

BEN ALBRITTON *President of the Senate*

STATE OF FLORIDA OFFICE OF PUBLIC COUNSEL

C/O THE FLORIDA LEGISLATURE 111 WEST MADISON ST. SUITE 812 TALLAHASSEE, FLORIDA 32399-1400 850-488-9330

EMAIL: OPC_WEBSITE@LEG.STATE.FL.US WWW.FLORIDAOPC.GOV FILED 6/9/2025 DOCUMENT NO. 04339-2025 FPSC - COMMISSION CLERK



DANIEL PEREZ Speaker of the House of Representatives

June 9, 2025

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

Re: Docket No. 20250011-EI-Petition for rate increase by Florida Power & Light Company

Dear Mr. Teitzman:

Please find enclosed for filing in the above referenced docket the Direct Testimony and Exhibits of Jacob M. Thomas, P.E. This filing is being made via the Florida Public Service Commission's web-based electronic filing portal.

If you have any questions or concerns, please do not hesitate to contact me. Thank you for your assistance in this matter.

Sincerely,

Walt Trierweiler Public Counsel

<u>/s/ Mary A. Wessling</u> Mary A. Wessling Associate Public Counsel Florida Bar No.: 93590

CERTIFICATE OF SERVICE DOCKET NO. 20250011-EI

I HEREBY CERTIFY that a true and correct copy of the foregoing has been

furnished by electronic mail on this 9th day of June, 2025, to the following:

Shaw Stiller Timothy Sparks Florida Public Service Commission Office of General Counsel 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 sstiller@psc.state.fl.us tsparks@psc.state.fl.us discovery-gcl@psc.state.fl.us

John T. Burnett Maria Moncada Christopher T. Wright Joel Baker Florida Power & Light Company 700 Universe Boulevard Juno Beach, FL 33408-0420 john.t.burnett@fpl.com maria.moncada@fpl.com christopher.wright@fpl.com joel.baker@fpl.com

Leslie R. Newton Ashley N. George Thomas A. Jernigan Michael A. Rivera James B. Ely Ebony M. Payton Federal Executive Agencies 139 Barnes Drive, Suite 1 Tyndall Air Force Base, FL 32403 leslie.newton.1@us.af.mil ashley.george.4@us.af.mil thomas.jernigan.3@us.af.mil michael.rivera.51@us.af.mil james.ely@us.af.mil ebony.payton.ctr@us.af.mil Kenneth A. Hoffman Florida Power & Light Company 134 West Jefferson Street Tallahassee, FL 32301-1713 ken.hoffman@fpl.com

Jon C. Moyle, Jr. Karen A. Putnal Moyle Law Firm, P.A. 118 North Gadsden Street Tallahassee, FL 32301 jmoyle@moylelaw.com kputnal@moylelaw.com mqualls@moylelaw.com

Nikhil Vijaykar Keyes & Fox LLP 580 California St., 12th Floor San Francisco, CA 94104 nvijaykar@keyesfox.com

Katelyn Lee Lindsey Stegall EVgo Services, LLC 1661 E. Franklin Ave. El Segundo, CA 90245 katelyn.lee@evgo.com lindsey.stegall@evgo.com Bradley Marshall Jordan Luebkemann Earthjustice 111 S. Martin Luther King Jr. Blvd. Tallahassee, FL 32301 bmarshall@earthjustice.org jluebkemann@earthjustice.org flcaseupdates@earthjustice.org

James W. Brew Laura Wynn Baker Joseph R. Briscar Sarah B. Newman Stone Mattheis Xenopoulos & Brew 1025 Thomas Jefferson St., NW Suite 800 West Washington, D.C. 20007 jbrew@smxblaw.com lwb@smxblaw.com jrb@smxblaw.com sbn@smxblaw.com

Stephanie U. Eaton Spilman Thomas & Battle 110 Oakwood Drive, Suite 500 Winston-Salem, NC 27103 seaton@spilmanlaw.com

William C. Garner Law Office of William C. Garner 3425 Bannerman Road Unit 105, No. 414 Tallahassee, FL 32312 bgarner@wcglawoffice.com Danielle McManamon Earthjustice 4500 Biscayne Blvd., Suite 201 Miami, FL 33137 dmcmanamon@earthjustice.org

Stephen Bright Jigar J. Shah Electrify America, LLC 1950 Opportunity Way, Suite 1500 Reston, Virginia steve.bright@electrifyamerica.com jigar.shah@electrifyamerica.com

Robert E. Montejo Duane Morris LLP 201 S Biscayne Blvd., Suite 3400 Miami, FL 33131-4325 remontejo@duanemorris.com

Steven W. Lee Spilman Thomas & Battle 1100 Bent Creek Blvd., Suite 101 Mechanicsburg, PA 17050 slee@spilmanlaw.com

D. Bruce May Kevin W. Cox Kathryn Isted Holland & Knight LLP 315 S. Calhoun Street, Suite 600 Tallahassee, FL 32301 bruce.may@hklaw.com kevin.cox@hklaw.com kathryn.isted@hklaw.com

<u>/s/ Mary A. Wessling</u> Mary A. Wessling Associate Public Counsel wessling.mary@leg.state.fl.us

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re.: Petition for rate increase by Florida Power & Light Company. Docket No. 20250011-EI

Filed: June 9, 2025

DIRECT TESTIMONY

OF

JACOB M. THOMAS, P.E.,

ON BEHALF OF

THE CITIZENS OF THE STATE OF FLORIDA

Walt Trierweiler Public Counsel

Mary A. Wessling Associate Public Counsel

Patricia Christensen Associate Public Counsel

Octavio Simoes-Ponce Associate Public Counsel

Austin Watrous Associate Public Counsel

Office of Public Counsel c/o The Florida Legislature 111 West Madison Street, Room 812 Tallahassee, FL 32399-1400 (850) 488-9330

Attorneys for the Citizens cf the State cf Florida

TABLE OF CONTENTS

I. INTRODUCTION	1
II. LOAD FORECAST ADJUSTMENTS	4
II.A Customers	4
II.B Energy Sales	
II.C Peak Demand	17
III. PRESENT RATE REVENUE ADJUSTMENTS	21
IV. SUMMARY OF RECOMMENDATIONS & CONCLUSIONS	24

EXHIBITS

Exhibit JMT-1 —	Resume	of Jacob	M.	Thomas	

- Exhibit JMT-2 Summary of Customer & Energy Load Forecast Adjustments
- Exhibit JMT-3 Summary of Revenue Adjustments
- Exhibit JMT-4 Summary of Discovery Responses Used in Testimony

1		DIRECT TESTIMONY OF
2		JACOB M. THOMAS, P.E.
3		On behalf of the Office of the Public Counsel
4		Before the
5		Florida Public Service Commission
6		I. INTRODUCTION
7	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
8	A.	My name is Jacob M. Thomas. I am a Principal of GDS Associates, Inc. ("GDS"). My
9		business address is 1850 Parkway Place, Suite 800, Marietta, GA 30067.
10		
11	Q.	ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?
12	А.	I am testifying in this proceeding on behalf of the Florida Office of Public Counsel
13		("OPC").
14		
15	Q.	PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND
16		QUALIFICATIONS.
17	A.	I received a Bachelor of Science in Industrial and Systems Engineering from the
18		Georgia Institute of Technology in 2000. I received a Master's of Business
19		Administration with a concentration in Finance from Auburn University in 2006. I am
20		a registered Professional Engineer in Georgia and a member of the American Statistical
21		Association.

1

Q. PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE.

A. I began working with GDS in June 1996 as a cooperative student while attending the
 Georgia Institute of Technology. After graduation in December 2000, I accepted a full time position in GDS's Distribution Services department and have risen to my current
 position of Principal in that department. In the past 25+ years, I have provided
 financial, statistical, and economic consulting to utilities and regulatory agencies
 nationwide.

8 In the areas of finance and economics, I specialize in retail and wholesale cost-9 of-service development and design, retail and wholesale rate design, financial 10 forecasting, economic impact analysis, and benefit-cost analysis of demand response 11 programs. In the area of statistics, I have provided services to clients with respect to 12 load forecasting, market research, sample design, load research, measurement and 13 verification, and other statistical modeling.

