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PAUL RENNER
Speaker of the House of Representatives

June 21, 2024

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

Re: Docket No. 20240025 - EI

Dear Mr. Teitzman,

Please find enclosed for filing in the above referenced docket the **non-confidential** Direct Testimony and Exhibits of Daniel J. Lawton. Counsel for DEF has reviewed Mr. Lawton's testimony and exhibits and confirmed that they do not contain information that DEF considers to be confidential.

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

Sincerely,

Walter Trierweiler
Public Counsel

/s/ Mary A. Wessling
Mary A. Wessling
Associate Public Counsel
Florida Bar No. 093590

CERTIFICATE OF SERVICE
DOCKET NO. 20240025-EI

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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

DIRECT TESTIMONY

OF

DANIEL J. LAWTON

ON BEHALF

OF

THE CITIZENS OF THE STATE OF FLORIDA

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TABLE OF CONTENTS

SECTION I: INTRODUCTION/BACKGROUND/SUMMARY……..……..……..1

SECTION II: OVERVIEW OF THE COMPANY RATE REQUEST AND ISSUE SUMMARY……11

SECTION III: REGULATORY ISSUES AND COST OF CAPITAL……...15

SECTION IV: CURRENT CAPITAL MARKET CONDITIONS …….....20

SECTION V: DUKE AND THE FLORIDA REGULATORY PROCESS…….……26

SECTION VI: COMPARABLE GROUP ANALYSIS……...35

SECTION VII: COST OF CAPITAL MODELS DCF ANALYSES ….....38

SECTION VIII: BOND YIELD EQUITY RISK PREMIUM, CAPM, AND ECAPM COST OF EQUITY ESTIMATE……46

SECTION IX: CAPITAL STRUCTURE ….……..……54

SECTION X: FINANCIAL INTEGRITY ……..61

SECTION XI: RESPONSIVE TESTIMONY TO COST OF CAPITAL WITNESS MR. ADRIEN MCKENZIE….....63

SCHEDULES

DJL-1……..Resume

DJL-2 ……Comparable Company Electric Group Equity Ratios

DJL-3 ……Historical Monthly Government Bond Yields

DJL-4.……Comparable Company Electric Equity Return Forecast

DJL-5 ……Comparable Company Electric Group Price Data

DJL-6 ……Comparable Company Electric Group Growth Rate Data

DJL-7 ……Comparable Company Electric Group DCF

DJL-8 ……Comparable Company Electric Group Two-Stage DCF

DJL-9 ……Comparable Company Electric Group CAPM/ECAPM

DJL-10 ……Bond Yield and Equity Risk Premium Analysis

DJL-11 ……Capital Structure Duke Energy Florida

DJL-12 ……Summary of Alternative Cost of Equity Model Estimates

DIRECT TESTIMONY OF

DANIEL J. LAWTON

SECTION I: INTRODUCTION/BACKGROUND/SUMMARY

Q. 1 PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Daniel J. Lawton. My business address is 12600 Hill Country Boulevard, Suite R-275, Austin, Texas 78738.

Q. 2 PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A. I have been working in the utility consulting business as an economist since 1983. My consulting engagements have included electric utility load and revenue forecasting, cost of capital analyses, financial analyses, revenue requirements/cost of service reviews, and rate design analyses in litigated rate proceedings before federal, state and local regulatory authorities, and in court proceedings. I have worked with numerous municipal utilities developing electric rate cost of service studies for reviewing and setting rates. In addition, I have a law practice based in Austin, Texas. My main areas of legal practice include administrative law representing municipalities in electric and gas utility rate proceedings and other litigation including appellate, and contract matters. I have included a brief description of my relevant educational background and professional work experience in Schedule (DJL-1).

Q. 3 HAVE YOU PREVIOUSLY FILED TESTIMONY IN RATE PROCEEDINGS

A. Yes. A list of cases where I have previously filed testimony is included in Schedule (DJL-1).

Q. 4 ON WHOSE BEHALF ARE YOU FILING TESTIMONY IN THIS PROCEEDING?

A. I have been retained to review the Duke Energy Florida, LLC ("Company," "DEF," "Duke") cost of capital request, and related financial issues, on behalf of the Florida Office of Public Counsel ("OPC").

Q. 5 WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?

The purpose of my testimony in this proceeding is to address the Company's requested overall cost of capital for Duke's regulated electric operations. I will address and separately estimate the Company's: (i) requested overall rate of return to be earned on rate base investment; (ii) proposed capital structure; (iii) financial risk; (iv) business risk; (v) cost rates for equity capital; and (vi) long-term debt. As discussed below, the Company's filing includes three cost of service models including three cost of capital estimates based on what is described as a three-year Rate Plan covering the rate years 2025, 2026, and 2027. With the understanding that

OPC strongly opposes approval of the proposed three-year rate plan as addressed further by other OPC expert witnesses, my analysis addresses cost of capital in each of the three proposed rate years of the multi-year rate proposal.[1]

The Company's proposed capital costs are presented and discussed in the direct testimony of Duke cost of capital witness, Mr. Adrien McKenzie, and Duke financial witness Mr. Karl Newlin, and the results presented in the Company's filed MFR Section D "Cost of Capital Schedules." In addition, I address several issues related to the Company's financial integrity, investment requirements, cash flow issues, and impacts of the proposed multi-year rate plan related to return on invested capital.

Q. 6 WHAT MATERIALS DID YOU REVIEW AND RELY ON FOR THIS TESTIMONY?

A. I have reviewed prior orders of the Florida Public Service Commission ("Commission"), the Company's direct testimony presented in this proceeding, Company responses to discovery requests in this proceeding, Value Line Investment Survey ("Value Line"), financial reports such as the 10-K filed with the SEC of the Company and other utility companies of comparable risk, and other relevant financial

[1] I have been made aware by counsel for the office that the OPC has taken various legal positions regarding the power or authority of the Commission to entertain the remote second and third fully projected test years. I am also aware that the OPC successfully challenged the authority of the Commission to determine a multi-year "rate plan" for a regulated utility in a litigated rate case that is not resolved via a settlement agreement in the form of a contract. My testimony, to the extent it opines on costs applicable to 2026 and 2027, does not concede the validity or legality of those years for those years. Furthermore, although I am an attorney, I do not offer any opinion on Florida law as it relates to any of the matters in this case. I solely address the risk considerations associated with a so-called multi-year plan in Questions 11-16 of my testimony.

information available in the public domain. When relying on various sources, I have referenced such sources in my testimony and/or attached exhibits and included copies or summaries in my schedules and/or work papers.

Q. 7 PLEASE SUMMARIZE YOUR FINDINGS AND CONCLUSIONS RELATED TO EQUITY RETURN IN THIS CASE.

A. My analysis of the Company's requested 11.15% cost of equity capital, or shareholder profit, in this proceeding is based on evaluating capital market data employing several commonly employed financial models. The models are described in the following pages as well as summarized in the attached Schedules (DJL-7), (DJL-8), (DJL-9), and (DJL-10). The results employing financial data from the adjusted[2] Company's proposed peer group of companies are shown in the following table:

[2] I excluded Allete Energy from my use of the Company's proposed peer group because the stock of Allete Energy is currently being purchased in an acquisition proposal. Given that Mr. McKenzie's analysis excludes all firms involved in merger or acquisition, Allete Energy should be removed.

Table 1

Cost of Equity Estimates Employing DUKE Comparable Risk Group [3]

MODEL	RANGE	MIDPOINT
DCF Model	**8.68% - 8.85%**	**8.76%**
Two-stage DCF	**9.66% - 9.98%**	**9.82%**
CAPM	**9.42% - 9.68%**	**9.55%**
ECAPM	**9.59% - 9.78%**	**9.68%**
Average of all Models	**9.34% - 9.57%**	**9.45%**
Minimum **Maximum** **Midpoint**		**8.68%** **9.98%** **9.33%**

A second analysis employing the same financial models but applied to an alternative 16-company peer group was analyzed and those results are shown in the following table:

[3] Each cost of equity capital estimate is discussed in the testimony and is presented in Schedules (DJL-7), (DJL-8), (DJL-9), and (DJL-10). Also note Allete Energy is removed from the analysis.

Table 2

Cost of Equity Estimates Employing Alternative 16-Company Comparable Risk Group[4]

MODEL	RANGE	MIDPOINT
DCF Model	**9.08% - 9.23%**	**9.15%**
Two-stage DCF	**9.66% - 9.73%**	**9.70%**
CAPM	**9.52% - 9.59%**	**9.56%**
ECAPM	**9.66% - 9.71%**	**9.69%**
Average of all Models	**9.48% - 9.56%**	**9.52%**
Minimum **Maximum** **Midpoint**		**9.08%** **9.73%** **9.41%**

The results of the two analyses shown in Tables 1 and 2 fall relatively close. Relying on the midpoint estimates from the DCF and two-stage DCF from each analysis (Table 1 and Table 2) provides the following midpoint results; 8.76%, 9.82%, 9.15%, and 9.70%. This DCF model range of results overlaps the CAPM and ECAPM results in each comparable risk group analysis. Moreover, the 8.76% to 9.82% range of midpoints covers most of the bond yield risk premium model range discussed below. Given the above, the indicated cost of capital range is 9.30% - 9.60% and I recommend a point estimate cost of capital of 9.45%. The point estimate of 9.45% is calculated by the reasonable range of 9.30 – 9.60 for both groups of comparable companies.

[4] Each cost of equity capital estimate is discussed in the testimony and is presented in Schedules (DJL-7), (DJL-8), (DJL-9), and (DJL-10).

Q. 8 WHAT IS YOUR OVERALL COST OF CAPITAL RECOMMENDATION FOR DUKE IN THIS CASE?

A. Based on my analyses (which are fully explained in the following pages), I make the following conclusions and recommendations for Duke's cost of capital in each of the three years of the proposed multi-year rate plan:

Table 3

Recommended Capital Structure and Cost Rates for

Duke Operations Rate Year 2025[5]

DESCRIPTION	RATIO	COST	WEIGHTED COST
COMMON EQUITY	45.61%	9.45%	4.311%
LONG-TERM DEBT	40.68%	4.49%	1.827%
SHORT-TERM DEBT	-0.20%	3.25%	-0.006%
CUSTOMER DEPOSITS ACTIVE	0.76%	2.61%	0.02%
CUSTOMER DEPOSITS INACTIVE	0.01%	0.00%	0.00%
INVESTMENT TAX CREDITS	1.00%	8.01%	0.08%
DEFERRED INCOME TAXES	12.13%	0.00%	0.00%
TOTAL CAPITAL	100.00%		6.23%

[5] Capital structure and cost rates (except equity cost) per Company filing MFR D-1a, page 3 of 5. Equity cost of 9.45% per this testimony.

Table 4

Recommended Capital Structure and Cost Rates for

Duke Operations Rate Year 2026[6]

DESCRIPTION	RATIO	COST	WEIGHTED COST
COMMON EQUITY	45.73%	9.45%	4.321%
LONG-TERM DEBT	40.58%	4.52%	1.834%
SHORT-TERM DEBT	-0.01%	3.20%	-0.000%
CUSTOMER DEPOSITS ACTIVE	0.71%	2.61%	0.019%
CUSTOMER DEPOSITS INACTIVE	0.01%	0.00%	0.00%
INVESTMENT TAX CREDITS	0.93%	8.03%	0.075%
DEFERRED INCOME TAXES	12.04%	0.00%	0.00%
TOTAL CAPITAL	100.00%		6.25%

Table 5

Recommended Capital Structure and Cost Rates for

Duke Operations Rate Year 2027[7]

DESCRIPTION	RATIO	COST	WEIGHTED COST
COMMON EQUITY	45.83%	9.45%	4.331%
LONG-TERM DEBT	39.57%	4.63%	1.832%
SHORT-TERM DEBT	1.10%	3.20%	0.035%
CUSTOMER DEPOSITS ACTIVE	0.67%	2.61%	0.018%
CUSTOMER DEPOSITS INACTIVE	0.01%	0.00%	0.00%
INVESTMENT TAX CREDITS	0.89%	8.13%	0.072%
DEFERRED INCOME TAXES	11.94%	0.00%	0.00%
TOTAL CAPITAL	100.00%		6.29%

[6] Capital structure and cost rates (except equity cost) per Company filing MFR D-1a, page 2of 5. Equity cost of 9.45% per this testimony.

