Forecasts for the number of customers in each service classification were developed using a time trend based on 2020 to 2023 data, adjusted by known factors and growth estimates for service territories and rate classes.

b. Regression modeling was not used to develop FPUC's customer forecast.

c. Using the May 2024 Northeast Residential customer forecast (15,611) as an example, the average of monthly 2023 Northeast Residential customers (15,599) was adjusted by an estimated growth rate of 0.10% and then adjusted by a seasonality rate of 99.976%. Please refer to the attached file DR 4.2c.

d. An example was provided in the response to c above and shown in the attached file DR 4.2c.

e. FPUC did not include real personal income and electricity prices in models to forecast normal UPC for several reasons. The first and primary reason for this is the relatively short-term nature of the forecast (to 2025). Electricity demand is relatively inelastic (i.e., insensitive) to personal income and electricity prices over the short term. The inclusion of income and price are more appropriate for longer-term demand forecasts (e.g., 5-20 years). The primary short-term driver of electricity demand is weather (CDD and HDD), and the forecasts were developed to reflect electricity consumption under normal weather conditions. Second, in the UPC regressions developed, there was no obvious indication of significant omitted variables, such as price. Weather alone (with a constant, and time-trend as appropriate) was adequate to provide a reasonable and accurate normal demand forecast. A time-trend variable was used when statistically appropriate, and this time-trend may reflect factors such as efficiency gains and response to changes in prices overtime.

f. As answered in e) above. A time-trend with adjustments for known factors within service territories and rate classes is appropriate for a short-term forecast. Given the relatively small and localized nature of FPUC's service areas, FPUC's internal knowledge regarding customer growth may be more accurate than a forecast based on macroeconomic data.

3. Please provide the Company's billed kWh projections (in Excel format, with cells and formulas unlocked) from May 2024 to December 2025 (for Residential, Commercial Small, and Commercial rate classes) for both the Northeast and Northwest Service Territories, as described by witness Taylor on page 6, lines 21-23, and page 7, lines 1 of his direct testimony.

Company Response:

For Residential, Commercial Small and Commercial customer classes please refer to the attached file DR 4.1. The forecast data is in tabs, *Northeast Forecast Detail* and *Northwest Forecast Detail.*

4. Please refer to MFR E-13c, which details the demand billing determinants for the GSD, GSDL, and GSLD1 rate classes.

   a) Please provide the Company's historical and forecasted demand for each applicable rate class. Please also provide the historical and forecasted demand by division (Northeast and Northwest) and system total (Northeast + Northwest).

   b) Please explain how the demand charges for the test year were developed, and by whom.

   c) Please provide (in Excel format, with cells and formulas unlocked) all models/forecasts, including assumptions, data, equations, and summary statistics for both the model and the forecast used to derive the demand charges shown in MFR E- 13c.

Company Response:

a. Please refer to the attached file DR 4.4a 4c. KW Forecast.

b. A three-year average usage was used to develop the usage amounts. These amounts were determined by a Financial Analyst. That analyst reviewed the forecasts with members of the operations team. They reviewed all the customers' data with management and field personal to determine if the results were reasonable. During that review, it was determined that one of a customer's building was being demolished. An adjustment was made for that customer.

c. Please refer to the response to a above.

5. Please refer to witness Taylor's direct testimony, page 5, lines 20-22.

a) Please explain why FPUC elected to utilize a 10-year historical period to calculate normal weather. Please provide any supporting documentation

b) Please compare the 10-year normal weather data (CDDs and HDDs) to the weather data period utilized in FPUC's last rate case (Docket No. 20140025-EI).

Company Response:

a. Normal weather was calculated using a 10-year historical period to balance a longer-term (20-30 year) calculation and recent shorter-term climate trends.

b. In FPUC's prior rate case, the normal period was stated to be "for the period 1999-forward"[1], so an approximately 15-year normal period. Currently, a 10-year normal period is being used.

[1] Docket No. 20140025-EI, Direct Testimony of Robert J. Camfield, p. 19, lines 2-4, "The monthly normal weather CDDs and HDDs are equal to the average CDDs and HDDs for the respective month, for the period 1999-forward".

6. How do FPUC's models account for specific events for the 2025 test year, such as new housing developments, port expansions, and/or new commercial expansions/contractions in the service area, which may significantly impact customers, sales, and demand?

Company Response:

Customer growth is expected to be minimal in 2025. In the northeast, there is no additional space for new development on the island. Much of the development on Amelia Island is related to demolition or remodeling of existing structures rather than construction of new development. The Northwest Florida Division is more rural and still working to recover from Hurricane Michael and has had very little growth. Operations personnel that are familiar with development that has occurred met with Atrium and discussed growth opportunities that would impact sales and demand in determination of the forecast.

7. Please identify all FPSC dockets or other filings in which FPUC presented the same customer and usage forecasts used in this proceeding and explain how they were used in those dockets or other filings.

Company Response:

The KWH usage projected in the rate proceeding for 2025 was used in Schedule E-1 page 3 filed in the fuel docket, 20240001-EI, to compute fuel rates for 2025.

8. Please identify all FPSC dockets which were opened after April 2024 in which FPUC filed customer or usage forecasts which were different from the forecasts used in this proceeding. For each such docket, explain why a different forecast was used and how those differed from the forecasts in the instant case.

