Moyle
LAW FIRM

June 11, 2024

Electronic Filing

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

Re: Docket 20240025-EG Petition for Rate Case Increase by Duke Energy Florida, LLC

Dear Mr. Teitzman:

Please find attached the intervenor testimony of witness Jonathan Ly provided on behalf of the Florida Industrial Power Users Group ("FIPUG").

Thank you for your assistance in filing this testimony.

Sincerely,

Jon C. Moyle, Jr.

Attachment
cc: All Parties of Record (with attachment)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for Rate Increase by Duke Energy Florida, LLC	**DOCKET NO. 20240025-EI** **Filed: June 11, 2024**

DIRECT TESTIMONY AND EXHIBITS OF JONATHAN LY

ON BEHALF OF
THE FLORIDA INDUSTRIAL POWER USERS GROUP

J. POLLOCK
INCORPORATED

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BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for Rate Increase by Duke Energy Florida, LLC	**DOCKET NO. 20240025-EI** **Filed: June 11, 2024**

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LIST OF EXHIBITS

GLOSSARY OF ACRONYMS

Term	Definition
DEF	Duke Energy Florida
EIA	Energy Information Administration
FIPUG	Florida Industrial Power Users Group
kW	Kilowatt
NPV	Net Present Value
NYMEX	New York Mercantile Exchange
Proposed Solar Projects	14 Solar Projects Proposed by DEF
PTC	Production Tax Credit

DIRECT TESTIMONY OF JONATHAN LY

Introduction and Qualifications

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Jonathan Ly, 1314 Welch Street, Unit A, Houston, TX 77006.

Q WHAT IS YOUR OCCUPATION AND BY WHOM ARE YOU EMPLOYED?

A I am a regulatory consultant affiliated with J. Pollock, Incorporated.

Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A I have a Bachelor of Arts degree in Integrative Biology from the University of California, Berkeley and a Master's degree in Energy and Earth Resources from the University of Texas at Austin. Since joining J. Pollock, Incorporated in 2018, I have participated in numerous regulatory proceedings regarding the ratemaking process, resource planning, certificates of convenience and necessity, and assessments of planned new resources in Arkansas, Florida, Georgia, Michigan, Minnesota, New Mexico, New York, North Carolina, Texas, and Wyoming. My qualifications are documented in **Appendix A**. A list of my appearances is provided in **Appendix B**.

Q ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

A I am testifying on behalf of the Florida Industrial Power Users Group (FIPUG). FIPUG members purchase electricity from Duke Energy Florida (DEF). They consume significant quantities of electricity, often around-the-clock, and require a reliable, affordably-priced supply of electricity to power their operations. Therefore, FIPUG members have a direct and substantial interest in the issued raised in and the outcome of this proceeding.

Q WHAT ISSUES DO YOU ADDRESS?

A I am addressing the cost-effectiveness of the 14 solar projects proposed by DEF for which it is seeking cost recovery in this base rate proceeding (hereinafter referred to as the Proposed Solar Projects). In addition, I also discuss the need for customer protections to balance the risk associated with these proposed solar resources between DEF and its customers.

Q ARE THERE ANY OTHER WITNESSES TESTIFYING ON BEHALF OF FLORIDA INDUSTRIAL POWER USERS GROUP?

A Yes. My colleague, Mr. Pollock, will address TECO's class cost-of-service study, class revenue allocation, and rate design.

Q ARE YOU SPONSORING ANY EXHIBITS WITH YOUR TESTIMONY?

A Yes. I am sponsoring **Exhibits JL-1** through **JL-3.**

Q DOES THE FACT THAT YOU ARE LIMITING YOUR TESTIMONY TO THE AFOREMENTIONED ISSUES MEAN THAT YOU ARE ENDORSING DEC'S OTHER PROPOSALS IN THIS CASE?

A No. One should not interpret the fact that I do not address every issue raised by DEF as support of its proposals.

Q PLEASE SUMMARIZE YOUR TESTIMONY.

A My findings and recommendations are as follows:

- The purported cost-effectiveness of the Proposed Solar Projects for which DEF is seeking cost recovery in this base rate proceeding are not supported by robust analysis. Further, DEF has not provided sensitivity analyses supporting the benefits of these projects under a range of capital and fuel cost assumptions.

- The net present value (NPV) benefits DEF claims would be achieved by the Proposed Solar Projects are based upon inflated natural gas prices. If future fuel prices are lower than DEF projects, these benefits could be diminished or even negated, thereby imposing an incremental cost on DEF's customers.

- Given the significant uncertainties surrounding the cost-effectiveness analysis, if the Commission approves the Proposed Solar Projects, it should also impose conditions to balance the risks of these resources between DEF and its customers.

- The Commission should implement a cost cap on the Proposed Solar Projects and establish a minimum capacity factor guarantee based upon DEF's projections.