[7] Capital structure and cost rates (except equity cost) per Company filing MFR D-1a, page 1of 5. Equity cost of 9.45% per this testimony.

As discussed below, these recommended return levels (9.45% equity return in each year of the proposed rate years) are reasonable. These proposed changes to the Company's rate request result in an overall cost of capital of 6.23% for rate year 2025, 6.25% for rate year 2026, and 6.29% for rate year 2027. These alternative capital costs are consistent with current market capital costs in the utility industry, consistent with recent regulatory authority decisions around the country, and consistent with just and reasonable rates for consumers.

My analyses of the Company's overall cost of capital request, which includes: (i) a multi-year rate plan[8] with three separate years of overall capital costs; (ii) substantially increased equity capital and long-term debt capital to fund investment over the three year rate plan; (iii) Mr. McKenzie's overstated recommended 11.15% equity return for Duke electric operations; and (iv) the overall weighted return request to be earned on rate base investment of 7.01% in 2025, 7.03% in 2026, and 7.07% in 2027 (see Company MFR Schedule D-1a) indicates that the Company's request is overstated, inconsistent with current and expected market capital costs, and inconsistent with just and reasonable rates for consumers.

[8] DEF refers to this as a "plan" but there is no commitment by the company to waive its legal rights to come in for rate relief, as suggested by DEF witness Marcia Olivier in her direct testimony at page 8 that their proposed rate increase will keep them out for three years "barring any unforeseen circumstances." I will use DEF's terminology for simplicity's sake, but I am not conceding that there is commitment to a plan in the form of an ironclad "stay-out."

Q. 9 PLEASE SUMMARIZE YOUR FINDINGS AND CONCLUSIONS IN THIS CASE.

A. Based on my analyses (which are fully explained in the following pages), I make the following conclusions and recommendations:

(i) I recommend a return of 9.45% on shareholder equity for Duke, which is consistent with current market capital cost requirements for electric utility operations and is more than adequate for Duke to maintain its financial integrity and creditworthiness;

(ii) I recommend no changes to Duke's proposed capital structure, which consists of 53% equity on a financial basis for each year of the multi-year rate plan, which is consistent with current equity ratios of operating electric utility operations around the country;

(iii) I recommend no changes to Duke's long-term or short-term debt costs; and

(iv) I recommend an overall cost of capital applied to rate base investment of 6.23% for rate year 2025; 6.25% for rate year 2026; and 6.29% for rate year 2027.

SECTION II: OVERVIEW OF THE COMPANY RATE REQUEST AND ISSUE SUMMARY

Q. 10 PLEASE DESCRIBE THE COMPANY'S PROPOSED RATE REQUEST.

A. The Company is proposing a forecasted multi-year rate plan where the three rate years are calendar-years 2025, 2026, and 2027.[9] The Company's current rates are based on a multi-year rate plan, established through a Commission-approved negotiated settlement agreement, where the rate years are calendar years 2022, 2023, and 2024.[10] Under the proposed multi-year rate plan, the Company's case is based on three projected test periods for the calendar years 2025, 2026, and 2027. The total amount of projected level of capital investment (rate base) for each of the three years in the test period is $20,534,271,000 in 2025, $21,428,996,000 in 2026, and $22,198,157,000 in 2027.[11] The Company is requesting rate increases of $593 million in 2025, an additional $98 million in 2026, and an added increment of $129 million in 2027, which would total approximately $2.1 billion over the three years of the multi-year rate plan.

The Company's main cost driver is projected investment over the 2025 – 2027 rate plan. Specifically, the Company states that "DEF faces substantial capital needs over the next several years to add solar generation and energy storage capacity… ."[12] Duke witness Karl Newlin states that the capital requirement over the three-year rate plan are

[9] The term "rate year" is used to define the period proposed rates from this case will be in effect.
[10] See PSC-2021-0202-PS-EI ("2021 Settlement").
[11] See MFR A pages 1 – 3.
[12] Direct testimony Karl Newlin at page 22, lines 11 – 12.

$8.8 billion, with $8.1 billion for project requirements and $0.7 billion for debt refunding.[13]

Thus, based on Mr. Newlin's testimony, the requested increase is primarily driven by capital additions. I should note that Duke witness Marcia Olivier does address other cost drivers ranging from depreciation to demolition costs for this case.

Q. 11 DO YOU HAVE ANY COMMENTS ON MULTI-YEAR RATE PLANS?

A. Yes, I have several general comments. First, traditional ratemaking establishes rates based on a single, 12-month test year period where costs, revenues, and investment are evaluated on an historical, forecasted, hybrid (forecasted and historical) period and sometimes adjusted for known and measurable changes. Once rates are set, the utility is authorized to charge consumers these new rates until rates are changed or reset by the regulatory authority in some future case.

In a multi-year rate plan or a flexible price mechanism, the regulatory authority is asked to establish different rates for more than one future period. Thus, there may be multiple price increases over future periods without a formal rate proceeding to reset rates. For example, instead of filing a new traditional rate case when conditions change – a multi-year rate plan may forecast changing conditions in revenues, costs, and/ or investment and request adjusted new rates for the forecasted change in conditions.

[13] Direct testimony Karl Newlin at page 22, lines 12 – 19.

Q. 12 IN THIS CASE HAS DUKE FORECASTED CHANGING FUTURE CONDITIONS?

A. Yes. In this proceeding Duke has presented three future test years for 2025, 2026, and 2027 where revenues, costs, and investment are based on Company forecasts for each future year of the rate plan. The Duke multi-year rate plan results in three forecasted rate increases, or price changes, over the three year plan. These rate increases are $593 million in 2025, $98 million in 2026, and $128 million in 2027, totaling an $820 million increase over the life of the plan. Each rate increase is based on a forecast of revenues or sales, costs, and investment over the plan period. Thus, the multi-year rate plan is dependent on the quality and accuracy of these annual forecasts in terms of whether the rates proposed are just and reasonable.

Q. 13 HOW SHOULD THE DUKE PROPOSED RATE PLAN BE EVALUATED?

A. Any rate plan that is dependent on multiple future forecasts must have the assurance that these future forecasts are both objective and unbiased to assure consumer rates are both just and reasonable. To the extent that the underlying revenue and/or sales forecast is understated, the actual billing units, margins and revenues will be higher than estimated which will increase utility profits. To the extent forecasts of costs are overstated, excess revenues will fall to the bottom line profits of the utility. Lastly, to the extent investment rate base and project construction additions are overstated and/or

delayed, again profits will increase. All forecasts for each year of the multi-year rate plan must be reasonable for a reasonable rate result.

Q. 14 DOES THE UTILITY BENEFIT FROM A MULTI-YEAR RATE PLAN?

A. Yes. First the utility benefits by having planned and locked-in rate increases to address forecasted revenue changes, cost changes, and or investment changes. This will prevent earnings erosion and maintenance of profits and cash flow metrics. Minimizing regulatory lag associated with the processing of a rate changes by having predetermined rate changes for different plan years enhances cash flow metrics, and quality of earnings are maintained through periodic cash increases. These periodic increases provide timely recovery of planned investment and avoid regulatory lag and earnings erosion.

Such planned increases limit and reduce to the utility risk and enhance a utility's financial health. One way to see these benefits is to review the Duke earnings for 2022 and 2023 where the Company was under the first two years of the prior multi-year rate plan. Duke earned an equity return of 10.47% in 2022 and 10.45% in 2023. Both these earned returns were well above the authorized midpoint return which formed the basis of the 2022 and 2023 rates. Duke was able to add investment and earn higher returns through the prior negotiated rate plan.

Q. 15 ARE THE RISKS OF REGULATORY LAG AND EARNING EROSION SHIFTED TO CUSTOMERS IN A MULTI-YEAR RATE PLAN THAT IS NOT THE PRODUCT OF A NEGOTIATED SETTLEMENT?

A. Yes. In the scenario presented to the Commission here, the Company will have developed and would control the plan into the future. To the extent the revenue forecast is understated, expense forecast is overstated, or planned investment schedules are slowed, the Company will earn added profits. Any risks of regulatory lag and earnings erosion do not vanish – rather, customers will now have those risks in the form of paying higher rates for higher utility profits.

Q. 16 DO YOU MAKE A RECOMMENDATION ON THE PROPOSED MULTI-YEAR RATE PLAN?

A. No. Other OPC expert witnesses will address forecasts and rate plan issues. I just outline the evidence and facts supporting the lower utility risks associated with the proposed multi-year plan.

SECTION III: <u>REGULATORY ISSUES AND COST OF CAPITAL</u>

Q. 17 PLEASE EXPLAIN THE COST OF CAPITAL CONCEPT AS IT RELATES TO THE REGULATORY PROCESS.

A. The overall rate of return to be earned on rate base investment is an essential element in the regulatory and rate setting process and is typically a major part of overall revenue

requirements. For example, in this case, the Company's requested overall return for rate year 2025 (the first year of the rate plan) is 7.01%. As is discussed below, and for illustrative purposes only, a 50-basis point reduction in the 11.15% rate of return on equity (to a 10.65% level) can have a large impact on overall revenue requirements. As shown in the table below, a 50 basis point reduction in equity return in the 2025 test year would result in an approximate $62.1 million per year reduction in annual revenue requirements including the impact of the federal income tax and other revenue gross-up factors for electric customers.[14]

TABLE 6

IMPACT OF 50-BASIS POINT REDUCTION IN EQUITY

RATE BASE 2025	**$20,534,271,000**
RATE OF RETURN @10.65% EQUITY	**6.78%**
REQUIRED INCOME	**$1,392,223,574**
CURRENT INCOME	**$996,671,000**
CALCULATED DEFICIENCY	**$395,552,574**
INCOME GROSS-UP MULTIPLIER	**1.3433**
RATE CHANGE	**$531,345,773**
DIFFERENCE FROM $593,446,000 REQUEST	**$62,100,227**

Thus, equity return can have a large impact on revenue requirements for consumers.

Q. 18 PLEASE EXPLAIN HOW THE VARIOUS COMPONENTS OF COST OF CAPITAL ARE DETERMINED.

A. The overall rate of return in the regulatory process is best explained in two parts. First,

[14] Tax Factor equal 1/(1-tax rate), which is (1/(1-.21)) equals 1.26582. This tax factor of 1.26582 times the requested shareholder profit level requested equals taxes and profits.

return to securities, such as long-term debt and short-term debt, both of which are included in the capital structure, are contractually set at issuance. The reasonableness of the cost of this contractual obligation between the utility and its investors is examined by regulatory agencies as part of the utility's overall revenue requirement.

The second part of a company's overall return requirement is the appropriate cost rate to assign the equity portion of capital costs. The return to equity should be established at a level that will permit the Company an opportunity to earn a fair rate of return. By fair rate of return, I mean a return to equity holders, which is sufficient to hold and attract capital, sufficient to maintain financial integrity, and a return to equity holders comparable to other investments of similar risks.