14

Q. HAVE YOU TESTIFIED BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION BEFORE?

17 A. No, I have not.

18

19 Q. HAVE YOU TESTIFIED IN OTHER REGULATORY PROCEEDINGS?

A. Yes, I have provided expert testimony in the areas of cost of service, retail and
wholesale rate design, load forecasting, and load research in several jurisdictions. I
have testified in Georgia, Indiana, Maryland, Michigan, North Carolina, South
Carolina, Utah, and Vermont. I have also filed testimony before the Federal Energy

1		Regulatory Commission.
2		
3	Q.	WHAT IS THE PURPOSE OF YOUR TESTIMONY?
4	А.	I have reviewed Florida Power & Light Company's ("FPL") load and revenue forecasts
5		as filed in this Docket. I recommend several adjustments to the load forecast which, in
6		turn, impact present rate revenues.
7		
8	Q.	ARE YOU SPONSORING ANY EXHIBITS?
9	А.	Yes, I am sponsoring four exhibits.
10		• Exhibit JMT-1 is my professional resume.
11		• Exhibit JMT-2 is a summary of my recommended adjustments to the class customer
12		and energy sales forecasts.
13		• Exhibit JMT-3 provides a summary of my recommended adjustments to present
14		rate revenues in 2026 and 2027.
15		• Exhibit JMT-4 is a composite exhibit of select discovery responses.
16		
17	Q.	WERE THESE EXHIBITS PREPARED BY YOU OR UNDER YOUR DIRECT
18		SUPERVISION?
19	A.	Yes.

1	Q.	HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?
2	А.	The remainder of my testimony is organized into the following sections:
3		II. Load Forecast Adjustments
4		II.A Customers
5		II.B Energy Sales
6		II.C Demand
7		III. Present Rate Revenue Adjustments
8		IV. Summary of Recommendations and Conclusion
9		
10		II. LOAD FORECAST ADJUSTMENTS
11		II.A Customers
12	Q.	PLEASE PROVIDE AN OVERVIEW OF FPL'S LOAD FORECASTING
13		PROCESS.
14	А.	FPL deploys a series of statistical models to project number of customers and usage
15		per day ("UPD") per customer, based on billing days. Such pairs of models are prepared
16		for each of six revenue classes. The UPD projections and customer projections are then
17		multiplied to produce energy sales forecasts by revenue class. Peak demands are also
18		estimated using regression model specifications. FPL develops separate models for its
19		two regions, hereinafter referenced as the "FPLE" and "NWFL" regions. In general,
20		FPL uses econometric modeling techniques, in which economic activity and associated
21		economic projections are one of the key independent variables used to project customer
22		and energy sales growth and uses a 20-year average of weather data to represent normal
23		weather.

Q. DO YOU HAVE ANY CONCERNS ABOUT THE RESIDENTIAL CUSTOMER FORECAST?

A. I have concluded that the residential customer forecast is currently too low and should be adjusted upward for purposes of this proceeding. Analysis of the forecast performance relative to actual for the period for which actual data is available shows a consistent pattern of under forecasting actual number of customers:

7

Table 1: Residential Customer Forecast vs. Actual¹

Date	RES Fcst	Actual	Difference
Jul-24	5,291,268	5,295,609	-4,341
Aug-24	5,297,025	5,303,897	-6,872
Sep-24	5,302,792	5,312,291	-9,499
Oct-24	5,308,551	5,318,891	-10,340
Nov-24	5,314,294	5,324,294	-10,000
Dec-24	5,320,004	5,329,908	-9,904
Jan-25	5,325,685	5,336,096	-10,411
Feb-25	5,331,345	5,344,332	-12,987

8

Although the magnitude of the errors may seem small now, the trend is likely to continue with the forecast getting less accurate through 2027. This is because the number of customers is a time series that exhibits very strong first order autocorrelation. First order autocorrelation exists when the value of the variable, in this case number of residential customers, is highly dependent on the value in the prior period. Because the number of customers is a running tally, first order autocorrelation is obvious. One challenge with forecasting a time series with such autocorrelation is

¹ FPL response to Staff 1st Set of Interrogatories, No. 6, represents the sum of information provided in Exhibit JMT-4 page 2 and JMT-4 page 8.

1	that a forecast that is under-forecasting is likely to continue to be too low. In order for
2	the forecast to "catch up", actual growth would have to drop below forecasted growth
3	rate because the forecast is already too low. This seems unlikely even if there are signs
4	of less growth in Florida than recent years. As can be seen in Table 2, the forecast has
5	produced lower growth rates for 2025-2027 than what was experienced over the last
6	five years. If you extend the trend in number of customers the forecast is below actual,
7	the error reaches 0.8% by the end of 2027 and represents nearly 45,000 fewer
8	customers. In fact, the trend in Table 1 is so strong that a simple trend line regression
9	gives a trend variable with a p-value of 0.003, which is very significant.

10

Table 2: Growth Rates of Past 5 Years and Forecast Period for Residential Customers

Region	Growth in Customers 2020-2025 (CAGR)	Projected Growth Rate 2025-2027 (CAGR)
FLPE	1.46%/yr	1.21%/yr
NWFL	1.50%/yr	1.29%/yr

11

12 Q. WHAT IS YOUR RECOMMENDATION REGARDING THE RESIDENTIAL 13 CUSTOMER FORECAST?

14A.Given what we know about actual residential customers relative to the forecast at this15point, it is appropriate to make an adjustment or calibration to the residential customer16forecast reflecting the trending under-forecast. I am recommending a modest increase17of an average of 28,126 customers per month in 2026, resulting in an increase of18337,508 bills. In 2027, my recommended increase is an average of 39,425 customers19per month, or 473,094 bills.

Q. WHAT ARE YOUR OBSERVATIONS ABOUT OTHER CUSTOMER CLASS FORECASTS?

3 Given my recommendation to calibrate the residential forecast, I also recommend A. 4 similar "adjust to actual" calibrations for the other classes. I ran a simple trend 5 regression through the forecast errors for July 2024 through February 2025. If the trend 6 variable had a significant p-value (less than 0.10 for my analysis), then I used a trend 7 to account for the adjustment, with an exception for the industrial class which I will 8 discuss later. If the p-value on the trend was greater than 0.10, I took the error in 9 February 2025 (the last month for which actual data was available) and multiplied that 10 by twelve to get the number of bills for the adjustment. Neither the commercial sector 11 nor the street lighting sector had p-values below 0.10, so the recommended adjustment 12 for them was to take the February error amount. This results in my recommendation to 13 reduce the number of commercial customers by just under 1,100 customers, resulting in a downward adjustment of 12,816 bills. The street lighting sector results in a 14 15 recommended reduction of 612 bills. Figure 1 summarizes the trends for the residential, 16 commercial, and street lighting classes.



Q. PLEASE DISCUSS YOUR REVIEW OF THE INDUSTRIAL CUSTOMER 4 FORECAST.

A. There are two issues that I have with the industrial customer forecast. First, as shown
in Table 3, a calibration as I have recommended for the other classes would be
appropriate. As can be seen, the actual number of customers has dropped significantly
between July 2024 and February 2025. According to FPL, the decline is reflective of
loss of temporary GS-1 Industrial customers from October 2024 to February 2025.²

2

² FPL response to OPC's 11th Set of Interrogatories, No. 307 (See Exhibit JMT-4, page 11).

Deploying my trend method would result in using a trend for the adjustment to the industrial sector. However, deploying the trend would result in no industrial customers by 2027. Therefore, I recommend using the error in February 2027 as the adjustment and therefore recommend reducing the number of customers by 2,372 and the number of bills by 28,464 to reflect the adjustment for this element of the forecast.

6

Table 3: Industrial Customers Forecasted versus Actual³

				Percent
Date	Ind Fcst	Actual	Difference	Diff
Jul-24	15,790	15,568	222	1.4%
Aug-24	15,790	15,328	462	3.0%
Sep-24	15,787	14,699	1,088	7.4%
Oct-24	15,782	14,274	1,508	10.6%
Nov-24	15,776	14,032	1,744	12.4%
Dec-24	15,771	14,065	1,706	12.1%
Jan-25	15,768	13,321	2,447	18.4%
Feb-25	15,766	13,394	2,372	17.7%

7

8 Q. DO YOU HAVE ANY OTHER CONCERNS ABOUT THE INDUSTRIAL 9 CUSTOMER FORECAST?

A. Yes. A second concern I have with the industrial forecast is related to what the forecast produces for customers in 2025-2027. FPL predicts the number of customers to be 12 15,748 in 2025. The forecast then drops to 15,713 accounts in 2026 and 15,729 accounts in 2027, both of which are lower than the 2025 projection. This phenomenon is independent of the loss in GS-1 customers mentioned earlier and is a function of the FPLE Small/Medium Industrial customer forecast model.