- The Commission should also ensure that each of the Proposed Solar Projects entering rate base qualify for the production tax credits in an amount no less than projected by DEF, which should also be included as an offset to these projects' base revenue requirements when rate recovery is authorized.

Proposed Solar Projects

Q FOR WHAT PROJECTS IS DEF SEEKING COST RECOVERY IN THIS PROCEEDING?

A DEF is seeking cost recovery for fourteen solar projects. The characteristics of the fourteen Proposed Solar Projects are summarized in Table 1.

Table 1
Summary of Proposed Solar Projects

Project	Nameplate Capacity (MW)	Installed Cost ($/kW)	Annual Capacity Factor	In-Service Date
Bailey Mill Solar Center	74.9	$1,522	27%	March 2026
Half Moon Solar Senter	74.9	$1,522	27%	March 2026
Rattler Solar Center	74.9	$1,522	27%	March 2026
Sundance Solar Center	74.9	$1,522	27%	June 2025
Unnamed 2025 Solar Facility 1	74.9	$1,522	27%	June 2025
Unnamed 2025 Solar Facility 2	74.9	$1,522	27%	December 2025
Unnamed 2026 Solar Facility 1	74.9	$1,529	27%	2026

Table 1
Summary of Proposed Solar Projects

Project	Nameplate Capacity (MW)	Installed Cost ($/kW)	Annual Capacity Factor	In-Service Date
Unnamed 2026 Solar Facility 2	74.9	$1,529	27%	2026
Unnamed 2026 Solar Facility 3	74.9	$1,529	27%	2026
Unnamed 2026 Solar Facility 4	74.9	$1,529	27%	2026
Unnamed 2027 Solar Facility 1	74.9	$1,523	27%	2027
Unnamed 2027 Solar Facility 2	74.9	$1,523	27%	2027
Unnamed 2027 Solar Facility 3	74.9	$1,523	27%	2027
Unnamed 2027 Solar Facility 4	74.9	$1,523	27%	2027

Source: Direct Testimony of Vanessa Goff at 5–6 and 10–11; Exhibit BG-2; DEF Response to LULAC POD 2, 2024 Rate Case Solar Study CPVRR Results.

DEF's estimated total cost to construct the proposed Solar Projects is $1.598 billion, which translates into a capital cost of $1,524 per kilowatt (kW).[1] The capital cost includes all interconnection and upgrade costs.[2]

Q DOES DEF ASSERT THAT THE PROPOSED SOLAR PROJECTS WILL BENEFIT CUSTOMERS?

A Yes. DEF estimates that the NPV benefits of the Proposed Solar Projects are $550 million or approximately 34% of the projected capital costs.[3]

Q DO YOU HAVE ANY CONCERNS WITH THE PROPOSED SOLAR PROJECTS?

A Yes. First, the Proposed Solar Projects represent a $1.598 billion addition to rate base. The corresponding benefits are only a small fraction of the projected upfront

[1] Direct Testimony of Vanessa Goff at 4, 10–11.

[2] *Id*. at 10.

[3] Direct Testimony of Benjamin M. H. Borsch, Exhibit BMHB-3.

capital costs. Any material changes in the assumed capital costs, fuel savings, operating performance, and/or the magnitude of the applicable production tax credits (PTCs) could result in the costs exceeding the benefits. Thus, unless the Commission finds DEF's cost-effectiveness analysis to be sufficiently robust (that is, the benefits exceed the costs under a wide range of assumptions), the Proposed Solar Projects should not be approved.

Second, absent the PTCs, which apply during the first ten years of commercial operation, the Proposed Solar Projects would not be cost-effective. Thus, as a policy matter, the Commission should guarantee, at a minimum, that the PTCs flow through to customers based on projected performance – even if DEF is unable to monetize them. This PTC guarantee is discussed in more detail later.

Cost-Effectiveness Analysis

Q WHAT IS A COST-EFFECTIVENESS ANALYSIS?

A A cost-effectiveness analysis estimates the impact of a new generating project (or projects) by comparing system-wide costs and benefits both with and without the new project (or projects) over its (their) expected life (or lives). The analysis is typically conducted using a production cost simulation model. For example, DEF uses the EnCompass Expansion Planning and Production Cost model.[4] The costs associated with a new project are the incremental capital cost (both generation and transmission) and operating costs over the expected life. The benefits attributable to a new project are the capital, fuel, and non-fuel operating costs that a utility would avoid incurring with the addition of the new project. If the Commission finds that a project is not likely

[4] *Id*. at 17.

to be cost effective, it can protect ratepayers by declining to approve the project, thus saving customers from the capital, fuel, and non-fuel operating costs that would have been spent on the cost-ineffective project.

Because these new generating resources have expected lives of 30 years, a cost-effectiveness analysis must, by necessity, rely on assumptions about future load growth, inflation, commodity costs, financing costs, labor and materials costs, and operating performance. Given the wide range of required assumptions, it is customary to conduct a base case and several sensitivity studies to determine a range of possible outcomes.