Two U.S. Supreme Court decisions are often cited as the legal standards for rate of return determination. The first is *Bluefield Water Works and Improvement Company v. Public Service Commission of West Virginia*, 262. U.S. 679 (1923). The *Bluefield* case established the following general standards for a rate of return: The return should be sufficient for maintaining financial integrity and capital attraction and a public utility is entitled to a return equal to that of investments of comparable risks.

The second U.S. Supreme Court decision is the *Federal Power Commission v. Hope Natural Gas Company*, 320 U.S. 591 (1942). In the *Hope* decision, the Court affirmed its earlier *Bluefield* standards and found that methods for determining return are not the test of reasonableness; rather, the result and impact of the result are controlling.

The cost of capital is defined as the annual percentage that a utility must receive to maintain its financial integrity, to pay a return to security owners, and to ensure the

continued attraction of capital at a reasonable cost and in an amount adequate to meet future needs. Mathematically, the cost of capital is the composite of the cost of several classes of capital used by the utility such as debt, preferred stock, and common stock, weighted on the basis of an appropriate capital structure.

The ratemaking process requires the regulator to determine the utility's cost of capital for debt, preferred stock, and equity costs. These calculations of costs, when combined with the proportions of each type of capital in the capital structure, result in a percentage figure that is then multiplied by the value of assets (investment) used and useful in the production of the utility service to ultimately arrive at a rate charged to customers. Rates should not be excessive (exceed actual costs) or burdensome to the customer and at the same time should be just and reasonable to the utility.

Q. 19 PLEASE EXPLAIN THE COST OF EQUITY CONCEPT.

A. The cost of equity, or return on equity capital, is the return expected by investors over some prospective time period. The cost of equity one seeks to estimate in this proceeding is the return investors expect prospectively when the rates from this case will be in effect.

The cost of common equity is not set by contract, and there are no hard and fast mathematical formulae with which to measure investor expectations with regard to equity requirements and perceptions of risk. As a result, any valid cost of equity recommendation must reflect investors' expectations of the risks facing a utility.

Q. 20 WHAT PRINCIPAL METHODOLOGY DO YOU EMPLOY IN YOUR COST OF EQUITY CAPITAL ANALYSES?

A. I employ the Discounted Cash Flow ("DCF") methodology for estimating the cost of equity, keeping in mind the generally accepted premise that any utility's cost of equity capital is the risk-free return plus the premium required by investors for accepting the risk of investing in an equity instrument. It is my opinion that the best analytical technique for measuring a utility's cost of common equity is the DCF methodology. I also employ the two-stage DCF to reflect different growth rate assumptions. Other return on equity modeling techniques such as the Capital Asset Pricing Model ("CAPM"), Empirical Capital Asset Pricing Model ("ECAPM"), and bond yield equity risk premium model are often used to check the reasonableness of the DCF results. I have employed all of these modeling methods to arrive at my recommendations in this case.

Q. 21 PLEASE DESCRIBE THE RISKS YOU REFER TO ABOVE.

A. As I stated earlier in this testimony, equity investors require compensation above and beyond the risk-free return because of the increased risk factors investors face in the equity markets. Thus, investors require the risk-free return plus some risk premium above the risk-free return. The basic risks faced by investors that make up the equity risk premium include business risks, financial risks, regulatory risks, and liquidity risks.

SECTION IV: CURRENT CAPITAL MARKET CONDITIONS

Q. 22 PLEASE DESCRIBE CURRENT AND EXPECTED ECONOMIC CONDITIONS.

A. Current economic conditions reflect declining inflation under tighter monetary policy with higher federal funds rates and higher interest rates as a result of economic disruptions from the COVID-19 economic impacts of early 2020 period. The pandemic and shutdown led to substantial economic structural changes that are still having impacts today in terms of monetary policy by the Federal Reserve.

Starting in March 2021, the Consumer Price Index (CPI) began to climb above 2.5% and the CPI increase was steady to 8.6% for May 2022, and 9.1% for June 2022, before declining in July 2022 to 8.5%.[15] The June 2022 9.1% CPI is the largest 12-month increase since the 12-month period ending November 1981.[16]

The Federal Reserve's tighter monetary policy has had an impact on inflation as can be seen in the January through April 2024 reported inflation levels of 3.1% January 2024, 3.2% February 2024, 3.5% March 2024, and 3.4% for April 2024, all of which are substantially below the 2022 year and first six months of 2023.[17]

The Federal Reserve employs the Personal Consumption Expenditure (PCE) metric for measuring long-run inflation. During the November 2023 through April 2024

[15] U.S. Department of Labor Bureau of Labor Statistics, News Release at page 1 (June 10, 2022) and U.S. Department of Labor Bureau of Labor Statistics, News Release at page 1 (July 13, 2022) and August 10, 2022.
[16] U.S. Department of Labor Bureau of Labor Statistics, News Release at page 1 (July 13, 2022).
[17] www.bls.gov/news.release/cpi May 15, 2024.

period, the annual measure of the PCE price index was as follows:

Table 7[18]

PERSONAL CONSUMPTION EXPENDITURES PRICE INDEX

NOVEMBER 2023 THROUGH APRIL 2024

NOVEMBER 2023	**2.7%**
DECEMBER 2023	**2.6%**
JANUARY 2024	**2.5%**
FEBRUARY 2024	**2.5%**
MARCH 2024	**2.7%**
APRIL 2024	**2.7%**

Like the CPI measure discussed above, the PCE metric has declined substantially from the 2022 and 2023 levels.

Q. 23 WHAT HAS BEEN THE FEDERAL RESERVE RESPONSE TO INCREASING INFLATION?

A. When addressing inflation, the Federal Reserve and the Federal Open Market Committee (FOMC) look to the percent change in inflation as measured by the metric

[18] Personal Consumption Expenditures Expenditure Price Index, Bureau of Economic Analysis ("BEA") Release Date (May 31, 2024); also see www.bea.gov/news/2022/peronal-income-and-outlays-april-2024.

PCE as the primary measure of price changes when determining and implementing long-term monetary policy goals.[19] The FOMC, in its recent May 1, 2024 meeting, noted that "[i]nflation has eased over the past year but remains elevated."[20] The FOMC also stated that the target range of the federal funds rate would remain at 5.25% to 5.50%, and adjustments to the federal funds rate would consider the incoming data, the evolving outlook, and the balance sheet risks.[21] The FOMC concluded that the "Committee does not expect it will be appropriate to reduce the target range until it has gained greater confidence that inflation is moving sustainably toward 2 percent."[22]

In the March 20, 2024 "Summary of Economic Projections," the FOMC members provided forecasts for the federal funds rate as follows:

TABLE 8

CURRENT AND PROJECTED FEDERAL FUNDS RATE

Year	Federal Funds Rate[23]
Current May 2024 level	**5.25% - 5.50%**
2024	**4.6% - 5.1%**
2025	**3.4% - 4.1%**
2026	**2.6% - 3.4%**
Longer-run	**2.5% – 3.1%**

[19] *President's Message: CPI vs. PCE Inflation: Choosing a Standard Measure,* Federal Reserve Bank of St. Louis (July 1, 2013) at page 2, The Federal Reserve has employed the PCE inflation metric rather than the CPI measure since about 2000 in setting long-term monetary policy. After extensive analysis the Federal Reserve selected the PCE metric because: (i) the expenditure weights in the market basket measure change as consumers substitute goods and services; (ii) the PCE market basket includes more comprehensive coverage of goods and services; and (iii) historical PCE is subject to revision and correction beyond seasonality adjustments.
[20] Federal Reserve FOMC Statement May 1, 2024.
[21] Federal Reserve FOMC Statement May 1, 2024.
[22] Federal Reserve FOMC Statement May 1, 2024
[23] *Summary of Economic Projections*, Federal Open Market Committee, page 2 Table 1, Federal Funds Rate Median Projections (March 20, 2024).

The most recent FOMC projections in Table 8 indicate decreases in the federal funds rate through the remainder of 2024 from the May 2024 5.50% level to about 4.6% - 5.1% by year-end. These FOMC projections also indicate that the federal funds rate will decrease to 3.1% - 4.1% by the end of 2025 and further decrease to 2.6% - 3.4% by the end of 2026. Obviously, these are the current projections, which are all subject to change as the Federal Reserve delicately balances reducing inflation while maintaining employment and economic growth in the general economy.

Also, **i**n the March 20, 2024 "*Summary of Economic Projections,"* the FOMC members provided forecasts for the PCE that the inflation rate in the United States will average 2.4% over the entire year 2024, decline to 2.2% for the year 2025, and further decline to 2.0% in the year 2026.[24] When addressing inflation, the Federal Reserve and FOMC look to the percent change in inflation PCE as well as "core PCE" (which excludes fuel and food changes from the metric calculation) as the primary measure of price changes when determining and implementing long-term monetary policy goals.[25]

While the financial markets, and the economy in general, have experienced periods of uncertainty and turmoil since early 2020, government intervention has generally had a positive impact on financial markets and on the general economy. Recent 2023 – 2024 declining trends in inflation, whether measured by the CPI or PCE have caused the Federal

[24] *Summary of Economic Projections*, Federal Open Market Committee, page 1, Table 1, PCE Inflation Median Projections (March 20, 2024).
[25] *President's Message: CPI vs. PCE Inflation: Choosing a Standard Measure,* Federal Reserve Bank of St. Louis (July 1, 2013) at page 2, The Federal Reserve has employed the PCE inflation metric rather than the CPI measure since about 2000 in setting long-term monetary policy. After extensive analysis the Federal Reserve selected the PCE metric because: (i) the expenditure weights in the market basket measure change as consumers substitute goods and services; (ii) the PCE market basket includes more comprehensive coverage of goods and services; and (iii) historical PCE is subject to revision and correction beyond seasonality adjustments.

Reserve to cease increasing the federal funds rate and project lower federal funds rates in the immediate future. The end result is that cost of capital today includes expectations of declining interest rates.

Q. 24 DOES THE FACT THAT INTEREST RATES ARE EXPECTED TO BE DECREASING MEAN OTHER CAPITAL COSTS SUCH AS EQUITY ARE ALSO DECREASING?

A. Yes. Capital costs do move together – so if interest rates are rising (falling), the cost of other capital such as equity will increase (decrease), as well. The key difference is that equity and debt costs do not move in lock-step. In other words, debt costs may increase by 1.0%, but equity costs will change a smaller fraction of 1.0%.

For the period 1981 through 2023, the average of the absolute value change in 30-year U.S. Treasury bond yields is about 60 basis points.[26] For authorized electric utility equity returns over the same time period, the average absolute value rate of change is about 25 basis points or less than half the rate of change in U.S. Treasury yields.[27] Thus, while it may be correct to conclude debt costs will decrease over the short-term, if history is a guide, equity cost changes whether increasing or decreasing should be of substantially smaller magnitude.

[26] See Schedule (DJL-10) and Workpaper DJL-10.
[27] See Schedule (DJL-10) and Workpaper DJL-10.

Q. 25 DO THE RECENT FEDERAL RESERVE POLICY ACTIONS PROVIDE YOU ANY INSIGHT AS TO THE DIRECTION AND LEVEL OF LONGER-TERM INTEREST RATES?