³ FPL response to Staff 1st Set of Interrogatories, No. 6. Represents the sum of customers from Exhibit JMT-4 page 4 and Exhibit JMT-4 page 10.

The primary economic driver in the model is housing starts.⁴ The model also 1 includes a lagged dependent variable,⁵ a couple of indicator variables for a couple of 2 months in the historical period, and a first order moving average ARIMA⁶ component. 3 4 The model is trained on an extensive historical period, July 2004 through June 2024. 5 The historical period and projected number of customers is shown in Figure 2. Under this model specification, even though housing starts increase in 2016 and 2017, the 6 7 number of customers declines from 2015 to 2016. This is an antithetical result since the concept of the model is that housing starts should drive customer growth in this 8 9 sector.

⁴ Housing starts are the number of new housing units where construction has begun.

⁵ A lagged dependent variable means the forecast for customers in period x is based on the number of customers in period x-1.

⁶ An ARIMA model is an Autoregressive Integrated Moving Average statistical model. The moving average element uses a moving average of prior model error terms.



2

3

4

Q. WHAT IS YOUR RECOMMENDATION FOR THE INDUSTRIAL FORECAST?

A. I recommend two remedies to this model. First, I trained the model with data starting
in January 2011, thus eliminating the sharp drop-off that is evident in the historical
data. Secondly, I excluded the ARIMA moving average element from the forecast. I
suspect the interplay between the lagged dependent and the moving average component
were partly responsible for the strange result. This model has an adjusted-R² of 0.992

1

⁷ This chart is generated by MetrixND software and was obtained from the working papers of Tiffany C. Cohen, the file entitled "Bates # FPL 010628 - 2025 TYSP FPL customers.NDM".

1		and a Mean Absolute Percent Error ("MAPE") of 1.01%.8 It produces a forecast that
2		shows an increase in number of customers from 2025 through 2027 in alliance with
3		increases in housing starts. My recommended model results in an adjustment of 1,008
4		new bills in 2026 and 1,464 new bills in 2027. These adjustments would be added to
5		the downward adjustments I recommend for the calibration to actual adjustment.
6		
7		II.B Energy Sales
8	Q.	PLEASE SUMMARIZE YOUR RECOMMENDATIONS FOR ADJUSTMENTS
9		TO THE ENERGY SALES FORECASTS.
10	А.	The types of adjustments I recommend for energy sales fall into one of three categories:
11		1. Adjustments associated with the customer adjustment recommendation and
12		calibration to reflect actual energy sales;
13		2. Demand Side Management ("DSM") adjustments; or
14		3. Weather normalization adjustments.
15		
16	Q.	DESCRIBE THE ADJUSTMENTS TIED TO YOUR CUSTOMER
17		RECOMMENDATIONS.
18	A.	Given that I have recommended adjusting the number of customers, it is only
19		appropriate to also adjust energy to reflect the additional or fewer customers in each
20		class.

⁸ Adjusted- R^2 is a measure of how well a model fits the underlying data that also takes into account the number of independent variables included in the model. A value close to 1.00 is preferred. MAPE is the average absolute value. percentage error across the in-sample data. An interpretation of a MAPE of 1% is that, on average, the model is off by 1% (either above or below) the actual data values across the historical period over which the model was trained.

1		For the residential and commercial classes, I applied 2026 and 2027 project
2		UPD to the customer adjustment recommendation to produce the recommended energy
3		sales adjustments associated with the customer adjustments.
4		The industrial class has two energy adjustments. First, it is interesting to see
5		that although a significant number of GS-1 industrial customers were lost between
6		October 2024 and February 2025, total class energy sales have actually exceeded the
7		load forecast. From July 2024 through February 2025, the forecast has been low on
8		average by 8,509 MWh per month, even with forecast customers much higher than
9		actual. Because the load is not weather sensitive, I recommend an adjustment to reflect
10		this under forecasting, resulting in an increase in forecasted sales of 102,113 MWh. I
11		also made an adjustment for my recommended increase based on revising the FPLE
12		Small Medium Industrial model. For that energy, I applied the average usage per
13		customer to my recommended additional customers.
14		The street lighting forecast has been too high by 1,652 MWh per month and is
15		not weather sensitive. Annualizing this number results in my recommended downward
16		adjustment of 19,829 MWh in 2026 and 2027. Likewise, the metro class has come in
17		at a higher level than forecasted, so I recommend a small downward adjustment of
18		3,735 MWh to adjust to actual.
19		
20	Q.	DESCRIBE HOW FPL REFLECTS DSM ADJUSTMENTS IN ITS FORECAST.
21	А.	FPL makes a "post modeling adjustment" to the residential energy sales to reflect DSM
22		program impacts. This means that they reduce energy sales for DSM after using the

23 customer and UPD models to forecast energy sales.

1

Q. WHAT IS YOUR CONCERN ABOUT THIS DSM ADJUSTMENT?

2 A. My concern is that FPL might be double-counting energy efficiency effects that would 3 result in under-forecasting energy sales. This could be happening in two ways. First, 4 the historical time series UPD data includes any past DSM program impacts that have 5 already been captured in the meter data. Second, the residential UPD econometric 6 models include a "codes & standards" variable meant to capture the impacts of evolving 7 codes and standards. The coefficient of this variable is negative, meaning that energy 8 usage goes down as codes & standards go up. In the residential models, this codes & 9 standards variable is increasing over time. This is another method for capturing energy 10 efficiency impacts in the residential usage. I have not seen demonstrated evidence by 11 FPL that they are avoiding double-counting of efficiency impacts by including the 12 DSM adjustment and keeping codes & standards in their econometric model. 13 Therefore, I recommend removal of the DSM adjustment for purposes of establishing 14 present revenues in this proceeding.

15

16 Q. DID YOU EVALUATE FPL'S APPROACH FOR COMPUTING NORMAL 17 WEATHER FOR ITS LOAD FORECAST?

A. I did. FPL currently uses an average of the most recent 20-years of weather data for estimating normal weather for the forecast period. This approach is one of several used in the industry, although some utilities use longer (30-year) or shorter (10-year) periods. Furthermore, I have seen some utilities that actually use a trend of historical weather to reflect climate change effects. If a trend is present, it might be reasonable to consider a shorter normal period.

1Q.DO YOU BELIEVE THE 20-YEAR NORMAL IS APPROPRIATE IN THIS2CASE?

3 A. I do not. I believe use of a ten-year normal period would be appropriate in this case. 4 There is evidence in FPL's own weather data that the last ten years have been warmer 5 than the prior ten years, which might be indicative of a hotter trending local climate. 6 In Table 4, I have shown three different variables used by FPL in its FPLE and NWFL 7 usage models. The CDH80 column represents the sum of July-September Cooling 8 Degree Hours ("CDH") with a base 80 temperature. HDH56 is Heating Degree Hours 9 ("HDH") with a base 56 and is represented as the sum of December through March. 10 Finally, the CDH66 variable is CDH but based on a 66-degree base.

11

Table 4: CDH and HDH Ranks

	_	CDH80	Rank	HDH56	Rank	CDH66	Rank
	2004	206.7	15	54.0	4	1,162.6	14
	2005	246.2	9	50.3	5	1,217.7	8
	2006	191.2	20	33.0	9	1,134.6	20
	2007	236.1	11	23.8	17	1,191.0	13
	2008	199.1	17	62.3	3	1,146.4	19
	2009	239.3	10	146.2	1	1,203.4	10
	2010	284.3	3	104.1	2	1,269.5	3
	2011	248.7	7	30.6	13	1,215.9	9
	2012	199.6	16	33.5	8	1,156.0	16
_	2013	191.4	19	29.6	14	1,150.3	18
	2014	211.3	14	31.8	11	1,156.8	15
	2015	232.4	12	29.3	15	1,197.7	11
	2016	264.0	6	12.5	20	1,239.0	6
	2017	277.1	4	44.8	6	1,262.6	4
	2018	198.9	18	30.9	12	1,153.3	17
	2019	247.5	8	17.8	18	1,223.8	7
	2020	272.3	5	33.7	7	1,253.9	5
	2021	226.6	13	24.7	16	1,194.9	12
	2022	290.6	2	31.8	10	1,272.3	2
	2023	321.6	1	12.7	19	1,307.9	1

12

As can be seen, the first, second, fourth, fifth, and sixth hottest years have all occurred in the most recent ten years (see the two CDH columns and ranks). Similarly, the top 5 coldest years, as measured by HDH56, occurred in the first ten years of the period. This seems to indicate a consistently warmer trend in the most recent ten years.