Q HAS DEF CONDUCTED A COST-EFFECTIVENESS ANALYSIS OF THE PROPOSED SOLAR PROJECTS?

A Yes. The results of DEF's cost-effectiveness analysis are summarized in **Exhibit JL-1**.

Q WHAT DO THE RESULTS OF DEF'S COST-EFFECTIVENESS SHOW?

A The Proposed Solar Projects are only beneficial for customers because of the PTCs. In other words, absent taxpayer subsidies, the Proposed Solar Projects would not be cost-effective. Even considering the impact of these PTCs, the margin of benefit for the Proposed Solar Projects is only 34% of the projected incremental capital costs. These benefits are largely attributable to the forecast fuel savings associated with the Proposed Solar Projects. However, if these fuel savings were to diminish or otherwise fail to materialize, the cost-effectiveness of these facilities would be jeopardized.

Q DID DEF PRESENT ANY SENSITIVITY ANALYSES TO ASSESS THE COST AND BENEFITS FROM THE PROPOSED SOLAR PROJECTS IF EITHER FUTURE CAPITAL COSTS WERE HIGHER OR COMMODITY COSTS WERE LOWER THAN PROJECTED?

A No. DEF does not appear to have evaluated the Proposed Solar Projects using sensitivity cases which assume a wide range of possible future scenarios (*i.e.*, varying levels of capital costs for the solar projects or fuel prices aside from its base case assumptions). Therefore, the cost-effectiveness analysis is not supported by robust studies — as such, the results are not competent, substantial evidence in support of these projects.

Q DO YOU HAVE ANY SPECIFIC CONCERNS WITH THE PROJECTED FUEL COST SAVINGS?

A Yes. The projected fuel cost savings assume that Henry Hub natural gas prices forecasted by DEF will escalate by 2.2% on average per year. Furthermore, these assumptions are significantly higher than Henry Hub natural gas futures prices from the New York Mercantile Exchange (NYMEX) and projections produced by the Energy Information Administration (EIA), as shown in **Exhibit JL-2** and summarized in Table 2 below.

Table 2 Levelized Natural Gas Price Forecast 2024 Through 2036 ($/MMBtu)	
Description	**Levelized Cost***
DEF	$4.99
EIA Reference	$4.08
NYMEX Futures (30-Day Avg)	$3.97
NYMEX Futures (90-Day Avg)	$3.78
EIA High Oil & Gas Supply	$3.47
Sources: DEF Response to FIPUG ROG 4-51; EIA 2023 Annual Energy Outlook (Table 13); S&P Global Market Intelligence. * 6.83% Discount Rate.	

Additionally, DEF assumes that the Proposed Solar Projects will generate energy at an average annual capacity factor of 27% over the first 10 operating years of each of these facilities' lives, during which each facility would be eligible for PTCs. Meanwhile, the projected fuel savings are based on an average annual capacity factor of 27% over their expected lives. If these facilities fail to operate at such levels, the PTCs and system fuel savings associated with these plants would be diminished.

Q PLEASE DISCUSS THE EIA'S REFERENCE GAS FORECAST THAT IS INCLUDED IN TABLE 2.

A EIA's Reference natural gas price forecasts reflect the agency's base case assumptions. Although the levelized amounts included in Table 2 show that the EIA Reference forecast is similar to the NYMEX Futures prices, the EIA has consistently overstated natural gas prices under its Reference forecast. This is documented in **Exhibit JL-3**, which compares the EIA's Reference natural gas price forecasts

published in its Annual Energy Outlooks for the years 2017 – 2023 to actual spot gas prices over the time span. Further, the EIA has generally lowered its Reference gas forecast in successive editions of its Annual Energy Outlook. Consequently, little weight should be given to EIA's inflated Reference forecast. Because DEF's natural gas forecasts are even higher, they should also be disregarded.

Q WHAT IS THE EIA'S HIGH OIL AND GAS SUPPLY SCENARIO

A EIA describes its High Oil and Gas Supply scenario as follows:

> In the High Oil and Gas Supply case, we assume the estimated ultimate recovery per well to be 50% higher than in the Reference case for:
>
> • Tight oil, tight gas, and shale gas in the Lower 48 States
>
> • Undiscovered resources in Alaska
>
> • Offshore Lower 48 states
>
> Rates of technological improvement that reduce costs and increase productivity in the United States are also 50% higher than in the Reference case. The Liquid Fuels Market Module (LFMM) assumes crude oil pipeline and export capacity increases in the projection period to accommodate higher levels of domestic oil production.[5]

Q HAVE EIA'S HIGH OIL AND GAS SUPPLY FORECASTS PERFORMED BETTER THAN EIA'S REFERENCE FORECASTS?

A Yes. EIA's High Oil and Gas Supply scenario has consistently projected lower natural gas prices than its Reference forecasts. Therefore, although it is not perfect, this scenario has provided a more accurate forecast. As shown in **Exhibit JL-2**, NYMEX futures prices converge with the EIA's High Oil and Gas Supply forecast in the early to mid-2030s.