A. Monetary policy objectives of the Federal Reserve are designed to stimulate economic growth and employment while targeting inflation at levels of about 2.0%. As discussed above, the FOMC May 1, 2024 press release addressed the FOMC's concerns with inflation. As stated earlier, following the March 20, 2024, FOMC projections, there is an expectation for Federal Funds rate decreases before year end 2024 and continuing declines in 2025, 2026, and beyond. The expectation of lower interest rates and declining cost of capital is most likely to occur over the three-year period included in the multi-year rate plan. Thus, if the Commission is to accept the three-year period included in the multi-year rate plan, fairness requires that the declining interest rates and declining cost of capital be recognized.

Q. 26 WHAT LEVEL OF INTEREST RATES DO YOU EMPLOY FOR YOUR COST OF CAPITAL ANALYSIS?

A. I generally employ the most current three-month average as the best approximation of interest rate levels. In my opinion, the most recent three months of activity adequately capture the market expectations and trends of interest rates while avoiding any limited influences those monthly or shorter durations may have on interest rates. Given the expectations for rate decreases to come in the Federal Funds rate by year end and into 2025-2027, I employed a 3.0% - 4.0% 30-year Treasury bond yield range to capture

the impacts from the most recent statements in Federal Reserve policy.

Q. 27 WHAT CONCLUSIONS DO YOU DRAW FROM CURRENT ECONOMIC CONDITIONS IN PROVIDING GUIDANCE IN SETTING EQUITY CAPITAL COSTS IN THIS PROCEEDING?

A. As general matter, capital costs remain low in comparison to historical levels. Through 2023, the average authorized equity returns for electric at 9.59% have remained low as shown in Schedule (DJL-10). The bottom line is that the general economic data does not support substantially increasing capital costs. The current average authorized ROE for gas and electric is around 9.6% - Duke now seeks to substantially boost the profit level to 11.15%. Duke's cost of capital proposals are not reasonable and are inconsistent with market data.

SECTION V: DUKE AND THE FLORIDA REGULATORY PROCESS

Q. 28 DOES THE REGULATORY PROCESS IN FLORIDA AFFORD THE COMPANY RISK REDUCING OPPORTUNITIES?

A. The regulatory process in Florida provides ample opportunity to recover revenues, address regulatory lag concerns, and promote earned returns and margins over and above cost recoveries. The Florida FPSC's supportive regulatory environment includes regulatory mechanisms such as subsequent year adjustments to avoid regulatory lag, forward-looking test periods, negotiated multi-year rate plans, revenue recovery

mechanisms such as fuel and capacity recovery mechanisms, environmental cost recovery clauses, storm hardening cost recovery, ability to petition for storm cost recovery outside a base rate proceeding[28], credit supportive storm cost treatment, and an overall credit supportive regulatory environment.[29] While Moody's points to risk of storms and the cost impacts on credit metrics, Moody's also points out that the Florida Legislature provides timely storm hardening cost recovery.[30]

All of these credit supportive regulatory mechanisms help offset the impacts of regulatory lag, enhance cash flow, and strengthen financial integrity.

Q. 29 HAVE OTHER REGULATORY AUTHORITIES WEIGHED IN WITH REGARD TO DUKE SUBSIDIARY COST OF CAPITAL?

A. Yes. The Parent Company Duke Energy has a number of vertically integrated electric operations operating in several states subject to rate regulation. The following table is a summary of regulatory authority decisions on capital structure and cost of equity for several DEF sister subsidiaries for the 2023 the early 2024 period.

[28] While perhaps not explicitly called out by Moody's, the storm cost recovery process allows for DEF to begin collections of storm costs on an accelerated, interim basis.
[29] See Moody's Investor Services Credit Opinion Duke Energy Florida pages 1 – 4, (May 22, 2023).
[30] See Moody's Investor Services Credit Opinion Duke Energy Florida page 1.

TABLE 9

RECENT DUKE SUBSIDIARY AUTHORIZED RETURNS AND EQUITY RATIO[31]

COMPANY	REGULATORY AUTHORITY	EQUITY RETURN	EQUITY RATIO	EFFECTIVE DATE
DUKE ENERGY CAROLINAS	NCUC	10.10%	53.00%	JAN. 2024
DUKE ENERGY CAROLINAS	PSCSC	9.94%	51.21%	MAY 2024
DUKE ENERGY KENTUCKY	KPSC	9.75%	52.145%	OCT. 2023
DUKE ENERGY PROGRESS	NCUC	9.80%	53.0%	OCT. 2023
DUKE ENERGY PROGRESS	PSCSC	9.60%	52.43%	APR. 2023
DUKE ENERGY OHIO	PUCO	9.50%	50.50%	JAN. 2023
AVERAGE		9.78%	52.04%	2023 - 2024

As shown in the table above, recent equity return for Duke electric utility operations range from 9.50% to 10.10% and average 9.78% for the 2023 and beginning of 2024 period. These results and facts do not support the Company's equity return range of 10.50% to 11.50% and 11.15%-point estimate. To accept the Company's proposal requires a belief that Duke in Florida is substantially riskier than all other Duke

[31] See MFR Schedule F Duke 2023 10K at page 18 of 384. The May 2024 PSCSC decision provided from PSCSC Docket No. 2023-388-F and 2023-403-E (Settlement).

operating subsidiaries, but there is no evidence to support such a conclusion. Actually, the evidence suggests given the supportive regulatory environment in

Florida, Duke Florida is less risky and requires a lower equity return than the other Duke electric subsidiary operations.

Expanding the analysis to consider all electric related utility decisions, one finds that the average authorized electric return is 9.46% for 2022 and 9.59% for 2023.[32] Again, to accept the Company's 11.15% equity return proposal requires a belief that Duke Florida is substantially riskier on average than all other electric utility operations, but there is no evidence to support such a conclusion. Actually, the evidence suggests that Duke Florida is less risky and requires a lower equity return than the average electric utility.

Q. 30 CAN YOU PROVIDE AN EXAMPLE OR EVIDENCE THAT DEF IS LESS RISKY?

A. Yes. Risk for shareholders is measured as the ability of a firm to earn a reasonable return on equity. In the case of a regulated utility, the reasonable return on equity is established by the regulatory authority. Below, I include a table of actual earned return by DEF relative to this Commission's authorized equity return for the years 2014 through 2023.

[32] See Schedule (DJL-10) Authorized Electric Equity Return 2022 and 2023.

TABLE 10

AUTHORIZED VERSUS EARNED EQUITY RETURNS

FOR DEF 2014- 2023[33]

YEAR	ROE BOTTOM RANGE	ROE MID-POINT	ROE TOP RANGE	ACHIEVED ROE	ACTUAL AUTHORIZED RETURN ELECTRIC UTILITY
2014	9.50%	10.50%	11.50%	9.36%	9.91%
2015	9.50%	10.50%	11.50%	10.06%	9.84%
2016	9.50%	10.50%	11.50%	9.82%	9.77%
2017	9.50%	10.50%	11.50%	9.80%	9.74%
2018	9.50%	10.50%	11.50%	9.13%	9.60%
2019	9.50%	10.50%	11.50%	10.83%	9.66%
2020	9.50%	10.50%	11.50%	10.86%	9.44%
2021	9.50%	10.50%	11.50%	9.48%	9.38%
2022	9.10%	10.10%	11.10%	10.47%	9.46%
2023	9.10%	10.10%	11.10%	10.45%	9.59%

As can be seen from the Table above, DEF has been able to achieve an actual equity return within the range of authorized annual equity return in seven of the recent ten years. In the years DEF did not achieve the authorized return, the Company was

[33] Data from earnings surveillance reports. Actual average authorized equity returns from Schedule (DJL-10).

marginally below the authorized equity return level; missing the range by 2 basis points in 2021, 14 basis points in 2014, and missing the rage by 37 basis points in 2018. All other years were within the ROE range and since 2019 above the midpoint of the range in 4 of 5 years. Also, Duke was able to achieve an equity return higher than the average authorized return for electric utilities from around the country in 8 of 10 years since 2014.These earned return results demonstrate that DEF has operated in a regulatory environment where the Company has consistently earned its authorized returns – even in what can be described as a turbulent economic environment given the COVID-19 impacts on the economy in recent years. This evidence does not support the Company's proposal that the DEF equity return should be set at 11.15%, well above current authorized equity return levels.

Q. 31 HAVE RATING AGENCIES WEIGHED IN WITH REGARD TO THE DEF REGULATORY MECHANISMS?

A. Yes. As discussed earlier, Moody's risk evaluation relies on the benefits and attributes of supportive Florida regulation coupled with the benefits of regulatory mechanisms, which are generally viewed as important attributes by credit rating agencies in evaluating risk and creditworthiness.

Q. 32 EARLIER YOU MENTIONED REGULATORY LAG. HOW DOES THIS LAG IMPACT RATE SETTING AND REGULATORY RISK?

A. Regulatory lag is the period of time it takes to adjust tariffs in a rate case proceeding. Generally, it is the time between the utility rate request and the realization of a needed rate adjustment and the ultimate authorization of a rate change. For example, a utility requesting a rate increase of $1million based on a historical test year may claim earnings erosion due to the regulatory lag during the pendency of the rate process until the authorized increase is implemented.

The counter argument to these claims of regulatory lag and risk is that the utility controls the timing of its rate requests. Also, regulatory lag is built into the regulatory process to encourage the utility to control and monitor costs as a means of bolstering profits. Regulatory lag can work both ways – sometimes there is earnings erosion while other times there can be excess earnings.

Other contributions to regulatory lag are increasing costs, inflation, increasing capital investments, and lower growth and sales. The regulatory process in Florida provides the Company ample opportunity to earn its authorized return by mitigating regulatory lag and maintaining cash flows and liquidity in the rate process.

Q. 33 DO THE CREDIT RATING AGENCIES SUCH AS MOODY'S VIEW RATE MECHANISMS FAVORABLY?

A. Yes. Rating agencies are foremost concerned with a utility's ability to recover costs and earn an adequate return to cover expenses and debt obligations with a margin of

safety on top of costs. For example, Moody's states a "… utility's ability to recover its costs and earn an adequate return are among the most important analytical considerations when assessing utility credit quality and assigning credit ratings."[34] In terms of rate mechanisms and the impacts of reducing risks, Moody's states the following:

> One of the most referenced, but potentially misleading, indicators used to judge whether a particular utility is recovering its costs and earning an adequate return is its regulatory allowed return on equity. Although a high allowed return on equity can be associated with a higher earned return, this measure cannot be looked at in isolation but must be viewed in relation to a utility's cost recovery provisions that impact actual earned rate of return, like automatic adjustment clauses, the length of rate cases, and the degree of regulatory lag that may occur. Some regulators believe that mechanisms like automatic adjustment clauses materially reduce the business and operating risks of a utility, providing justification for a relatively low allowed rate of return. We believe this is one of several reasons why both allowed and requested ROE's have trended downward over the last two decades.[35]

Moody's concludes that the more clauses a utility has in place, the lower the risk for the utility.[36]

[34] *"Cost recovery Provisions Key To Investor- Owned Utility Ratings and Credit Quality*, Evaluating a Utility's Ability to Recover Costs and Earn Returns," Moody's Investors Service Special Comment (June 18, 2010) at page 1.
[35] *"Cost recovery Provisions Key To Investor-Owned Utility Ratings and Credit Quality*, Evaluating a Utility's Ability to Recover Costs and Earn Returns," Moody's Investors Service Special Comment (June 18, 2010) page at pages 1-2.
[36] *"Cost recovery Provisions Key To Investor-Owned Utility Ratings and Credit Quality*, Evaluating a Utility's Ability to Recover Costs and Earn Returns," Moody's Investors Service Special Comment (June 18, 2010) at page 2.