5 One consideration when recommending shortening the period used to define 6 normal weather is what that might mean to forecast stability from one period to the 7 next. Using only ten years means every data point has twice the weight in the average as it would in a twenty-year average. This may be an undesirable result, especially if 8 9 there is generally long-term stability in the weather data. However, in this case, the 10 trend seems convincing enough that it would be preferable to adopt the shorter window 11 in order to achieve normal weather that is more likely to represent actual weather in the 12 next two-to-three years.

13

14 Q. HOW DID YOU DETERMINE THE IMPACTS ON THE LOAD FORECAST

15 **OF A SHORTER WEATHER NORMALIZATION PERIOD?**

- A. I calculated new normal weather variables for all residential and commercial models
 and used FPL's modeling coefficients for those variables to determine the energy
 impact of shortening the weather normalization period.
- 19

20 Q. CAN YOU PLEASE SUMMARIZE YOUR CUSTOMER AND ENERGY 21 ADJUSTMENT RECOMMENDATIONS?

A. The cumulative effect of the recommendations I am making with respect to the customer and energy forecasts is an increase of roughly 24,700 customers (296,624

1		bills) and an increase of 1,847 GWh in energy sales in 2026. In 2027, I recommend a
2		cumulative increase of just over 36,000 customers representing 432,666 bills and 2,068
3		GWh. A summary is provided in Exhibit JMT-2.
4		
5		II.C Peak Demand
6	Q.	PLEASE SUMMARIZE FPL'S DEMAND FORECAST.
7	A.	FPL uses econometric models to forecast summer and winter peak demands for the
8		FPLE and NWFL regions. The four models include the following independent
9		variables:
10		• FPLE Summer – the maximum and minimum temperatures on the peak day, non-
11		agricultural employment, a variable representing energy efficiency savings, and an
12		indicator variable ⁹ for 2020;
13		• FPLE Winter – minimum temperature on the peak day, a morning temperature on
14		the day prior to the peak, non-agricultural employment; and a variety of indicator
15		variables;
16		• NWFL Summer – maximum temperature on the day of the peak, non-agricultural
17		employment, and a variable to represent the impact of codes and standards;
18		• NWFL Winter – minimum temperature on the day of the peak, total population,
19		and a variable to represent the impact of codes and standards. ¹⁰
20		They then generate an hourly load profile for each region, aggregate them to produce a

⁹ An indicator variable (also sometimes called a binary or "dummy" variable) is a variable that has a value of 1 for certain data points and a value of 0 for all other data points. They are often used to control for unusual circumstances known to be in the historical data series that are often single instance events, such as a major storm. ¹⁰ Model variables are included in MFR F-05, Attachment 2.

	combined hourly load profile, and then determine the combined summer and winter
	peak demands which they call a "consolidated peak". The forecasted consolidated peak
	demands for the summer are 28,664 MW in 2026 and 28,925 MW in 2027. Winter peak
	demands for 2026 and 2027 are 23,323 MW and 23,648 MW, respectively.
Q.	DO YOU HAVE ANY CONCERNS ABOUT FPL'S PEAK DEMAND
	FORECAST?
A.	Yes. I have a few concerns:
	• I have a concern with the lack of a consistent modeling theory with respect to peak
	demands. Three of the four models include a variable for energy efficiency impacts
	and one does not. Three of the four use employment as an economic driver and one
	uses population. One of the four models includes an indicator variable for 2020
	while the others do not;
	• I am also not convinced that for those models that include codes & standards
	variables that efficiency impacts are not being double-counted since a DSM
	adjustment is also made; and
	• The demand models are completely independent of the energy forecasts. Energy
	and peak demand are, of course, highly correlated with each other. Considerable
	effort is put into a bottom-up forecast by FPL, in which trends in residential,
	commercial, and industrial energy needs are forecasted and aggregated. The
	relative growth-rates of the different sectors is likely to impact peak demand growth
	rates. Figure 3 shows historical and projected load factors for the summer and
	winter seasons based on FPL's load forecast. As can be seen, FPL is projecting load 18
	Q. A.

factor to decline over time, which is inconsistent with the historical period shown in the Figure.

Annual Load Factors FPL Load Forecast 100.00% 90.00% 80.00% 70.00% 60.00% 50.00% 40.00% 2014 2015 2016 2017 2013 2019 2019 2020 2020 202 023 2024 026 023 South 031 032 2033 2034 2035 2036 2036 2038 2038 2038 2038 2038 2038 2038 2040 Summer --- Winter

Figure 3: Summer and Winter Load Factors

4

1

2

3

5 Q. WHAT DO YOU RECOMMEND TO REMEDY THESE CONCERNS?

6 Α. I recommend using a constant load factor for the forecast period. Peaks can then be 7 computed as the average load factor applied to net energy for load. This assumption means that, for this case, peak demands and energy would grow at the same rate. I 8 recommend using a 10-year average of 2014-2023 load factors, which I derived from 9 10 data in FPL's 2024 10-Year Site Plan. A ten-year average would be consistent with the 11 ten-year average recommendation for normal weather. My recommendation is to use a 12 summer load factor of 59.4% and a winter load factor of 79.5%. Figure 4 provides a comparison of FPL's forecasted load factors versus my recommendation. 13



2

3 Q. WHAT IS YOUR RESULTANT RECOMMENDED PEAK DEMAND?

A. Applying my recommended load factors to my adjusted net energy for load results in a
decrease in peak demands. As shown in Table 5, I am recommending a downward
adjustment of nearly 500 MW for summer peaks and a downward adjustment of over
2,000 MW in winter peaks.

8

Table 5: Recommended Peak Demand Adjustments

		_	2026							
_	Line.	Item	FPL	Adj.	JMT	Adjustment	FPL	Adj.	JMT	Adjustment
_	1	Total Delivered (MWH)	136,773,946	1,847,114	138,621,060		137,600,753	2,068,311	139,669,064	
	2	Losses plus Own Use (MWH	7,912,754	106,861	8,019,615		7,960,587	119,658	8,080,245	
	3	Net Energy for Load (MWH)	144,686,700	1,953,975	146,640,675		145,561,340	2,187,969	147,749,309	
	4	Loss %	5.47%	5.47%	5.47%		5.47%	5.47%	5.47%	
	5	Summer Peak (MW)	28,664		28,205	(459)	2 8,9 25		28,418	(507)
	б	Summer LF	57.6%		59.35%		57.4%		59.35%	
	7	Winter Peak (MW)	23,323		21,068	(2,255)	23,648		21,228	(2,421)
9	8	Winter LF	70.8%		79.45%		70.3%		7 9 .45%	

1

1		III. PRESENT RATE REVENUE ADJUSTMENTS
2	Q.	ARE YOU RECOMMENDING ANY PRESENT RATE REVENUE
3		ADJUSTMENTS?
4	А.	Yes. I am recommending adjustments to present rate revenues that correspond to the
5		adjustments I am recommending in the load forecast. I will discuss the revenue
6		adjustments for each class in turn.
7		
8	Q.	PLEASE EXPLAIN YOUR RECOMMENDED RESIDENTIAL REVENUE
9		ADJUSTMENT.
10	А.	For the residential class adjustment, I used the present RS-1 residential rate. I used
11		FPL's projected split of TY energy in the "First 1,000 kWh" and "Over 1,000 kWh"
12		energy blocks and applied it to my residential energy adjustment amount to determine
13		the amount of energy in each block. This computation results in an upward adjustment
14		of nearly \$105 million in 2026 and \$120 million in 2027. (See Exhibit JMT-3).
15		
16	Q.	PLEASE EXPLAIN YOUR RECOMMENDED COMMERCIAL REVENUE
17		ADJUSTMENT.
18	A.	For the commercial adjustments, I assumed the adjustments would flow through the
19		GS-1 General Service and GSD-1 General Service Demand rate schedules. I assumed
20		the number of customers and energy would be split in similar proportions to FPL's
21		projected TY billing units in those two rates. I added demand in the GSD-1 rate by
22		applying the FPL TY GSD-1 load factor to the GSD-1 energy adjustment amount. This
23		results in a decrease in base charges and an increase in non-fuel energy and demand

1 2 charges. The net impact is an increase of present rate revenues of just under \$23 million in 2026 and nearly \$24 million in 2027.