[5] U.S. Energy Information Administration, *Annual Energy Outlook: 2023 Case Descriptions* at 6 (Mar. 2023).

Q WHAT ARE NYMEX FUTURE PRICES?

A NYMEX natural gas futures prices (depicted by the orange lines in **Exhibit JL-2**) are based on average closing prices of futures contracts traded through 2036 at the Henry Hub. The Henry Hub is a natural gas pipeline in Louisiana that serves as the official delivery location for futures contracts on NYMEX. The 30-day average reflects the period from April 10 to May 21, 2024, and the 90-day average reflects the period from January 12 to May 21, 2024.

Q DO NYMEX FUTURES CONTRACT PRICES PROVIDE VALUABLE INFORMATION ABOUT FUTURE LONG-TERM ENERGY MARKET FUNDAMENTALS?

A Yes. Futures contracts are highly liquid in the near term, and futures prices are highly visible because they are widely disseminated by the various financial and commodity exchanges. Thus, futures contract prices are an important source of price discovery for sellers and producers, and they are an essential tool for making future production and consumption decisions. Further, they represent actual transactions between buyers and sellers who put real money at risk in their day-to-day operations. The NYMEX futures prices are based on an actual market.

Q PLEASE SUMMARIZE YOUR ASSESSMENT OF DEF'S NATURAL GAS PROJECTION.

A DEF's natural gas forecasts are significantly higher than forecasts developed by the EIA and futures prices for natural gas reflecting actual market expectations. Therefore, the Commission should be skeptical and cautious of accepting DEF's purported fuel savings attributable to the Proposed Solar Projects, and consequently, the overall cost-effectiveness of these projects.

Q HOW SHOULD THE COMMISSION ASSESS THE COST-EFFECTIVENESS ANALYSIS OF THE PROPOSED SOLAR PROJECTS?

A The Commission and its staff should rigorously review whether customers will actually benefit from the Proposed Solar Projects. Even under DEF's analysis, the Proposed Solar Projects are not cost-effective without the PTCs. When subjected to more scrutiny, it is clear that the projected benefits may not outweigh the projected costs, particularly if:

- Future commodity costs are lower than DEF has projected;
- Projected Solar Project costs are more expensive than projected; and
- Projected Solar Projects fail to produce energy at a 27% annual capacity factor over the first 10 years.

Therefore, if the Commission approves the Proposed Solar Projects, any rate base treatment should be contingent on providing specific and meaningful consumer protections.

Consumer Protections

Q RECOGNIZING YOUR CONCERNS ABOUT THE LACK OF SENSITIVITY ANALYSES IN DEF'S COST-EFFECTIVENESS ANALYSIS, SHOULD THE COMMISSION IMPOSE CONDITIONS TO ESTABLISH A MORE BALANCED RISK APPORTIONMENT BETWEEN DEF AND ITS CUSTOMERS?

A Yes. There are several measures that should be implemented to provide a more balanced risk apportionment, including:

- Imposing a cap on the construction costs;
- Establishing a performance standard for the Proposed Solar Projects; and

- Providing a guarantee that the Proposed Solar Projects are fully eligible to receive PTCs and that all PTCs (grossed up for taxes) will be flowed through to DEF's customers in an amount no less than DEF has projected.

Q WHAT COST CAP FOR THE SOLAR FACILITIES DO YOU RECOMMEND?

A I recommend a cost cap of $1,524 per kW, which is DEF's projected cost of the Proposed Solar Projects. This amount represents the total estimated costs of the Proposed Solar Projects of $1.598 billion divided by the total nameplate capacity of 1,048.6 MW.

Q SHOULD ANY OTHER ALLOWANCES BE REFLECTED IN THE CONSTRUCTION COST CAPS?

A No. The projected installed cost already includes contingency allowances of 4%.[6]

Q WHAT PERFORMANCE STANDARDS WOULD HELP REBALANCE THE RISKS ASSOCIATED WITH THE PROPOSED SOLAR PLANTS?

A As previously discussed, the amount of energy generated from the Proposed Solar Projects is critical to determining the amount of PTCs that DEF will receive and whether, and to what extent, DEF and its customers realize any fuel cost savings. The most logical performance standard would be to require that the Proposed Solar Projects achieve a minimum annual capacity factor. In the event that the minimum annual capacity factor standard is not met, ratepayers should be held harmless for the difference between DEF's projected minimum annual capacity factor and the actual minimum annual capacity factor. In other words, the Commission should evaluate the difference between the actual energy output of the Proposed Solar Projects against

[6] Direct Testimony of Vanessa Goff at 11-12.

the energy that would be generated at a defined minimum annual capacity factor. If the actual amount of energy falls below the guaranteed level, the shortfall amount should be multiplied by the value of the grossed-up PTCs to determine the value of PTCs that should be provided to customers to be made whole. Similarly, the shortfall amount should also be multiplied by avoided energy costs for each of the Proposed Solar Projects to determine the amount of fuel savings that should be credited to customers through the fuel clause cost recovery proceeding.