Q. 34 DOES THE COMPANY FACE ANY UNUSUAL BUSINESS OR FINANCIAL RISK?

A. DEF does propose a large construction program over the next several years for solar facilities and other assets which will increase the size of rate base as planned projects go into service.[37] As Moody's points out, the Company's 2023 – 2027 capital forecast totaling around $12 billion is approximately $2.6 billion higher than it spent over 2018 – 2022.[38] There is an expectation that cash flow metrics will be impacted over the construction period until all facilities are included in rates, then cash flow metrics will increase.[39] Despite the large construction program and expectation of impacts on cash metrics, Moody's continues to have a positive outlook for Duke. Moody's sees the multi-year rate plan as a key factor impacting Duke's future credit metrics favorably. Moreover, while the risk of severe storms is always high in Florida, Moody's sees these risks as mitigated by credit supportive regulatory treatment.[40]

Q. 35 IN YOUR OPINION, CAN A HIGH EQUITY RETURN WHEN COMBINED WITH COST RECOVERY MECHANISMS LEAD TO EXCESS PROFITS AND EXCESSIVE OR UNREASONABLE RATES?

A. Yes. I have described how the cost recovery mechanisms assure stable and consistent recovery no matter: (i) the weather; (ii) consumer usage preferences, conservation levels and demand; (iii) fuel cost increases; and in cases like a negotiated multi-year

[37] See Moody's Credit Opinion May 22, 2023 at page 4.
[38] Moody's Credit Opinion May 22, 2023 at page 4.
[39] Moody's Credit Opinion May 22, 2023 at page 4.
[40] Moody's Credit Opinion May 22, 2023 at page 4.

rate plan (iv) infrastructure capital additions through the rate plan or system hardening, or capital replacement due to storm damage through storm cost recovery mechanisms. Through such mechanisms, revenue recovery is stable and consistently assuring cash flow for corporate needs and profit levels. Risk as measured by volatility of return is addressed by these cost recovery mechanisms. Equity return levels are a function of risk levels so if risk is addressed in the mechanisms – a higher equity return authorization would overcompensate risk and result in unfair or unreasonable rates.

A better way to look at the DEF regulatory risk profile is to say that it makes my recommended ROE conservative. The 9.45% ROE recommendation and the 6.23% (2025 test year) overall rate of return recommendation represent DEF's costs of capital largely without regard to the Florida multi-year rate plan.

SECTION VI: COMPARABLE GROUP ANALYSIS

Q. 36 PLEASE EXPLAIN AND DESCRIBE THE STARTING POINT OF YOUR COST OF CAPITAL ANALYSIS FOR THIS CASE.

A. The first step for any cost of equity capital analysis is the selection of a comparable group of companies for which market data is available to conduct a market-based cost of capital analysis. I reviewed Mr. McKenzie's risk screening criteria for his comparable group analysis and selection. I agree with most of Mr. McKenzie's selection or screening criteria for the comparable group analysis in this case. I do find that Mr. McKenzie has excluded from his comparable group companies with issuer

credit ratings more than 1-notch different (higher or lower) than DEF's issuer credit rating of A3 (Moody's) and BBB+ (S&P). In my opinion, the 1-notch issuer credit analysis is very limiting and does not improve the analysis.

I should also point out that one of Mr. McKenzie's selected comparable companies, Allete Energy, is currently involved in a merger acquisition with a buy-out provision from a Canadian pension fund, and no longer meets Mr. McKenzie's selection criteria. I have removed Allete Energy from the cost of capital analyses.

While I have used Mr. McKenzie's comparable group of 9 companies (originally 10-companies but Allete Energy is removed), I also employed a 16-company risk group of electric utilities for comparable analysis. This alternative risk group is based on firms designated by Value Line as an electric utility with the following criteria: (i) consistent cash dividend payments; (ii) investment grade level issuer rating from Standard & Poor's and/or Moody's; and (iii) not party to merger or acquisition.

The difference between this alternative group and the Company proposal is that Mr. McKenzie limits his group to a one-notch difference from Moody's A3 rating and S&P's BBB+ rating. The financial one-notch limitation is somewhat restrictive.

I also will employ an expanded 16-company comparable group for the electric utility group B.[41] The 9-company utility group A and the 16-company electric utility group B of companies are shown in the following Table 11.

[41] Direct Testimony DEF witness Adrien McKenzie, Exhibit AMM-3, page 1 of 1.

Table 11

COMPARABLE COMPANY GROUP

Company	Stock Ticker
UTILITY GROUP A	
AMEREN CORPORATION	AEE
CONSOLIDATED EDISON	ED
NEXTERA, INC.	NEE
OGE ENERGY CORPORATION	OGE
PINACLE WEST CAPITAL CORP	PNW
PORTLAND GENERAL ELECTRIC CO.	POR
PPL CORP.	PPL
WEC ENERGY GROUP	WEC
XCEL ENERGY INC.	XEL
ELECTRIC UTILITY GROUP B	
ALLIANT ENERGY CORP	LNT
AMEREN CORPORATION	AEE
AMERICAL ELECTRIC POWER	AEP
AVISTA CORPORATION	NWE
DUKE ENERGY CORPORATION	DUK
ENTERGY CORPORATION	ETR
EVERGY, INC.	EVRG
IDACORP, INC.	IDA
MGE ENERGY, INC.	MGEE
NEXTERA, INC.	NEE
NORTHWESTERN CORPORATION	NWE
OGE ENERGY CORPORATION	OGE

PINACLE WEST CAPITAL CORP	**PNW**
PORTLAND GENERAL ELECTRIC CO.	**POR**
SOUTHERN COMPANY	**SO**
XCEL ENERGY	**XEL**

All of these companies are dividend-paying electric utilities with investment grade bond ratings. I have included a listing in Schedule (DJL- 4) of the electric utilities in the comparable group along with basic data for beta, historical, forecasted equity ratios, and a forecast of comparable earnings from the Value Line data base.

SECTION VII: COST OF CAPITAL MODELS DCF ANALYSIS

Q. 37 PLEASE EXPLAIN THE CONSTANT GROWTH DCF METHODOLOGY YOU HAVE EMPLOYED IN YOUR ANALYSIS.

A. The price that an investor is willing to pay for a share of common stock today is determined by the income stream the investor expects to receive from the investment. The return the investor expects to receive over the investment time horizon is composed of: (i) dividend payments; and (ii) the appreciated sale value of the investment. A proper analysis adds dividends to the gain on the final sale value, and discounts these expected future earnings to a present value.

To determine or estimate investor requirements using the DCF model, one computes a cost of capital requirement, or discount rate from the current market data and the expected dividend stream. The DCF model stated as a formula is as follows:

$$K = D/P + G$$

where:
K = required return on equity,
D = dividend rate,
P = stock price,
D/P = dividend yield, and
G = growth in dividends.

Q. 38 PLEASE EXPLAIN HOW YOU CALCULATED THE DIVIDEND YIELD FOR THE COMPARABLE COMPANIES.

A. The dividend yield is the ratio of the dividend rate to the stock price. When calculating the dividend yield, one must be cautious and not rely on spot stock prices. One must be equally cautious not to rely on long periods of time as the data becomes unrepresentative of market conditions. The objective is to use a period of time such that the resulting dividend yield is representative of the prospective period when rates will be in effect.

While there is no fixed period for selecting the denominator of the dividend yield (i.e., stock price), the key guideline is that the yield not be distorted due to fluctuations in stock market prices. On the other hand, dividends (the numerator of the yield calculation) are relatively stable as opposed to the stock prices, which are subject to daily and cyclical market fluctuations. The selection of a representative time period will dampen the effect of stock market changes.

The price and dividend data used for each of the proxy companies in the comparable group is contained in my Schedule (DJL-5).

I have examined monthly closing stock prices for the period November 2023 through April 2024, for a 12-week period ending in April 2024 along with 52 week high and low averages, to calculate a representative price for the dividend yield calculation. For this analysis, I have employed the recent 3-month average price (February 2024, through April 2024) in calculating the dividend yield.

To calculate dividends, I employ the current annualized dividend, increased for ½ the expected growth rate. Because utility companies tend to increase quarterly dividends at different times throughout the year, the assumption is that dividend increases will be evenly distributed over the calendar quarters for the comparable group companies. Given the above, it is appropriate to calculate the expected dividend yield by applying one-half of the long-term estimates of growth to the current dividend yield. I have calculated the yield employing the current dividends for each comparable company as reported by Value Line and the recent three-month average price and the resulting dividend yields are shown in my Schedule (DJL-5).

Q. 39 EXPLAIN HOW YOU HAVE CALCULATED THE EXPECTED GROWTH RATE IN YOUR CONSTANT GROWTH DCF ANALYSIS FOR THE COMPANIES IN THE COMPARABLE GROUP.

A. Like the dividend yield, there exists no single or simple method to calculate growth rates. The calculation of investor growth expectations is the most difficult part of the DCF analysis. To estimate investor expectations of growth, I have examined historical growth, forecasted growth rates, and other financial data for each of the companies in

the comparable group.

Implementation of the DCF model requires the exercise of considerable judgment with regard to estimating investor expectations of growth, and it is a difficult task, but such difficulties are not insurmountable. Many economic factors affect capital markets in general and individual stocks specifically. Such economic variables, which were discussed earlier, entail the current state of the economy, including the trade deficit, federal budget uncertainty, fiscal policy, inflation, and Federal Reserve Board policies on interest rates.

Investors generally have good information on the economic and financial variables outlined above. All of this information is available quickly, especially in recent decades with easy access to the internet.

Like the information available on the general economy, investors also have access to a wealth of information about particular types of securities, industries and specific company investments. This information is also factored into investor expectations and therefore the stock price individuals are willing to pay.

Common stock earnings growth rate forecasts and historical growth rate data may be found in the Value Line publication. These Value Line earnings estimates are five-year projections in annual earnings. Again, Value Line is widely available to the public, and is a good source of earnings projections. Other earnings estimates are forecasted by Zacks as well as First Call projections from Yahoo finance, which are widely available on the internet at Zacks.com and Yahoo Finance, respectively. Those

earnings projections along with other stock-specific financial data provide a range of estimates of earnings and are readily available at no cost.

Another growth estimate is referred to as the sustainable growth or retention ratio growth estimate. To project future growth in earnings under the sustainable growth method, one multiplies the fraction of a firm's earnings expected to be retained (not paid out as dividends) by the expected return on book equity. As a formula:

$$\text{Growth} = (\text{"}b\text{"} \; x \; \text{"}r\text{"})$$

Where:
"b" =1- (dividends per share/earnings per share)
"r" =earnings per share / net book value share

All the data necessary to calculate the elements of the sustainable growth method are available on a forecasted basis in Value Line.

I have extended this sustainable growth formula to include the impact of external equity financing. The growth formula including external financing is:

$$g = br + sv$$

The terms "b" and "r" have been described above, "s" is the expected growth in shares to finance investment, and "v" is the profitability of those expected investments.

Q. 40 PLEASE EXPLAIN YOUR GROWTH RATE ANALYSIS.

A. I have included in my Schedule (DJL-6), a three-page schedule showing the growth rates I have reviewed in my analysis. The first set of growth rates examined is the five-

year and ten-year historical growth rates in earnings per share, dividends per share, and book value per share as reported by Value Line. The second set of growth rates are the Value Line forecasted growth rates in dividends, book value and earnings per share for each company in the comparable group. The third set of growth rates examined is the Zacks forecasted growth rates in earnings. The fourth growth estimate considered, the First Call earnings growth estimate, is readily available to investors at Yahoo Finance.