- 3
- 4
- 5

Q. PLEASE EXPLAIN YOUR RECOMMENDED INDUSTRIAL REVENUE ADJUSTMENT.

6 A. For the industrial adjustments, I assumed the adjustments would flow through the GS-7 1 General Service, the GSD-1 General Service Demand, and the GSLD-1 General 8 Service Large Demand rate schedules. I assumed the number of customers and energy 9 would be split in similar proportions to FPL's projected TY billing units in those three 10 rates. I added demand in the GSD-1 and GSLD-1 rates by applying the FPL TY load 11 factors to the energy adjustment amounts in each rate. This results in a decrease in base 12 charges and an increase in non-fuel energy and demand charges. The net impact is an 13 increase of present rate revenues of \$6.3 million in 2026 and \$6.4 million in 2027.

14

15 Q. PLEASE EXPLAIN YOUR RECOMMENDED STREET LIGHTING 16 REVENUE ADJUSTMENT.

A. The street lighting classification revenue calculation is complicated by the fact that the number of customers is not directly tied to the number of devices and that there are street lighting rates that do and do not meter and charge for energy. Given that I am recommending an energy decrease to this class, I felt it would be unfair to FPL to assume all of the adjustments would come from unmetered lighting. Therefore, I have assumed the adjustment is reflective of adjustments to SL-1 and SL-1 Metered rates. For energy, I used FPL's TY energy split between the two schedules (75.5% of energy

1		is in SL-1 based on FPL's estimated energy per device and number of devices). Then,								
2		for SL-1 Metered base charges, I used FPL's TY energy per bill and applied that factor								
3		to the SL-1 Metered energy. For SL-1, I applied FPL's TY average energy per device								
4		to compute the number of devices. I then applied FPL's TY average revenue per device								
5		times the derived number of devices to get the revenue impact. In total, I recommend a								
6		downward adjustment of \$170 thousand dollars for street lighting in 2026 and 2027.								
7										
8	Q.	PLEASE EXPLAIN YOUR RECOMMENDED METRO REVENUE								
9		ADJUSTMENT.								
10	A.	Simple application of the Metro rate to recommended Metro adjusted energy sales								
11		results in my recommendation to reduce Metro revenue by \$86 thousand per year.								
12										
13	Q.	CAN YOU SUMMARIZE YOUR REVENUE ADJUSTMENT								
14		RECOMMENDATIONS?								
15	А.	My recommended present rate revenue adjustments are summarized in Exhibit JMT-3								
16		and in Table 5. In total, I am recommending an increase to present base rate revenues								
17		of \$133,031,551 in 2026 and \$150,474,873 in 2027.								

Table 5: Summary of Recommended Present Rate Revenue Adjustments

		2026				
	Residential	Commercial	Industrial	Street Lights	METRO	Total
Base Charges	\$3,243,452	(\$198,268)	(\$428,537)	(\$2,792,761)	\$0	(\$176,114)
Non-Fuel Energy Charges	\$104,381,866	\$14,007,521	\$3,739,588	(\$169,880)	(\$85,573)	\$121,873,523
Demand Charges	\$0	\$8,767,950	\$2,566,192	\$0	\$0	\$11,334,143
Total Revenue Adjustment	\$107,625,318	\$22,577,204	\$5,877,243	(\$2,962,641)	(\$85,573)	\$133,031,551

		2027				
	Residential	Commercial	Industrial	Street Lights	METRO	Total
Base Charges	\$4,546,433	(\$198,268)	(\$421,476)	(\$2,934,783)	\$0	\$991,907
Non-Fuel Energy Charges	\$119,462,053	\$14,709,251	\$3,771,694	(\$169,880)	(\$85,573)	\$137,687,546
Demand Charges	\$0	\$9,207,195	\$2,588,225	\$0	\$0	\$11,795,420
Total Revenue Adjustment	\$124,008,487	\$23,718,179	\$5,938,443	(\$3,104,663)	(\$85,573)	\$150,474,873

3

4

2

1

IV. SUMMARY OF RECOMMENDATIONS & CONCLUSIONS

5

6

Q. CAN YOU SUMMARIZE YOUR RECOMMENDATIONS WITH RESPECT TO LOAD FORECASTING?

7 A. I recommend several adjustments be made to FPL's load forecast. I recommend 8 adjustments to the number of customers by sector, with updates made to reflect the most recently known actual customer counts. For energy sales, I recommend 9 10 adjustments to reflect adjusted number of customers, a change to a ten-year normal for 11 defining normal weather variables, adjustments to reflect current modeling impacts, and removal of the DSM post-modeling adjustment made by FPL. As shown in Exhibit 12 13 JMT-2, my recommendation is to add nearly 25,000 customers and 1.8 million MWh 14 to FPL's 2026 forecast. Finally, I recommend using a ten-year average load factor applied to net energy for load to produce adjusted peak demand forecasts. The 15 16 recommendation results in a downward adjustment of approximately 500 MW in summer peak demands and over 2,000 MW in winter peak demands, as shown in 17 Exhibit JMT-2. 18

1Q.CANYOUSUMMARIZEYOURRECOMMENDATIONSFOR2ADJUSTMENTS TO BASE RATE REVENUES.

- A. I applied various present base rates to the residential, commercial, industrial, street
 lighting, and metro forecast adjustments that I am recommending. This produces a
 recommended adjustment to present base rate revenues. As shown in Exhibit JMT-3,
 this results in a recommended additional \$133,031,551 in base rate revenue under
 present rates in 2026 and an additional \$150,474,873 in 2027.
- 8

9 Q. DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?

10 A. Yes, it does.

CONTACT

- 770-425-8100
- ⊠ Jacob.thomas@gdsassociates.com
- gdsassociates.com
- O Marietta GA 30067

EDUCATION

Master of Business Administration, Finance, Auburn University, 2006

Bachelor of Science in Industrial Engineering, Cooperative Program, With Highest Honors, Georgia Institute of Technology, 2000

P R O F E S S I O N A L A F F I L I A T I O N S / C E R T I F I C A T I O N S

Registered Professional Engineer in the State of Georgia

American Statistical Association (ASA)

EXPERTISE

Financial Forecasting Load Research Cost of Service Studies Retail Rate Design Economic Impact Analyses Benefit Cost Analyses

JACOB Thomas

PRINCIPAL, P.E.

PROFESSIONAL EXPERIENCE

GDS Associates, Inc., 1996-Present

Principal

Jacob is a Principal at GDS Associates, working in our Distribution Services department. He has over 25 years of experience in utility consulting, including demonstrated expertise in load forecasting, load research, economic impact analysis, DSM impact evaluation, demand response potential analysis, financial forecasting, and retail and wholesale cost of service and rate design. Jacob has also been an expert witness or has been a subject matter expert working on behalf of various intervenors and public agencies in several states, has made presentations at regional and national conferences, and has performed training in the areas of cost of service and load forecasting.

SELECT PROJECT EXPERIENCE

- Development of short-term and long-term load forecasts for electric and gas utilities. Modeling approaches have included econometric, exponential smoothing, end-use, Statistically Adjusted End-use (SAE), neural networks, and assorted machine learning algorithms. Also has audited load forecasts and load forecasting processes and provided expert testimony on load forecasting in several jurisdictions.
- Managed multiple cost of service and retail rate studies on behalf of cooperative, municipal, and public power utilities. Work has included development and defense of revenue requirements, cost of service, and retail rate design. Mr. Thomas has supported his studies in presentations before Boards of Directors, Utility Commissions, and City Councils.
- Innovative rate design for multiple utilities, including development of residential demand charges, time-of-use rate design, subscription service rates, industrial contract rates, interruptible, electric vehicle time-of-use, value of solar, and net metering.
- Prepared financial forecasts, including development of scenarios related to capital expenditure, equity planning, capital credit retirement planning, analysis of debt payoff, and other financial metrics. He has also developed financial forecasting models to measure the impact of municipal annexation of cooperative territory on both entities and for all ratepayers.
- Wholesale cost of service and rate design projects for Generation & Transmission Cooperatives. Work has included evaluation of cost allocation approaches, development of proprietary cost of service models for use by utilities, and development of rate design alternatives. Work includes development of member cooperative impact analyses and presentations to the Board of Directors.
- Economic impact analysis of continued operation of nuclear power plant in Vermont. Analysis included impacts to Vermont economy in general, Vermont government, and in-state utility ratepayers. Prepared testimony as an expert witness on economic analysis on behalf of the Department of Public Service.
- Statistical load impact analysis of various demand side management programs, including evaluation of residential behavioral program, custom commercial and industrial demand response program, direct control thermostat and water heater programs, and critical peak pricing pilot programs.