Company Response:

The electric conservation 2025 projection filed in Docket 20240002-EG and the storm protection plan cost recovery projection for 2025 in Docket 20240010-EI were started before Atrium completed its projection of usage. Each used very early versions of KWH projections. The Company hires an expert to perform a much more sophisticated analysis of usage for a base rate proceeding. It is also important to note, that with clause dockets which have a true-up mechanism, any variance in actuals and projections result in a surcharge or refund in future periods and as such FPUC does not hire experts to calculate the projections for those filings.

9. When discussing the Large Commercial and Industrial Rate Class usage forecasts, witness Taylor testifies that, "FPUC personnel developed forecasts for their largest customers

within the Commercial Large and Industrial classes to account for any changes in load expected for these customers."

a) Please provide the 2024 historic base year +1 and the 2025 test year customer and energy sales forecasts for the Commercial Large and Industrial rate classes.

b) Please describe how the load forecasts for the Commercial Large and Industrial

classes were developed, including how customer or usage growth, if any, was accounted for.

Company Responses:

a. **Please refer to the attached file DR 4.9a – Large Com Ind Cust Sales Forecast (2024 2025).**

b. **The Company first developed a 3-year average of past usage for each rate class. The individual customer data was reviewed with operations management, operations field personnel, and marketing personnel to determine any known changes and the reasonableness of the 3-year average. Because these service areas are small and the Northeast territory is fully developed, there has been minimal growth in these areas and none is expected in 2025.**

10. Beginning with the first forecasted monthly data point (May 2024) that FPUC used for its model projections by service territory through the most recent month for which actual data is available, please provide the following:

a) A side-by-side comparison of FPUC's monthly projected customer count and UPC to FPUC's actual monthly customer count and UPC (for each rate class).

b) A causative explanation for any forecast-to-actual deviations greater than 15 percent for UPC and 3 percent for customers.

Company Response:

a) **Please see Excel spreadsheet, DR 4.1. The side-to-side comparisons, with percent**

forecast-to-actual deviations are in columns M to AG in tabs, *Northeast Forecast Detail* and *Northwest Forecast Detail.*

b) No UPC forecast-to-actual deviation exceeded 15-percent, and no customer count forecast-to-actual deviation exceeded 3-percent.

11. Please provide 0 Year through 3 Year company forecast error rates for Total Customers and Total Energy Sales, for 2020, 2021, 2022, and 2023, with average error rate data, as shown below:

Year	Accuracy of Total Customers Forecasts*					
	Forecast Error Rate (%)				0-3 Year Error (%)	
	Years Prior**				Average	Absolute Average
	3 Years	2 Years	1 Year	0 Years		
2020						
2021						
2022						
2023						
Average						

*The Company's officially adopted annual forecast of total customers for both service territories

**Examples: In the column '3 Years,' row '2020', enter the percent error in the Company's 2017 forecast of 2020 customers. Similarly, in the column '0 Years', row '2023', enter the percent error in the Company's 2023 forecast of 2023 customers.

Year	Accuracy of Total Energy Sales Forecasts*					
	Forecast Error Rate (%)				0-3 Year Error (%)	
	Years Prior**				Average	Absolute Average
	3 Years	2 Years	1 Year	0 Years		
2020						
2021						
2022						
2023						
Average						

*The Company's officially adopted annual forecast of total energy sales for both service territories

**Examples: In the column '3 Years,' row '2020', enter the percent error in the Company's 2017 forecast of 2020 total energy sales. Similarly, in the column '0 Years', row '2023', enter the percent error in the Company's 2023 forecast of 2023 total energy sales.

Company Response:

Please refer to the attached file DR 4.11 AvB Tables-Customers and Volumes.

12. For each customer class, and by division (Northeast, Northwest), please provide FPUC's annual actual customers, UPC and demand for 2015 through 2023, annual actual/forecast of customers, UPC, and demand for 2024, and annual forecast of customers, UPC, and demand for 2025. Please provide in an Excel spreadsheet.

Company Response:

Please see Excel spreadsheet, DR 4.1 for Residential, Commercial Small and Commercial customer classes. Actual billed demand, number of customers and UPC through April 2024 was used. The forecast is from May 2024 through December 2025. The data is in tabs, *Northeast Forecast Detail*, *Northwest Forecast Detail*, *NE Hist Data – MFR* and *NW Hist Data – MFR*.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by Electronic Mail to the following parties of record this 22nd day of October, 2024:

Suzanne Brownless Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, FL 32399-0850 sbrownle@psc.state.fl.us discovery-gcl@psc.state.fl.us	Walt Trierweiler/P. Christensen / Charles Rehwinkel/Mary Wessling/Octavio Ponce/Austin Watrous Office of Public Counsel c/o The Florida Legislature 111 W. Madison Street, Room 812 Tallahassee, FL 32399-1400 Trierweiler.Walt@leg.state.fl.us Wessling.Mary@leg.state.fl.us Rehwinkel.Charles@leg.state.fl.us Christensen.patty@leg.state.fl.us Ponce.octavio@leg.state.fl.us Watrous.austin@leg.state.fl.us
Michelle Napier Florida Public Utilities Company 1635 Meathe Drive West Palm Beach FL 33411 mnapier@fpuc.com	

By: _____

Beth Keating
Gunster, Yoakley & Stewart, P.A.
215 South Monroe St., Suite 601
Tallahassee, FL 32301
(850) 521-1706