Q WHAT MINIMUM ANNUAL CAPACITY FACTOR WOULD BE REASONABLE?

A Given that DEF's projections assume a 27% average annual net capacity factor for each of the Proposed Solar Projects' operating lives, it would be reasonable to hold DEF to those projections.

Q HOW CAN THE COMMISSION ENSURE THAT DEF'S CUSTOMERS BENEFIT FROM THE PRODUCTION TAX CREDITS?

A First, as a prerequisite for recovering any of the investment, the Proposed Solar Projects must qualify for the PTCs. Any portion of the investment that does not qualify should either be disallowed or not included in rate base. Alternatively, customers should be held harmless should DEF's projected PTCs upon which DEF is asking the Commission to approve the 14 new solar projects fail to materialize, either in whole or in part. This means that DEF should compensate customers for the value of the lost PTCs for any portion of the Proposed Solar Projects that do not fully qualify.

Second, to ensure that customers receive the full benefits of the PTCs, the Commission should require that all PTCs (grossed up for income taxes) be included as offsets to DEF's base revenue requirements associated with each Proposed Solar Project that is placed into commercial operation and for which cost recovery is authorized.

Q WOULD IMPLEMENTING THESE PROTECTIONS ELIMINATE ALL RISKS TO DEF'S CUSTOMERS?

A No. As previously stated, the amount of any fuel savings will also depend on future natural gas prices. If natural gas prices are well below DEF's projections, the projected production cost savings may not fully materialize even if the Proposed Solar Projects are built within budget, operate at the projected capacity factors and are fully eligible for PTCs.

In summary, DEF's customers will continue to face significant risks of higher rates as a result of the Proposed Solar Projects, even if the recommended protections are implemented. However, the Commission should more appropriately apportion the risks of DEF's 14 Proposed Solar Projects between customers and DEF than would be the case in the absence of any ratepayer protections.

Conclusion

Q WHAT FINDINGS SHOULD THE COMMISSION MAKE BASED ON THE ISSUES ADDRESSED IN YOUR TESTIMONY?

A Given the significant uncertainty surrounding the cost-effectiveness of the Proposed Solar Projects, the Commission should make the following findings:

- Implement a cost cap of $1,524 per kW for the Proposed Solar Projects.
- Establish a minimum annual capacity factor for the Proposed Solar Projects of 27%. In the event this minimum annual capacity factor is not met, DEF's customers should be held harmless for the capacity shortfall.
- Ensure that each portion of the Proposed Solar Projects that enters rate base fully qualifies for the PTCs projected by DEF.
- Require that all PTCs (grossed up for income taxes) be included as offsets to the base revenue requirements associated with the Proposed Solar Projects.

Q DOES THAT CONCLUDE YOUR DIRECT TESTIMONY?

A Yes.

APPENDIX A
Qualifications of Jonathan Ly

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Jonathan Ly. My business mailing address is 1314 Welch Street, Unit A, Houston, TX 77006.

Q WHAT IS YOUR OCCUPATION AND BY WHOM ARE YOU EMPLOYED?

A I am a regulatory consultant affiliated with J. Pollock, Incorporated.

Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A I received a Bachelor of Arts degree in Integrative Biology from the University of California, Berkeley in 2013 and a Master's degree in Energy and Earth Resources from the University of Texas at Austin in 2017. In addition, I have completed a course in utility accounting and finance.

I joined J. Pollock, Incorporated in 2018 as an energy analyst assisting consultants in the preparation of financial and economic studies of investor-owned, cooperative, and municipal utilities on revenue requirements, cost of service and rate design, tariff review and analysis, integrated resource planning, and certificates of convenience and necessity. I began working as a regulatory consultant affiliated with J. Pollock, Incorporated in 2021 expanding upon my responsibilities and assignments in matters I had previously worked on as an energy analyst. I have been involved in various projects in multiple states including Arkansas, Florida, Georgia, Michigan, Minnesota, New Mexico, New York, North Carolina, Texas, and Wyoming.

Q PLEASE DESCRIBE J. POLLOCK, INCORPORATED.

A J. Pollock, Inc. assists clients to procure and manage energy in both regulated and competitive markets. The J. Pollock team also advises clients on energy and regulatory issues. Our clients include commercial, industrial and institutional energy consumers. J. Pollock is a registered broker and Class I aggregator in the State of Texas.