In addition, I have examined the growth rates based on the forecasted internal growth, the so-called sustainable growth estimate discussed above.

The growth rates described above provide a range of estimates for each of the comparable companies. The resulting range of average and median forecasted growth rates for the electric utility comparable group is shown in Schedule (DJL-6).

Q. 41 DID YOU RELY ON THE HISTORICAL GROWTH RATES?

A. No. Historical growth rates are a starting place for the analysis, but investors consider additional information when formulating expectations. Moreover, whether the trends of the past ten or five years continue to hold for the future is often a suspect assumption. Instead, for the constant growth DCF I rely on the sustainable growth estimates as a better predictor of investor expectations. I do employ the Value Line, Zacks, and Yahoo finance earnings estimates and sustainable growth estimates in the two-stage growth model.

Q. 42 PLEASE SUMMARIZE YOUR CONSTANT GROWTH DCF ANALYSIS.

A. The 9-company comparable group mean and median results fall in a range of 8.68% to 8.85% with about an 8.76% midpoint. These analyses can be found in my Schedule (DJL-7), SLIDE 1, column F, lines 1 - 12. The DCF results for the 16-company alternative electric utility comparable group mean and median results fall in a higher range of 9.08% to 9.23% with about a 9.15% midpoint. These analyses can also be found in my Schedule (DJL-7), SLIDE 2, column F.

Q. 43 HAVE YOU CALCULATED ADDITIONAL DCF ANALYSES FOR THE COMPARABLE GROUP COMPANIES?

A. Yes. I have calculated a two-stage non-constant growth DCF analysis for the companies in the comparable groups.

Q. 44 PLEASE DESCRIBE YOUR TWO-STAGE NON-CONSTANT GROWTH DCF.

A. This analysis calculates equity cost using a non-constant growth two-stage DCF Model. The constant growth DCF model can be adjusted to reflect multiple growth assumptions because the constant growth rate assumption is often not consistent with investor expectations. As an example, it is often the case where short-term growth estimates are not consistent with long-term sustainable growth projections. In those instances, where more than one growth rate estimate is appropriate, a multi-stage non-

constant growth model can be employed to derive a cost of capital estimate. In other words, the constant growth model is adjusted to incorporate multiple growth rate periods, assuring a constant growth (long-term) rate is estimated for a longer period.

For the comparable group, the first growth stage (years 1-5) of the model, the Value Line forecasted growth in dividends is employed and an annual dividend is calculated. The second stage (years 6 and beyond) employs an earnings growth estimate based on the individual company in the comparable group of forecasted earnings per share Value Line, Zacks, and Yahoo Finance and the forecast sustainable growth estimate ("b*r" + "s*v"). The estimated cash flows are modeled over an extended period and return is calculated employing the Internal Rate of Return formula ("IRR").

Q. 45 WHAT ARE THE RESULTS OF THE TWO-STAGE NON-CONSTANT GROWTH DCF ANALYSIS?

A. The results of the two-stage non-constant growth DCF analysis for the 9-company utility group are shown in Schedule (DJL-8), Slide 1, column K, lines 1 -12. The 9-company utility company comparable group mean and median results indicate a cost of equity range of 9.66% to 9.98% with an 9.82% midpoint. The results of the two-stage non-constant growth DCF analysis for the 16-company alternative utility group are shown in Schedule (DJL-8), Slide 2, column K, lines 1 - 19. The alternative electric company comparable group mean and median results indicate a cost of equity range of 9.66% to 9.73% with a 9.70% midpoint.

SECTION VIII: BOND YIELD EQUITY RISK PREMIUM, CAPM, AND ECAPM COST OF EQUITY ESTIMATE

Q. 46 PLEASE DESCRIBE THE RISK PREMIUM ANALYSIS.

A. Debt instruments such as bonds (long-term debt) are less risky than common equity when both classes of capital are issued by the same entity. Bondholders have a prior contractual claim to the earnings of the corporation and returns on bonds are less variable and more predictable than stocks. The bottom line is that debt is less risky than equity. There are numerous return studies of capital market investments, all of which show lower returns with lower risks and higher returns with higher risk investments. These financial truisms provide a sound theoretical basis and foundation for the risk premium method for estimating equity costs. The risk premium approach is useful in that the analysis is based on current market interest rates.

The risk premium approach is not without its problems and drawbacks. In practice and application, there is considerable debate as to the historical time period to analyze and added debate concerning the calculation of the bond/equity return risk spread. Historical debt/equity risk spreads measured over many decades may not be relevant to current capital market requirements. Others argue that a long-term analysis is necessary, since the goal is to measure investors' long-term expectations.

Another version of the risk premium method is the capital asset pricing model ("CAPM").

Finally, I examine Empirical Capital Asset Pricing Model (ECAPM") estimates. The

ECAPM is quite similar to the CAPM described above with the difference being an adjustment for the beta estimate in the model. Firms with beta estimates below unity tend to have actual beta values that are higher. The ECAPM includes an adjustment to correct for any systematic measurement errors in beta.

CAPITAL ASSET PRICING MODEL ANALYSIS

Q. 47 PLEASE EXPLAIN HOW YOU CALCULATED THE EQUITY RETURN ESTIMATE EMPLOYING THE CAPM.

A. I employed the basic CAPM formula denoted as follows:

$$R_f + \beta(R_m - R_f)$$

Where:

R_f = risk free rate;
β =beta;
R_m= market return; and
R_m - R_f= market risk premium or MRP

This is the typical model structure employed by most financial analysts in estimating equity returns.

Q. 48 WHAT RISK FREE (R_f) VALUE DID YOU EMPLOY IN YOUR CAPM ESTIMATE?

A. I typically employ the most recent three-month average of the 30-Year U.S. Treasury Bond rates. This three-month average is:

Table 12[42]

30-Year U.S. Government Bond Yields

February 2024	4.38%
March 2024	4.36%
April 2024	4.61%
3-Month Average	4.45%

I have employed a 3.0% to 4.0% range 30-Year U.S. Treasury Bond yield which is consistent with the market expectations of declining future rates as the Federal Reserve is expected to lower federal funds rates over the foreseeable future of the proposed 2025 – 2027 test year periods proposed in this case. I should note that since January 2022, the average 30-year U.S. Treasury yield has been 3.7%. Over this January 2022-April 2024, period the federal funds rate has gone from zero to 4.5%. Now, given the projections of federal funds rates to reverse course, a 3.0% to 4.0% expectation for U.S. Treasury yields is reasonable.

Q. 49 WHAT VALUE DID YOU EMPLOY FOR BETA IN YOUR CAPM ANALYSIS?

A. I employed a Value Line beta estimate for each company in the comparable group as

[42] The monthly bond yields are presented in Schedule (DJL-3)

shown in my Schedule (DJL-4), column A into the CAPM Schedule (DJL-9) columns A and F.

Q. 50 WHAT VALUE HAVE YOU EMPLOYED FOR THE MARKET RISK PREMIUM ("MRP")?

A. To calculate the MRP, I first looked at the historical risk premiums for the period 1926-2022. The following summarizes the historical MRP for the 1926-2022 period:

Table 13

Market Risk Premium

Investment[43]	Arithmetic Mean Return
Large Company Stocks	12.03%
Long Term Government Bonds	5.0%
Historical MRP	7.03%

Thus, the historical MRP is 7.03% above the risk-free rate for long-term U.S. Treasury Bonds.

I also estimated a second MRP by measuring the difference between the forecasted equity return for the two groups of electric comparable companies as reported by Value Line for the period 2027 – 2029. As shown in Schedule (DJL-4) at Slide 1, column K, the 9-company comparable group forecasted average return is about 10.77% (The 15.19% outlier for WEC Energy is excluded from the calculation). Also shown in Schedule (DJL-4) the alternative electric comparable group forecasted return shown at

[43]Market Results for Stocks, Bonds, Bills, and Inflation, 1926-2022, Kroll 2023 Classic Yearbook.

column K, is about 10.77%% (The 15.96% return outlier for Southern Company is excluded from this calculation). Employing an assumed 30-year U.S. Treasury yield of 3.5% for the risk-free rate produces an MRP of 7.27 % (10.77 % - 3.5%).

A third MRP estimate is calculated by examining the historical market risk premiums produced by the difference in authorized returns and 30-year U.S. Treasury yields. These results are shown in Schedule (DJL-10) and for electric, the MRP is 5.45.

To calculate the MRP to use in this case, I have employed the long view 1926 - 2022 average historical MRP of 7.03%, the comparable group forward or forecast estimate of MRP of 7.27%, and the historical 1981-2023 regulated utility MRP estimate of about 5.50%. Giving equal weight to each of these estimates results in an MRP estimate as follows:

TABLE 14

FINAL MARKET RISK PREMIUM

KROLL HISTORICAL MRP	7.03%
FORECASTED COMPARABLE GROUP MRP	7.27 %
1981 – 2023 HISTORICAL UTILITY MRP	5.45 %
AVERAGE MRP	6.58 %

This average 6.58% MRP estimate is consistent with the expected ranges of MRP's of 5% - 8% found in a number of studies in the financial literature and is consistent with

current financial markets expectations for MRPs.[44]

Q. 51 WHAT ARE THE RESULTS OF YOUR CAPM ANALYSES FOR THE ELECTRIC COMPANY COMPARABLE GROUP?

A. The results of the CAPM analyses can be found in my Schedule (DJL-9) at column D for the electric comparable group. The range of results for the Duke proposed utility group indicate an equity return range of 9.42% to 9.68% with a 9.55% midpoint. The CAPM range of results for the alternative electric utility group indicate an equity return range of 9.52% to 9.59% with a 9.56% midpoint.

Q. 52 IN YOUR ANALYSES, HAVE YOU INCLUDED A CALCULATION OF THE EMPIRICAL CAPM OR ECAPM RETURN ESTIMATE FOR THIS CASE?

A. Yes. Like the CAPM analysis discussed above, the ECAPM estimate of equity return relies on basic financial portfolio theory. To correct for the potential of biased beta estimates, an adjustment is made so as not to understate the cost of equity. The basic formula for the ECAPM for beta conversion is as follows:

$$K=R_f + 0.25(R_m - R_f) + 0.75\beta(R_m - R_f)$$

[44]Morin, Roger; New Regulatory Finance, Public Utility Reports, Inc. (2006). See Chapter 5.

Q. 53 WHAT ARE THE RESULTS OF YOUR ECAPM ANALYSES FOR THE ELECTRIC COMPANY COMPARABLE GROUP?

A. The results of the ECAPM analyses can be found in my Schedule (DJL-9) at column H. The range of ECAPM results for the Duke proposed comparable group are 9.59% to 9.78% with a midpoint of 9.68%. The range of ECAPM results for the alternative 16-company electric comparable group are 9.66% to 9.71% with a midpoint of 9.69%.

Q. 54 DESCRIBE YOUR BOND YIELD EQUITY RISK PREMIUM ANALYSIS.

A. The bond yield equity risk premium analysis is presented in Schedule (DJL-10) and evaluates the risk/return differential between the authorized electric utility return on equity relative to 30-year U.S. Treasury bond yields for the period 1981-2023. The resulting risk premium is combined with the estimated 30-year U.S. Treasury yield of 3.0% to 4.0% to determine the range of risk premium estimates of equity costs.

The resulting risk premium range of results for the utility group is 9.68% to 10.27% with a 9.97% midpoint estimate. These risk premium results exceed all other model results and were not considered in the final analysis.

Q. 55 PLEASE SUMMARIZE YOUR COST OF EQUITY CAPITAL RESULTS AND RECOMMENDATION.

A. Table 14 below is a summary of the equity cost estimates for the comparable group

companies employing the constant growth DCF, 2-Stage DCF, CAPM, and ECAPM models.