Docket No. 20250011-EI Resume of Jacob M. Thomas Exhibit JMT-1, Page 1 of 2



Docket No. 20250011-EI Resume of Jacob M. Thomas Exhibit JMT-1, Page 2 of 2

CONTACT

- **C** 770-425-8100
- ☑ Jacob.thomas@gdsassociates.com
- gdsassociates.com
- Marietta GA 30067

JACOB Thomas

PRINCIPAL, P.E.

PROJECT EXPERIENCE [continued]

 Developed benefit-cost analysis and market potential studies for demand response programs for multiple utilities. Evaluated program design, developed avoided cost benefit assumptions, and analyzed technical, economic, and achievable potential estimates.

PUBLICATIONS

- Smart Grid Application Guide: Integrating Facilities with the Electric Grid. American Society of Heating, Refrigeration and Air-Conditioning Engineers.
- Distributed Energy Generation Compensation and Cost Recovery Guide. National Rural Electric Cooperative Association.
- AMP Focus Forward Member Toolkit: Preparing for Distributed Energy Future. American Public Power.
- "Residential Behavioral Program Persistence Effects in Pennsylvania." Summer Study on Energy Efficiency in Buildings. 2016. American Council for an Energy-Efficient Economy.

SOFTWARE/PROGRAMMING EXPERIENCE

Statistical Analysis System (SAS), Visual Basic, Microsoft Office, MetrixND forecasting software, Crystal Ball simulation software, IMPLAN Economic Input/Output Analysis software, Lotus 1-2-3, Word Perfect, Quatro Pro, OrgPlus, SQL, Minitab

REGULATORY EXPERIENCE

Federal Energy Regulatory Commission, Docket No.ER23-255-001

Georgia Public Service Commission, Docket No.44160 and No. 44161

Indiana Utility Regulatory Commission, Cause No. 44967

Maryland Public Service Commission, Case No. 9695 and Case No. 9744

Michigan Public Service Commission, Case No. U-15701

North Carolina Utilities Commission, Docket No. E-22 Sub 532

North Dakota Public Service Commission, Case No. PU-16-666

South Carolina Public Service Authority, Docket No. 2023-154-E

Utah Public Service Commission, Docket No. 16-035-36

Vermont Public Service Board, Docket No. 7440, Case No. 18-0974-TF, Case No. 21-3707-PET, Case No. 21-0898-TF, Case No. 22-0175-TF, Case No. 23-0561-TF, and Case No. 23-3501-PET



Line No.	Item	Residential	Commercial	Industrial	Street Lights	METRO	Total
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
			2026				
1	Adjustment to Number of Customers	28,126	(1,068)	(2,288)	(51)	-	24,719
2	Adjustment to Number of Bills	337,508	(12,816)	(27,456)	(612)	-	296,624
	Adjustment to MWh Sales:						
3	10-Year Weather Normalization	912,120	457,383	-	-	-	1,369,504
4	Change in Number of Bills	365,598	(87,282)	1,900	-	-	280,216
5	Calibrate to Actual	-	-	102,113	(19,828)	(3,735)	
6	DSM Adjustment Removal	118,844	-	-	-	-	118,844
7	Total Energy Adjustment (MWH)	1,396,563	370,102	104,013	(19,828)	(3,735)	1,847,114
8	Summer Peak Demand Adjustment (MW)						(459)
9	Winter Peak Demand Adjustment (MW)						(2,255)
			2027				
10	Adjustment to Number of Customers	39,425	(1,068)	(2,250)	(51)	-	36,056
11	Adjustment to Number of Bills	473,094	(12,816)	(27,000)	(612)	-	432,666
	Adjustment to MWh Sales:						
12	10-Year Weather Normalization	922,683	475,135	-	-	-	1,397,818
13	Change in Number of Bills	509,473	(86,493)	2,793	-	-	425,774
14	Calibrate to Actual	-	-	102,113	(19,828)	(3,735)	
15	DSM Adjustment Removal	166,170	-	-	-	-	166,170
16	Total Energy Adjustment (MWH)	1,598,326	388,642	104,906	(19,828)	(3,735)	2,068,311
17	Summer Peak Demand Adjustment (MW)						(507)
18	Winter Peak Demand Adjustment (MW)						(2,421)

SUMMARY OF LOAD FORECAST ADJUSTMENTS

SUMMARY OF REVENUE ADJUSTMENTS

Line No.	Item	Residential	Commercial	Industrial	Street Lights	METRO	Total
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
			2026				
1	Base Charges	\$3,243,452	(\$198,268)	(\$428,537)	(\$2,792,761)	\$0	(\$176,114)
2	Non-Fuel Energy Charges	\$104,381,866	\$14,007,521	\$3,739,588	(\$169,880)	(\$85,573)	\$121,873,523
3	Demand Charges	\$0	\$8,767,950	\$2,566,192	\$0	\$0	\$11,334,143
4	Total Revenue Adjustment	\$107,625,318	\$22,577,204	\$5,877,243	(\$2,962,641)	(\$85,573)	\$133,031,551

			2027				
		Residential	Commercial	Industrial	Street Lights	METRO	Total
5	Base Charges	\$4,546,433	(\$198,268)	(\$421,476)	(\$2,934,783)	\$0	\$991,907
6	Non-Fuel Energy Charges	\$119,462,053	\$14,709,251	\$3,771,694	(\$169,880)	(\$85,573)	\$137,687,546
7	Demand Charges	\$0	\$9,207,195	\$2,588,225	\$0	\$0	\$11,795,420
8	Total Revenue Adjustment	\$124,008,487	\$23,718,179	\$5,938,443	(\$3,104,663)	(\$85,573)	\$150,474,873

RESIDENTIAL REVENUE ADJUSTMENTS Based on RS-1 - Residential

			2026			2027	
Line No.	Item	Units Adj.	Present Rate	Revenue Adj.	Units Adj.	Present Rate	Revenue Adj.
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1	Base Charges	337,508	\$9.61	\$3,243,452	473,094	\$9.61	\$4,546,433
	Non-Fuel Energy Charges						
2	First 1,000 kWh	965,934,945	\$0.07164	\$69,199,579	1,105,484,856	\$0.07164	\$79,196,935
3	All additional kWh	430,627,743	\$0.08170	\$35,182,287	492,841,106	\$0.08170	\$40,265,118
4	Total	1,396,562,688		\$104,381,866	1,598,325,962		\$119,462,053
5	Total Revenue Adjustment			\$107,625,318			\$124,008,487
	Present Billing Units:						
6	First 1,000 kWh	48,377,303,609	69.2%				
7	All additional kWh	21,567,300,294	30.8%				
8	Total	69,944,603,902					

COMMERCIAL REVENUE ADJUSTMENTS

Based on splits between GS-1 General Service and GSD-1 General Service Demand

Item (b) harges:	Units Adj. (c) (10,916) (1,900) (12,816)	Present Rate (d) \$12.87 \$30.41	Revenue Adj. (e) (\$140,489) (\$57,779) (\$198,268)	Units Adj. (f) (10,916) (1,900)	Present Rate (g) \$12.87 \$30.41	Revenue Adj. (h) (\$140,489)
(b) harges:	(c) (10,916) (1,900) (12,816)	(d) \$12.87 \$30.41	(e) (\$140,489) (\$57,779) (\$198,268)	(f) (10,916) (1,900)	(g) \$12.87 \$30.41	(h) (\$140,489)
harges:	(10,916) (1,900) (12,816)	\$12.87 \$30.41	(\$140,489) (\$57,779) (\$198,268)	(10,916) (1,900)	\$12.87 \$30.41	(\$140,489)
harges:	(10,916) (1,900) (12,816)	\$12.87 \$30.41	(\$140,489) (\$57,779) (\$198,268)	(10,916) (1,900)	\$12.87 \$30.41	(\$140,489)
harges:	(1,900) (12,816)	\$30.41	(\$57,779)	(1,900)	\$30.41	
harges:	(12,816)		(\$198,268)		450.41	(\$57,779)
harges:			(+,,	(12,816)		(\$198,268)
	96,632,815	\$0.07282	\$7,036,802	101,473,795	\$0.07282	\$7,389,322
	273,468,802	\$0.02549	\$6,970,720	287,168,675	\$0.02549	\$7,319,930
	370,101,617		\$14,007,521	388,642,470		\$14,709,251
	-	\$0.00	\$0	-	\$0.00	\$0
	765,092	\$11.46	\$8,767,950	803,420	\$11.46	\$9,207,195
	765,092		\$8,767,950	803,420		\$9,207,195
djustment			\$22,577,204			\$23,718,179
•	ljustment	- 765,092 765,092	- \$0.00 765,092 \$11.46 765,092	- \$0.00 \$0 765,092 \$11.46 \$8,767,950 765,092 \$8,767,950 Ijustment \$22,577,204	- \$0.00 \$0 - 765,092 \$11.46 \$8,767,950 803,420 765,092 \$8,767,950 803,420 ljustment \$22,577,204	- \$0.00 \$0 - \$0.00 765,092 \$11.46 \$8,767,950 803,420 \$11.46 765,092 \$8,767,950 803,420 ljustment \$22,577,204