APPENDIX B
Testimony Filed in Regulatory Proceedings
by Jonathan Ly

PROJECT	UTILITY	ON BEHALF OF	DOCKET	TYPE	STATE / PROVINCE	SUBJECT	DATE
240202	TAMPA ELECTRIC COMPANY	Florida Industrial Power Users Group	20240026-EI	Direct	FL	Solar Projects; Cost-Effectiveness Analysis; Consumer Protections	6/6/2024
240101	DUKE ENERGY CAROLINAS, LLC	Carolina Utility Customers Association, Inc.	E-7. SUB 1304	Direct	NC	Fuel and Fuel-Related Cost Factors	5/23/2024
221201	CONSUMERS ENERGY COMPANY	Association of Businesses Advocating Tariff Equity	U-21490	Rebuttal	MI	Uncollectible Expense Allocation; Economic Breakeven Points	5/17/2024
220604	SOUTHWESTERN PUBLIC SERVICE COMPANY	Occidental Permian Ltd.	23-00384-UT	Stipulation Support	NM	Stipulation Support regarding Long-Term Purchased Power Agreement and Ratemaking Treatment	5/10/2024
221201	CONSUMERS ENERGY COMPANY	Association of Businesses Advocating Tariff Equity	U-21490	Direct	MI	Class Cost-of-Service Study; Revenue Allocation; Rate Design	4/22/2024
220604	SOUTHWESTERN PUBLIC SERVICE COMPANY	Occidental Permian Ltd.	23-00384-UT	Direct	NM	Long-Term Purchased Power Agreement; Ratemaking Requests	4/1/2024
210301	LCRA TRANSMISSION SERVICES CORPORATION	Texas Industrial Energy Consumers	55867	Direct	TX	Wholesale Transmsision Rate	3/18/2024
231203	MINNESOTA POWER	Large Power Intervenors	E-015/GR-23-155	Direct	MN	Advanced Metering Infrastructure; Class Revenue Allocation; Rider for Voluntary Renewable Energy	3/18/2024
240102	NATIONAL FUEL GAS DISTRIBUTION CORPORATION	Multiple Intervenors	23-G-0627	Direct	NY	Class Revenue Allocation; Rate Design	3/1/2024
220604	SOUTHWESTERN PUBLIC SERVICE COMPANY	Occidental Permian Ltd.	23-00252-UT	Direct	NM	Certificate of Convenience and Necessity	12/1/2023
230301	EL PASO ELECTRIC COMPANY	Texas Industrial Energy Consumers	54929	Direct	TX	Certificate of Convenience and Necessity	10/24/2023
220504	SOUTHWESTERN PUBLIC SERVICE COMPANY	Texas Industrial Energy Consumers	54634	Direct	TX	Revised Class Cost-of-Service Study; Class Revenue Allocation; Energy Assistance Program	8/4/2023
230502	ENTERGY ARKANSAS, LLC	Arkansas Electric Energy Consumers, Inc.	22-082-U	Surrebuttal	AR	Additional Sum associated with Power Purchase Agreements	7/20/2023
230502	ENTERGY ARKANSAS, LLC	Arkansas Electric Energy Consumers, Inc.	22-082-U	Direct	AR	Additional Sum associated with Power Purchase Agreements	6/8/2023
221201	CONSUMERS ENERGY COMPANY	Association of Businesses Advocating Tariff Equity	U-21308	Rebuttal	MI	Uncollectible Expense Allocator	5/8/2023
221201	CONSUMERS ENERGY COMPANY	Association of Businesses Advocating Tariff Equity	U-21308	Direct	MI	Class Cost-of-Service Study, Allocation of Other Distribution Plant; Average & Peak Versus Average & Excess Methods	4/17/2023
220503	ENTERGY ARKANSAS, LLC	Arkansas Electric Energy Consumers, Inc.	20-049-U	Surrebuttal	AR	Capacity Need and Capacity Value; Risk to Non-Participants; Negative Impacts on Competition; Best Practices	8/1/2022
220503	ENTERGY ARKANSAS, LLC	Arkansas Electric Energy Consumers, Inc.	20-049-U	Direct	AR	Capacity Need and Capacity Value; Risk to Non-Participants; Negative Impacts on Competition; Best Practices	6/22/2022