Table 15

Cost of Equity Estimates Employing DUKE Comparable Risk Group [45]

MODEL	RANGE	MIDPOINT
DCF Model	**8.68% - 8.85%**	**8.76%**
Two-stage DCF	**9.66% - 9.98%**	**9.82%**
CAPM	**9.42% - 9.68%**	**9.55%**
ECAPM	**9.59% - 9.78%**	**9.68%**
Average of all Models	**9.34% - 9.57%**	**9.45%**
Minimum		**8.68%**
Maximum		**9.98%**
Midpoint		**9.33%**

The second financial analysis employed the same financial models, but applied the models to an alternative 16-company peer group. Those results are shown in the following table:

[45] Each cost of equity capital estimate is discussed in the testimony and is presented in Schedules (DJL-7), (DJL-8), and (DJL-9).

Table 16

Cost of Equity Estimates Employing Alternative 16-Company Comparable Risk Group[46]

MODEL	RANGE	MIDPOINT
DCF Model	9.08% - 9.23%	9.15%
Two-stage DCF	9.66% - 9.73%	9.70%
CAPM	9.52% - 9.59%	9.56%
ECAPM	9.66% - 9.71%	9.69%
Average all Models	9.48% - 9.56%	9.52%
Minimum Maximum Midpoint		9.08% 9.73% 9.40%

The results of the two analyses shown in Tables 15 and 16 are relatively close. I recommend a point estimate cost of capital of 9.45%.

SECTION IX: CAPITAL STRUCTURE

Q. 56 WHAT CAPITAL STRUCTURE IS THE COMPANY PROPOSING IN THIS PROCEEDING?

A. Based on the direct testimony of Company witness Karl Newlin, the Company's filed capital structure for each year of the multi-year rate plan includes 45.61.% equity

[46] Each cost of equity capital estimate is discussed in the testimony and is presented in Schedules (DJL-7), (DJL-8), and (DJL-9).

in 2025, 45.73% equity in 2026, and 45.83% equity in 2027 all on a regulatory-based capitalization.[47] I refer to regulatory capital structure because for ratemaking purposes, non-investor supplied funds representing deferred taxes and investment tax credits (ITC's) are included in capitalization for ratemaking purposes. The Duke capital structure assumes a 53% financial equity percentage (where financial basis assumes equity, long-term debt, and short-term debt).[48] In this case, the Company's capital structure is driven by the financial assumptions of 53.0% equity and 47.0% debt. Included in the Table below is a summary of each class of capital for each of the three years of the multi-year rate plan as proposed by Duke.

[47]Direct Testimony Karl Newlin at page 15, lines 10 – 16, also see MFR D-1a, pages 1, 2, and 3 of 5.
[48] Direct Testimony Karl Newlin at page 15, lines 14– 16.

TABLE 17

COMPANY PROPOSED CAPITAL STRUCTURE 2025 – 2027

CAPITAL	2025 TEST YEAR[49]	2026 TEST YEAR[50]	2027 TEST YEAR[51]
COMMON EQUITY	45.61%	45.73%	45.83%
LONG TERM DEBT	40.68%	40.58%	39.57%
SHORT TERM DEBT	-0.20%	-0.01%	1.10%
DEPOSITS ACTIVE	0.76%	0.71%	0.67%
DEPOSITS INACTIVE	0.01%	0.01%	0.01%
ITC'S	1.00%	0.93%	0.89%
DEFERRED TAX	12.13%	12.04%	11.94%
TOTAL	100.00%	100.00%	100.00%

As shown in the Table, the capital structure has slight variations each year, but does remain relatively constant. The largest percentage change is the increase in 2027 short-term debt reflecting financing capital additions in 2026 and 2027.

[49] MFR D-1a page 3 of 5.
[50] MFR D-1a page 2 of 5.
[51] MFR D-1a page 1 of 5.

Q. 57 DO YOU HAVE COMMENTS AND RECOMMENDATIONS ON THE COMPANY'S PROPOSED CAPITAL STRUCTURE RATIOS FOR DEBT AND EQUITY?

A. No. In this case the Company's capital structure is based on a 53% equity ratio on a financial basis. The current authorized equity ratio for Duke is based on the settlement of the last case and is consistent with the equity ratio proposed in this case.[52] Moreover, the testimony and evidence presented by Company witness McKenzie shows the comparable group average equity ratio of 53.8% on an operating company basis is consistent with the Duke proposed 53% for this case.[53] Further, the 16-Company comparable group equity ratio (on an operating company basis) about 52.3% well within range of the Duke proposed 53.0% for this case. Thus, Duke's proposed 53.0% equity ratio proposal is consistent with comparable electric utility current authorized levels of equity. Duke's financial risk as measured by the equity and debt ratio metrics is consistent with the comparable companies. For all of the above reasons, I recommend that the Commission employ the Duke proposed capital structure.

Q. 58 WHAT CAPITAL STRUCTURE AND COST RATES ARE YOU RECOMMENDING THAT THE COMMISSION ADOPT IN THIS CASE?

A. Based on the analyses and results discussed above, I am recommending a capital structure employing Duke's proposed capital levels and cost rates except that the equity

[52] Docket No. 22-06014 Final Order at page 31.
[53] See Direct testimony Adrien McKenzie at Exhibit ANM-5, page 2 of 2.

return should be set at 9.45%. The capital structure and cost rates are set forth in the following three tables:

Table 18

Recommended Capital Structure and Cost Rates for

Duke Operations Rate Year 2025 [54]

DESCRIPTION	RATIO	COST	WEIGHTED COST
COMMON EQUITY	45.61%	9.45%	4.311%
LONG-TERM DEBT	40.68%	4.49%	1.827%
SHORT-TERM DEBT	-0.20%	3.25%	-0.006%
CUSTOMER DEPOSITS ACTIVE	0.76%	2.61%	0.02%
CUSTOMER DEPOSITS INACTIVE	0.01%	0.00%	0.00%
INVESTMENT TAX CREDITS	1.00%	8.01%	0.08%
DEFERRED INCOME TAXES	12.13%	0.00%	0.00%
TOTAL CAPITAL	100.00%		6.23%

Thus, the recommended overall cost of capital for the 2025 test year is 6.23% and includes a 9.45% equity cost.

If the Commission approves a three year or multi-year rate plan as proposed by Duke, which OPC does not support, then I have included a cost of capital for those periods as follows.

[54] Capital structure and cost rates (except equity cost) per Company filing MFR D-1a, page 3 of 5. Equity cost of 9.45% per this testimony.

Table 19

Recommended Capital Structure and Cost Rates for

Duke Operations Rate Year 2026 [55]

DESCRIPTION	RATIO	COST	WEIGHTED COST
COMMON EQUITY	45.73%	9.45%%	4.321%%
LONG-TERM DEBT	40.58%	4.52%	1.834%
SHORT-TERM DEBT	-0.01%	3.20%	-0.000%
CUSTOMER DEPOSITS ACTIVE	0.71%	2.61%	0.019%
CUSTOMER DEPOSITS INACTIVE	0.01%	0.00%	0.00%
INVESTMENT TAX CREDITS	0.93%	8.03%	0.075%
DEFERRED INCOME TAXES	12.04%	0.00%	0.00%
TOTAL CAPITAL	100.00%		6.25%

The cost of capital for the 2026 period is 6.25% which includes a 9.45% cost of equity.

Finally, the third year of the proposed rate plan cost of capital is as follows:

[55] Capital structure and cost rates (except long-term debt cost and equity cost) per Company filing MFR D-1a, page 2of 5. Equity cost of 9.45% per this testimony.

Table 20

Recommended Capital Structure and Cost Rates for

Duke Operations Rate Year 2027 [56]

DESCRIPTION	RATIO	COST	WEIGHTED COST
COMMON EQUITY	45.83%	9.45%	4.331%
LONG-TERM DEBT	39.57%	4.63%	1.832%
SHORT-TERM DEBT	1.10%	3.20%	0.035%
CUSTOMER DEPOSITS ACTIVE	0.67%	2.61%	0.018%
CUSTOMER DEPOSITS INACTIVE	0.01%	0.00%	0.00%
INVESTMENT TAX CREDITS	0.89%	8.13%	0.072%
DEFERRED INCOME TAXES	11.94%	0.00%	0.00%
TOTAL CAPITAL	100.00%		6.29%

As can be seen from the above table, when the common equity cost rates reflect current market conditions and risks, the final recommended Company's overall cost of capital is substantially lower than the Duke request for each year for the rate plan. I have included the capital structure and cost rates in my Schedule (DJL-11).

[56] Capital structure and cost rates (except long-term debt cost and equity cost) per Company filing MFR D-1a, page 1of 5. Equity cost of 9.45% per this testimony.

SECTION X: FINANCIAL INTEGRITY

Q. 59 HAVE YOU REVIEWED CREDIT RESEARCH REPORTS FOR THE COMPANY REGARDING CREDIT QUALITY AND CORPORATE FINANCIAL METRICS?

A. Yes. As I discussed earlier, rating agencies view the Company's credit outlook as Stable and not threatened or under pressure of additional downgrade at this time. I have discussed these issues earlier with regard to a recent Moody's and the S&P Credit Reports.

Q. 60 WILL YOUR RECOMMENDED RETURN PROVIDE THE COMPANY SUFFICIENT CASH FLOW AND FINANCIAL METRICS TO MAINTAIN ITS FINANCIAL INTEGRITY?

A. Yes. Based on the capital structure and cost rates above, my recommended overall cost of capital provides sufficient financial metrics for the Company. As stated earlier, these cost rates reflect recovery of all current debt costs and equity returns are consistent with current authorized equity returns.

Q. 61 WHAT FINANCIAL RATIOS OR FINANCIAL METRICS SHOULD THE COMMISSION CONSIDER WHEN EVALUATING COST OF EQUITY?

A. In my opinion, the Commission should consider the financial metrics that bond rating

agencies consider in evaluating credit risk to a company. Key financial metrics involve cash flow coverage as a percentage of debt, and debt leverage ratio.

Q. 62 HOW ARE THESE FINANCIAL RATIOS CONSIDERED AND CALCULATED?

A. Ratings agencies such as Moody's Investor Services, Fitch Ratings, and Standard & Poor's develop rating guidelines that make explicit general ratings outcomes that are typical or expected given various financial and business risk combinations. A rating matrix or guideline is just that, a guideline, not a rule written in stone that guarantees a particular rating for a particular achieved financial metric level.

Funds or cash flow from a company's operations, in other words cash flow, are very critical to any rating/risk consideration. Interest and principal obligations of a company cannot be paid out of earnings if earnings are not cash. Thus, analyses of cash flow reveal debt-servicing ability.

Debt and capital structure considerations are indicative of leverage and flexibility to address financial changes. The 2008 liquidity crisis that hit all markets and industries is an example of the importance of financial flexibility. Stable and continuous cash flows provide financial flexibility. As discussed earlier, the array of cost recovery mechanisms available to Duke assure stable cash flows.

Given the recent ratings reports from both Moody's and Standard & Poor's, Duke is not in danger of losing current credit ratings, and my recommendations will not cause

Duke's financial integrity to diminish.