	No. of Bills						
1	GS-1	6,540,050	85.2%				
2	GSD-1	1,138,584	14.8%				
	Energy:						
	GS-1	8,214,258,257	26.1%				
	GSD-1	23,246,175,494	73.9%				
	Demand:						
	GS-1	n/a					
	GSD-1	65,036,503					

INDUSTRIAL REVENUE ADJUSTMENTS

Based on splits between GS-1 General Service, GSD-1 General Service Demand, and GSLD-1 General Service Large Demand

		2026			2027		
Line No.	Item	Units Adj.	Present Rate	Revenue Adj.	Units Adj.	Present Rate	Revenue Adj.
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
	Base Charges:						
1	GS-1	(23,341)	\$12.87	(\$300,399)	(22,953)	\$12.87	(\$295,405)
2	GSD-1	(4,064)	\$30.41	(\$123,586)	(3,996)	\$30.41	(\$121,518)
3	GSLD-1	(51)	\$89.26	(\$4,552)	(51)	\$89.26	(\$4,552)
4	Total	(27,456)		(\$428,537)	(27,000)		(\$421,476)
	Non-Fuel Energy Charges:						
5	GS-1	24,320,757	\$0.07282	\$1,771,038	24,529,562	\$0.07282	\$1,786,243
6	GSD-1	68,827,222	\$0.02549	\$1,754,406	69,418,137	\$0.02549	\$1,769,468
7	GSLD-1	10,864,777	\$0.01971	\$214,145	10,958,057	\$0.01971	\$215,983
8	Total	104,012,757		\$3,739,588	104,905,757		\$3,771,694
	Demand Charges:						
9	GS-1	-	\$0.00	\$0	-	\$0.00	\$0
10	GSD-1	192,560	\$11.46	\$2,206,737	194,213	\$11.46	\$2,225,683
11	GSLD-1	26,276	\$13.68	\$359,456	26,502	\$13.68	\$362,542
12	Total	218,836		\$2,566,192	220,715		\$2,588,225
1.2							AF 030 443

13 Total Revenue Adjustment

\$5,877,243

\$5,938,443

PRESENT BILLING UNITS TO ESTABLISH RELATIONSHIPS

	No. of Bills		
14	GS-1	6,540,050	85.0%
15	GSD-1	1,138,584	14.8%
16	GSLD-1	14,376	0.2%
	Energy:		
17	GS-1	8,214,258,257	23.4%
18	GSD-1	23,246,175,494	66.2%
19	GSLD-1	3,669,544,161	10.4%
	Demand:		
20	CR 1	n /a	

20	GS-1	n/a
21	GSD-1	65,036,503
22	GSLD-1	8,874,637

STREET LIGHTING REVENUE ADJUSTMENTS Based on split betwwen SL-1 Street Lighting and SL-1 MMetered Street Lighting

			2026			2027	
Line No.	Item	Units Adj.	Present Rate	Revenue Adj.	Units Adj.	Present Rate	Revenue Adj.
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1	Total No. of Customers Adjustment	(612)			(612)		
2	Total kWh Adjustment	(19,827,597)			(19,827,597)		
	SL-1M Revenues:						
3	Non-Fuel Energy Charges	(4,862,055)	\$0.03494	(\$169,880)	(4,862,055)	\$0.03494	(\$169,880)
4	Base Charges	(1,610)	\$17.30	(\$27,859)	(1,610)	\$17.30	(\$27,859)
5	Total SL-1M Revenues		-	(\$197,739)			(\$197,739)
	SL-1 Revenues:						
6	Energy Adjustment	(14,965,542)			(14,965,542)		
7	No. of Device s @ Avg kWh per Device	(159,048)	\$17.38	(\$2,764,902)	(159,048)	\$17.38	(\$2,764,902)
8	Total Street Lighitng Revenue Adjustment			(\$2,962,641)			(\$2,962,641)
	FPI Test Veer Energy]				
9	SL-1	115 034 568	75 5%				
10	SL-1M	37,372,815	24.5%				
	FPL Test Year Data for SL-1M:						
11	Number of Bills	12.378					
12	kWh Sales	37,372,815					
13	kWh per Bill	3,019					
	FPL Test Year Data for SL-1:						
14	Total Revenue	\$21,252,778					
15	No. of Devices	1,222,544					
16	Avg Revenue per Device	\$17.38					
17	Avg kWh per Device	94					

			2026		2	2027	
Line No.	Item	Units Adj.	Present Rate	Revenue Adj.	Units Adj. Pro	esent Rate	Revenue Adj.
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
1	Base Charges	-	\$811.96	\$0	-	\$811.96	\$0
2	Non-Fuel Energy Charges	(3,735,161)	\$0.02291	(\$85,573)	(3,735,161)	\$0.02291	(\$85,573)
3	Total Revenue Adjustment			(\$85,573)			(\$85,573)

METRO REVENUE ADJUSTMENTS Based on Tarijf 80-MET-1 - Metropolitan Transit Service(Metrorail)

Florida Power & Light Company Docket No. 20250011-EI Staffs First Set of Interrogatories Interrogatory No. 6 Page 1 of 1

QUESTION:

For MFR Schedule F-7, beginning with the first data point (month/year) that FPL used for its customer and sales projections to the most recent available actual monthly data point, please provide the following:

- a. For each rate class, a side-by-side comparison of FPL's then-projected monthly forecasts to FPL's actual monthly result, including both quantity and percent differences.
- b. A causative explanation for any deviations greater than 10 percent for sales and demand forecasts and 2 percent for customer forecasts.

RESPONSE:

Please see Attachment No. 1 for the requested information.

Florida Power & Light Company Docket No. 20250011-EI Staff's First Set of Interrogatories Interrogatory No. 6 Attachment No. 1 of 1 Tab 1 of 2

Customers

Date	RESI Fcst	Actual	Difference	Percent Diff
Jul-24	4,842,459	4,845,710	-3,251	-0.1%
Aug-24	4,847,778	4,853,240	-5,462	-0.1%
Sep-24	4,853,103	4,861,115	-8,012	-0.2%
Oct-24	4,858,418	4,866,604	-8,186	-0.2%
Nov-24	4,863,715	4,871,091	-7,376	-0.2%
Dec-24	4,868,980	4,876,092	-7,112	-0.1%
Jan-25	4,874,217	4,881,592	-7,375	-0.2%
Feb-25	4,879,431	4,889,299	-9,868	-0.2%

Billed Sales (kwh)

Date	RESI Fcst	Actual	Difference	Percent Diff
Jul-24	6,513,852,641	6,910,802,355	-396,949,714	-5.7%
Aug-24	6,435,693,928	6,820,928,045	-385,234,117	-5.6%
Sep-24	6,607,849,187	6,689,041,785	-81,192,598	-1.2%
Oct-24	5,828,575,971	5,991,386,417	-162,810,446	-2.7%
Nov-24	4,906,901,770	5,036,930,270	-130,028,500	-2.6%
Dec-24	4,424,683,513	4,296,448,143	128,235,370	3.0%
Jan-25	4,579,265,117	4,426,522,625	152,742,492	3.5%
Feb-25	4,386,815,773	4,573,568,952	-186,753,179	-4.1%

Explanations

FPLE Industrial Customers: FPLE Other Sales: FPLE Metro Sales: A decline in GS-1 industrial customers from 10/24 - 2/25Increase in usage for the GSLDT-3 rate from 11/24 - 1/25A decline in usage for the metro rate class