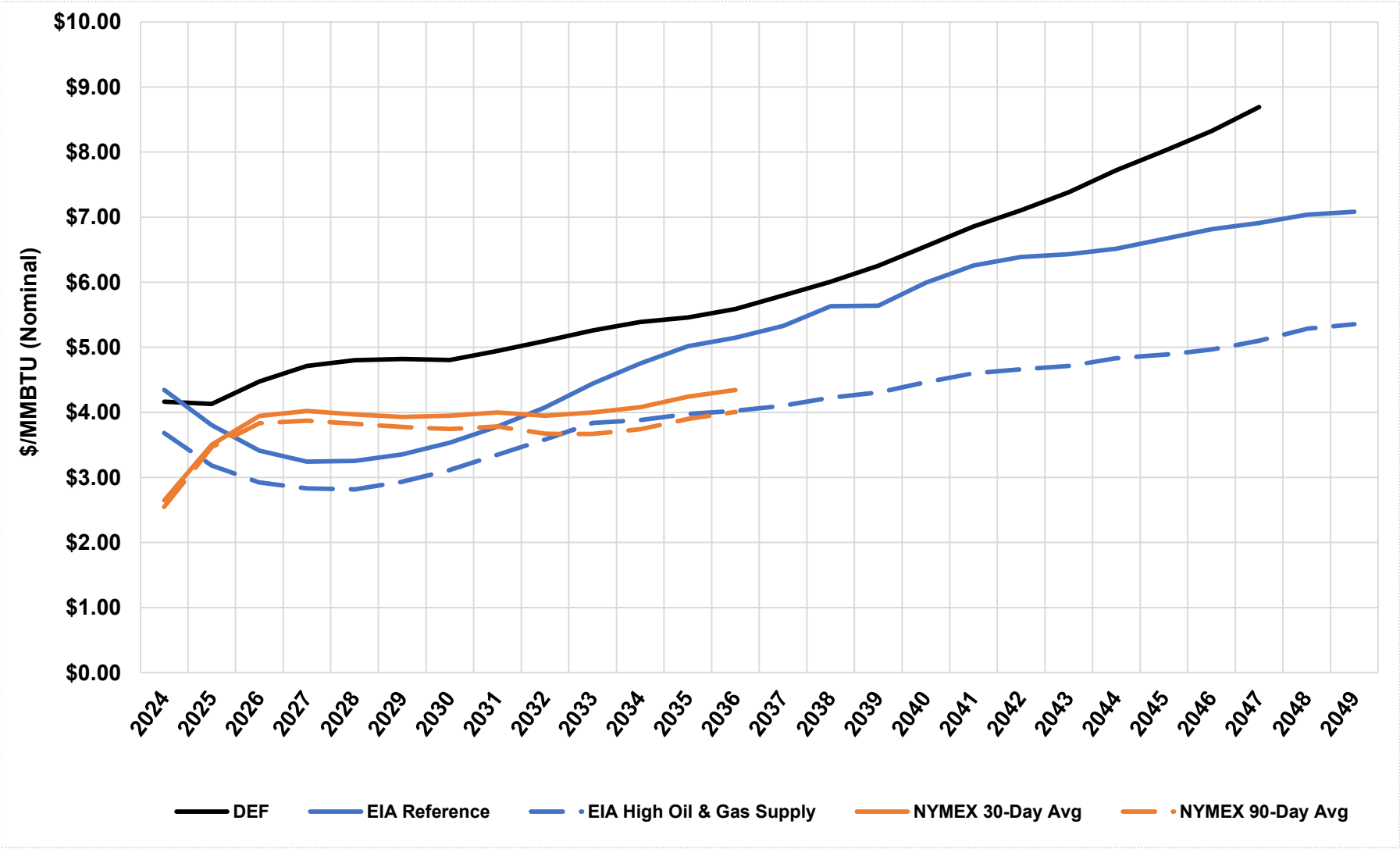
Docket No. 20240025-EI
Cost-Effectiveness Analysis
JL-1, Page 1 of 1

DUKE ENERGY FLORIDA
Summary of DEF's Future Solar Projects
Cost-Effectiveness Analysis
($000)

Line	Component	Base Case	Solar Case	Net Cost / (Benefits)
		(1)	(2)	(3)
1	**Incremental Capital Costs**	$1,852	$3,123	$1,271
2	**Fixed Operating & Maintenace Costs**	$583	$740	$157
3	**Incremental Costs**			$1,428
4	**Variable Operating & Maintenace Costs**	$2,661	$2,495	($166)
5	**Fuel Cost**	$22,375	$21,186	($1,189)
6	**Environmental Costs**	$34	$33	($1)
7	**Production Tax Credits**	($6,647)	($7,268)	($621)
8	**Incremental Benefits**			($1,977)
8	**Total**	$20,858	$20,309	($549)

Docket No. 20240025-EI
Natural Gas Forecasts
Exhibit JL-2, Page 1 of 1

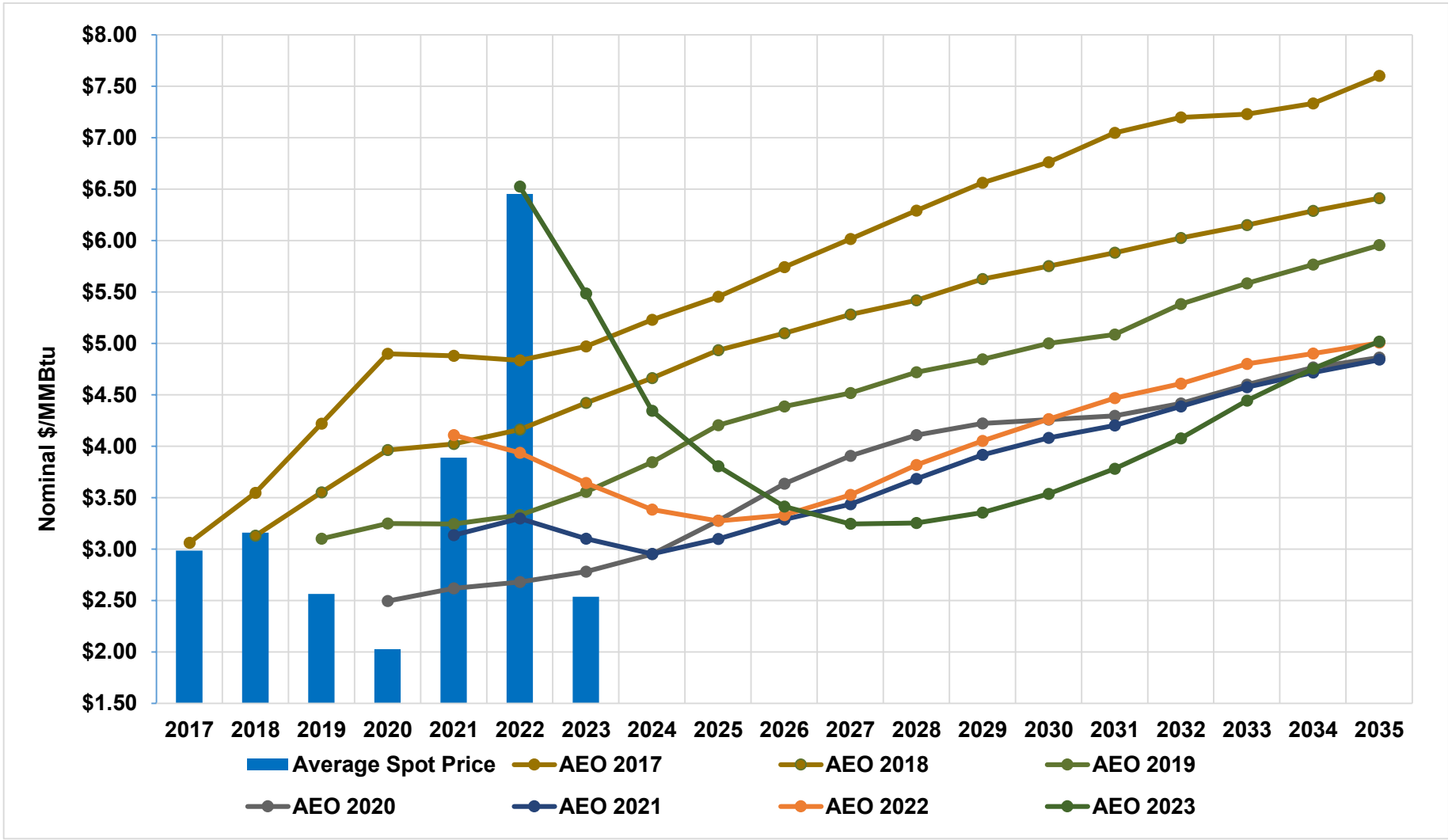
DUKE ENERGY FLORIDA
Comparison of Natural Gas Forecasts



Sources: DEF Response to FIPUG ROG 4-51; Energy Information Administration 2023 Annual Energy Outlook (Table 13); S&P Global Market Intelligence.

Docket No. 20240025-EI
Natural Gas Forecasts
Exhibit JL-3, Page 1 of 1

DUKE ENERGY FLORIDA
Comparison of EIA Reference Case
Henry Hub Natural Gas Price Forecasts



BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for Rate Increase by Duke Energy Florida, LLC	**DOCKET NO. 20240025-EI** **Filed: June 11, 2024**

AFFIDAVIT OF JONATHAN LY

STATE OF TEXAS)
) SS
COUNTY OF HARRIS)

Jonathan Ly, being first duly sworn, on his oath states:

1. My name is Jonathan Ly. I am a regulatory consultant affiliated with J. Pollock, Incorporated which is located at 14323 S. Outer 40 Rd., Suite 206N, St. Louis, Missouri 63017. J. Pollock, Inc. has been retained by Florida Industrial Power Users Group to testify in this proceeding on its behalf;

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony and Exhibits, which have been prepared in written form for introduction into evidence in Florida Public Service Commission Docket No. 20240025-EI; and,

3. I hereby swear and affirm that the answers contained in my testimony and the information in my exhibits are true and correct.

Jonathan Ly

Subscribed and sworn to before me this 11th day of June 2024.

JANET SANTA MARIA
Notary Public, State of Texas
Comm. Expires 05-06-2028
Notary ID 132466829

Janet Santa Maria Notary Public

Commission #: 132466829

My Commission expires on 05-06-2028.

CERTIFICATE OF SERVICE

I **HEREBY CERTIFY** that a true and correct copy of the foregoing Direct Testimony and Exhibits of Jonathan Ly has been furnished by electronic mail this 11th day of June 2024 to the following:

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