COM Fest	Actual	Difference	Percent Diff
595,149	595,118	31	0.0%
595,749	596,059	-310	-0.1%
596,350	597,085	-735	-0.1%
596,951	597,875	-924	-0.2%
597,552	598,416	-864	-0.1%
598,150	598,731	-581	-0.1%
598,763	598,517	246	0.0%
599,372	598,420	952	0.2%

COM Fest	Actual	Difference	Percent Diff
4,534,500,079	4,643,486,122	-108,986,043	-2.3%
4,404,309,324	4,581,671,627	-177,362,303	-3.9%
4,568,509,933	4,699,333,002	-130,823,069	-2.8%
4,292,126,517	4,328,730,548	-36,604,031	-0.8%
3,993,788,470	4,035,811,337	-42,022,867	-1.0%
3,826,838,052	3,700,617,645	126,220,407	3.4%
3,768,219,672	3,591,169,614	177,050,058	4.9%
3,660,846,465	3,706,738,030	-45,891,565	-1.2%

IND Fest	Actual	Difference	Percent Diff
15,584	15,362	222	1.4%
15,584	15,122	462	3.1%
15,581	14,493	1,088	7.5%
15,576	14,069	1,507	10.7%
15,570	13,827	1,743	12.6%
15,565	13,862	1,703	12.3%
15,562	13,118	2,444	18.6%
15,560	13,192	2,368	18.0%

IND Fest	Actual	Difference	Percent Diff
264,143,193	277,874,032	-13,730,839	-4.9%
269,051,077	279,536,655	-10,485,578	-3.8%
264,080,482	291,410,974	-27,330,492	-9.4%
255,554,485	269,483,301	-13,928,816	-5.2%
256,948,025	253,156,058	3,791,967	1.5%
254,502,330	253,366,491	1,135,839	0.4%
257,564,819	260,484,348	-2,919,529	-1.1%
255,295,420	243,859,984	11,435,436	4.7%

SHWY Fcst	Actual	Difference	Percent Diff
7,216	7,146	70	1.0%
7,239	7,180	59	0.8%
7,262	7,214	48	0.7%
7,283	7,256	27	0.4%
7,306	7,276	30	0.4%
7,329	7,309	20	0.3%
7,377	7,339	38	0.5%
7,426	7,375	51	0.7%

SHWY Fest	Actual	Difference	Percent Diff
36,423,827	34,041,398	2,382,429	7.0%
36,345,954	34,247,861	2,098,093	6.1%
36,268,080	34,811,131	1,456,949	4.2%
36,190,206	34,380,640	1,809,566	5.3%
36,112,334	33,235,190	2,877,144	8.7%
36,034,460	37,207,484	-1,173,024	-3.2%
35,785,824	33,419,610	2,366,214	7.1%
35,537,192	34,136,165	1,401,027	4.1%

OTHR Fest	Actual	Difference	Percent Diff
157	157	0	0.0%
157	157	0	0.0%
157	157	0	0.0%
157	156	1	0.6%
157	156	1	0.6%
157	156	1	0.6%
157	154	3	1.9%
157	154	3	1.9%

OTHR Fcst	Actual	Difference	Percent Diff
1,883,175	1,907,073	-23,898	-1.3%
1,883,175	1,839,286	43,889	2.4%
1,883,175	1,898,235	-15,060	-0.8%
1,883,175	1,977,663	-94,488	-4.8%
1,883,175	4,323,276	-2,440,101	-56.4%
1,883,175	4,319,618	-2,436,443	-56.4%
1,883,175	2,298,907	-415,732	-18.1%
1,883,175	1,786,152	97,023	5.4%

METR Fest	Actual	Difference	Percent Diff
27	27	0	0.0%
27	27	0	0.0%
27	27	0	0.0%
27	27	0	0.0%
27	27	0	0.0%
27	27	0	0.0%
27	27	0	0.0%
27	27	0	0.0%

METR Fest	Actual	Difference	Percent Diff
5,747,404	5,971,326	-223,922	-3.7%
5,722,089	5,501,710	220,379	4.0%
5,707,248	5,658,951	48,297	0.9%
5,698,547	5,860,843	-162,296	-2.8%
5,693,447	5,194,993	498,454	9.6%
5,690,456	4,995,978	694,478	13.9%
6,029,515	5,112,069	917,446	17.9%
5,687,676	5,190,405	497,271	9.6%

Worksheet Tab "FPLE"

Florida Power & Light Company Docket No. 20250011-EI Staff's First Set of Interrogatories Interrogatory No. 6 Attachment No. 1 of 1 Tab 2 of 2

Customers

Date	RESI Fcst	Actual	Difference	Percent Diff
Jul-24	448,809	449,899	-1,090	-0.2%
Aug-24	449,247	450,657	-1,410	-0.3%
Sep-24	449,689	451,176	-1,487	-0.3%
Oct-24	450,133	452,287	-2,154	-0.5%
Nov-24	450,579	453,203	-2,624	-0.6%
Dec-24	451,024	453,816	-2,792	-0.6%
Jan-25	451,468	454,504	-3,036	-0.7%
Feb-25	451,914	455,033	-3,119	-0.7%

Billed Sales (kwh)

Date	RESI Fcst	Actual	Difference	Percent Diff
Jul-24	645,766,394	680,055,176	-34,288,782	-5.0%
Aug-24	616,489,432	660,337,512	-43,848,080	-6.6%
Sep-24	593,782,996	615,695,077	-21,912,081	-3.6%
Oct-24	483,589,566	486,814,448	-3,224,882	-0.7%
Nov-24	364,080,237	392,966,704	-28,886,467	-7.4%
Dec-24	407,357,758	404,257,746	3,100,012	0.8%
Jan-25	490,738,704	503,023,653	-12,284,949	-2.4%
Feb-25	470,916,396	491,978,785	-21,062,389	-4.3%

COM Fest	Actual	Difference	Percent Diff
55,36	3 55,427	-64	-0.1%
55,40	0 55,352	48	0.1%
55,43	9 55,415	24	0.0%
55,47	8 55,456	22	0.0%
55,52	2 55,409	113	0.2%
55,56	5 55,482	83	0.1%
55,61	1 55,450	161	0.3%
55,65	6 55,540	116	0.2%

COM Fcst	Actual	Difference	Percent Diff
382,147,104	406,695,724	-24,548,620	-6.0%
364,311,120	396,525,820	-32,214,700	-8.1%
369,177,391	391,594,776	-22,417,385	-5.7%
330,769,362	340,497,473	-9,728,111	-2.9%
292,554,946	300,953,241	-8,398,295	-2.8%
288,584,966	274,999,006	13,585,960	4.9%
300,769,068	287,618,143	13,150,925	4.6%
290,182,608	294,880,658	-4,698,050	-1.6%

IND Fest	Actual	Difference	Percent Diff
206	206	0	0.0%
206	206	0	0.0%
206	206	0	0.0%
206	205	1	0.5%
206	205	1	0.5%
206	203	3	1.5%
206	203	3	1.5%
206	202	4	2.0%

IND Fest	Actual	Difference	Percent Diff
145,828,060	139,872,715	5,955,345	4.3%
146,204,036	154,832,582	-8,628,546	-5.6%
151,069,502	154,984,998	-3,915,496	-2.5%
140,065,375	148,363,986	-8,298,611	-5.6%
136,935,387	139,730,702	-2,795,315	-2.0%
123,430,365	133,960,725	-10,530,360	-7.9%
113,279,448	104,995,110	8,284,338	7.9%
121,116,129	117,230,643	3,885,486	3.3%

Florida Power & Light Company Docket No. 20250011-EI OPC's Eleventh Set of Interrogatories Interrogatory No. 307 Page 1 of 1

QUESTION:

Revenue. Refer to the response to OPC's First Set of Interrogatories, No. 41. Clarify whether the January and February 2025 are actuals or projected. If actual, provide the projected and if projected provide the actual and explain why there was a decrease in industrial customers in 2024.

RESPONSE:

The January and February 2025 values presented in OPC's First Set of Interrogatories, No. 41 reflect actual customers. The table below provides projected customers for January and February 2025.

YEAR	MONTH	RES	СОМ	IND	MET	SHWY	OTHER	RETAIL
2025	1	5,325,685	654,374	15,768	27	7,377	157	6,003,388
2025	2	5,331,345	655,028	15,766	27	7,426	157	6,009,749

The decrease in industrial revenue class customers in 2024 was driven primarily by the decrease in temporary service accounts taking service from Rate Schedule GS-1.