SECTION XI: RESPONSIVE TESTIMONY TO COST OF CAPITAL WITNESS MR. ADRIEN MCKENZIE

Q. 63 DO YOU HAVE ANY COMMENTS REGARDING THE DIRECT TESTIMONY AND RECOMMENDATIONS OF COMPANY WITNESS ADRIEN MCKENZIE?

A. Yes, I have a number of comments. First, as to Mr. McKenzie's recommended return on equity of 11.15% for Duke, such a return level is overstated and not supported by market data.[57] Mr. McKenzie's 11.15% recommendation appears to be based on his range of 10.50% to 11.50%. range from model results rather than current and/or expected market conditions, business or financial risk considerations, or other specific risk considerations. I discussed earlier in this testimony current market data and how such current market data supports a lower equity return. Further, Mr. McKenzie proposes the 11.15%% equity return in light of average authorized returns in the country that are about 9.60%.[58] There is no evidence that suggests Duke Florida operations are riskier than the average electric utility. Moreover, when you consider the risk reducing benefits of Florida rate mechanisms and the benefits of the negotiated multi-year rate plans of the past, along with the proposed multi-year rate plan (if

[57] Direct Testimony Mr. McKenzie at page 3, line 15.
[58] Direct Testimony Mr. McKenzie at page 3, line 15 and Schedule (DJL-10) which shows annual average authorized returns.

approved over OPC objection), Duke is less risky.

Q. 64 IS AN 11.15% EQUITY RETURN RECOMMENDATION REASONABLE IN THIS CASE?

A. No. There are several reasons why an 11.15% equity return is not reasonable in this case. First, Mr. McKenzie's own historical and current authorized equity return data in his Exhibit AMM-10, page 2, column (a) "Allowed ROE," demonstrates an 11.15% equity return is overstated. The last time that annual average authorized electric returns exceeded 11.15% was 2002 or almost 22 years ago.[59] Moreover, recent 2022 - 2023 authorized electric returns have been in the 9.6% range according to Mr. McKenzie.[60] Mr. McKenzie provides no reason to award Duke a bonus of 155 basis points (11.15% Mr. McKenzie recommendation – 9.6% average authorized equity return) or $192.2 million in annual revenues.[61] Certainly, the rating agencies do not view Duke as riskier than the average utility.

Second, Mr. McKenzie is correct that capital costs have increased along with inflation since 2021 and 2022, but even with changing interest rates and inflation, regulatory authorities around the country have not authorized average equity returns exceeding 9.66%.[62] As I noted earlier, there is currently an expectation of continued decreasing

[59] Direct Testimony Mr. McKenzie at Exhibit No. AMM-10 page 2 of 3 when the average authorized equity return was 11.21%.
[60] Direct Testimony Mr. McKenzie at Exhibit No. AMM-10, page 2 of 3 for 2022 and 2023.
[61] Based on the relationship of 50 basis points equaling $62.1 million in revenue requirements discussed in Question 17.
[62] Direct Testimony Mr. McKenzie at Exhibit No. AMM-10, page 2 of 3 for 2022 and 2023.

capital cost rates with decreasing inflation. Such expectations of declining inflation and interest rates do not support Mr. McKenzie's recommendation to radically increase the Duke equity returns.

Q. 65 DO YOU HAVE ANY COMMENTS REGARDING THE MR. MCKENZIE'S DCF ANALYSIS?

A. Yes, Mr. McKenzie's DCF analysis results for his 10-company comparable group are presented in his Exhibit AMM-6, Page 3 of 3. Only his 9.3% result employing the sustainable growth rate is consistent with current market returns authorized by regulatory authorities. The remaining results ranging from 10.2% to 10.6% are substantially in excess of expected returns authorized by regulatory authorities. While, these higher returns are the result of analyst earnings forecasts from Value Line, Zacks, and IBES, the end result appears overstated. I also employ these analyst forecasts in my two-stage DCF analysis, but one must be cautious as often these analyst forecasts are overstated and revised downward. This is especially true when economic conditions are expected to change course with market capital costs expected to decline given the current Federal reserve policies. Given the above, only Mr. McKenzie's 9.30% DCF estimate should be considered reasonable.

Q. 66 DO YOU HAVE ANY COMMENTS REGARDING MR. MCKENZIE'S CAPITAL ASSET PRICING MODEL ESTIMATES?

A. Yes, I have several comments. First, the CAPM results are presented in Mr.

McKenzie's Exhibit AMM-8, page 1 of 1, and show an 11.6% equity return estimate for Duke. Again, an 11.6% equity return is not consistent with declining capital costs or current authorized returns in the 9.6% range. Such an outlier as 11.6% should have alerted Mr. McKenzie that something is wrong when the model produces results about 200 basis points higher than the expected regulated utility return.

The second problem with the CAPM estimates is that Mr. McKenzie's estimate of risk premium of 7.3% is based on expected returns of the dividend paying stocks in the S&P 500.[63] As I discussed in the CAPM section of this testimony, a fair analysis of market risk premiums suggests a 6.6% risk premium. Third, Mr. McKenzie suggests a risk-free rate of 4.4% for the CAPM analysis.[64] While current U.S. Treasury yields are 4.4% and higher, as I described earlier, there is a market expectation and monetary policy projections of lower future interest rates. These facts have been ignored by Mr. McKenzie as demonstrated by his model projections of ROE's 200 basis points higher than current levels.

Q. 67 DO YOU HAVE ANY COMMENTS REGARDING THE MR. MCKENZIE'S EMPIRICAL CAPITAL ASSET PRICING MODEL?

A. Yes, First, the ECAPM results are presented in AMM-9 and indicate an 11.7% equity return. Like the CAPM results discussed above, the ECAPM model produces unreliable ROE estimates. The problems with the ECAPM are the same as the CAPM issues I

[63] Direct Testimony Mr. McKenzie at Exhibit No. AMM-8 page 1 columns (a – b).
[64] Direct Testimony Mr. McKenzie at Exhibit No. AMM-8, page 1 column c.

pointed out above.

Q. 68 DID MR. MCKENZIE DEVELOP OTHER EQUITY RETURN MODELS FOR HIS ANALYSES?

A. Yes, Mr. McKenzie developed a risk premium analysis producing a 10.79% equity return estimate.[65] In addition, Mr. McKenzie developed an Expected Earnings analysis which produced an 11.1% equity return estimate.[66] Given current market returns and market expectations, both the risk premium 10.79% result and the Expected Earnimgs 11.1% estimate are excessive and can only be considered outliers. The Commission should not consider such results that do not reflect current and expected market requirements.

Q. 69 AFTER REVIEWING MR. MCKENZIE'S MODELS AND RESULTS HOW DID HE ARRIVE AT HIS 11.15% RECOMMENDATION IN THIS CASE?

A. Unfortunately, Mr. McKenzie never explains how he arrived at his 10.50% to 11.50% range or his 11.15% recommendation. I have summarized each of Mr. McKenzie's model results in the Table below which demonstrate how Mr. McKenzie arrived at his results in this case.

[65] Direct Testimony Mr. McKenzie at Exhibit No. AMM-10 page 1 of 3.
[66] Direct Testimony Mr. McKenzie at Exhibit No. AMM-11 page 1 of 1.

TABLE 21
SUMMARY OF MR. MCKENZIE ROE MODEL ESTIMATES

DCF MODEL[67]	9.30%	10.20%	10.40%	10.60%
CAPM[68]	11.60%			
ECAPM[69]	11.70%			
RISK PREMIUM[70]	10.79%			
EXPECTED [7172]EARNINGS	11.1%			

It appears that the 10.50% bottom of Mr. McKenzie's range is based on the average the two highest DCF results of 10.40% and 10.60%, which provide 10.50%. Now, to calculate the 11.50% top end of the range, you average the three highest results CAPM 11.60%, ECAPM 11.70%, and Expected Earnings 11.10% which produces about 11.50%.

Now, to calculate the 11.15% point estimate, you only need to average the **highest result from each model** as follows: DCF 10.60%, CAPM 11.60%, ECAPM 11.70% Risk Premium 10.79%, and Expected Earnings 11.10% and the average is 11.16%, or about 11.15% selected by Mr. McKenzie. Mr. McKenzie's recommendation is based on averaging the highest results – this is no way to estimate a reasonable return or to set fair and just rates for consumers.

The bottom line is that Mr. McKenzie's estimated model results far exceed any authorized equity return around the country and ignore market expectations of declining

[67] Direct Testimony Mr. McKenzie at Exhibit No. AMM-6 page 3 of 3.
[68] Direct Testimony Mr. McKenzie at page 63 line 11.
[69] Direct Testimony Mr. McKenzie at page 66 line 12.
[70] Direct Testimony Mr. McKenzie at page 70 line 14.
[71] Direct Testimony Mr. McKenzie at page 73 line 6.
[72] Direct Testimony Mr. McKenzie at page 73 line 6.

capital costs. Then Mr. McKenzie averages the highest of these overstated model results to arrive at his recommendation in this case.

Q. 70 DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.

DANIEL J. LAWTON

B.A. ECONOMICS, MERRIMACK COLLEGE
M.A. ECONOMICS, TUFTS UNIVERSITY
J.D. LAW, TEXAS SOUTHERN UNIVERSITY

Prior to beginning his own consulting practice Diversified Utility Consultants, Inc., in 1986 where he practiced as a firm principal through December 31, 2005, Mr. Lawton had been in the utility consulting business with R.W. Beck and Associates a national engineering and consulting firm. In addition, Mr. Lawton has been employed as a senior analyst and statistical analyst with the Department of Public Service with the Public Utilities Commission of Minnesota. Prior to Mr. Lawton's involvement in utility regulation and consulting he taught economics, econometrics and statistics at Doane College.

Mr. Lawton has conducted numerous revenue requirements, fuel reconciliation reviews, financial, and cost of capital studies on electric, gas and telephone utilities for various interveners before local, state and federal regulatory bodies. In addition, Mr. Lawton has provided studies, analyses, and expert testimony on statistics, econometrics, accounting, forecasting, and cost of service issues. Other projects in which Mr. Lawton has been involved include rate design and analyses, prudence analyses, fuel cost reviews and regulatory policy issues for electric, gas and telephone utilities. Mr. Lawton has developed software systems, databases and management systems for cost-of-service analyses.

Mr. Lawton has developed and numerous forecasts of energy and demand used for utility generation expansion studies as well as municipal financing. Mr. Lawton has represented numerous municipalities as a negotiator in utility related matters. Such negotiations ranges from the settlement of electric rate cases to the negotiation of provisions in purchase power contracts.

In addition to rate consulting work Mr. Lawton through the Lawton Law Firm represents numerous municipalities in Texas before regulatory authorities in electric and gas proceedings. Mr. Lawton also represents municipalities in various contract and franchise matters involving gas and electric utility matters.

A list of cases in which Mr. Lawton has provided testimony is attached.

UTILITY RATE PROCEEDINGS IN WHICH TESTIMONY HAS BEEN PRESENTED BY DANIEL J. LAWTON

ALASKA REGULATORY COMMISSION		
Beluga Pipe Line Company	P-04-81	Cost of Capital
Municipal Light & Power	U-13-184	Cost of Capital
Enstar Natural Gas Co.	U-14-111	Cost of Capital & Revenue Requirements
Enstar Natural Gas Co.	U-16-066	Cost of Capital & Revenue Requirements
Municipal Light & Power	U-16-094	Cost of Capital
PUBLIC UTILITIES COMMISSION OF CALIFORNIA		
Southern California Edison	12-0415	Cost of Capital
San Diego Gas and Electric	12-0416	Cost of Capital
Southern California Gas	12-0417	Cost of Capital
Pacific Gas and Electric	12-0418	Cost of Capital
PUBLIC UTILITIES COMMISSION OF COLORADO		
Public Service Co. of Colorado	19AL-0268E	Cost of Capital
GEORGIA PUBLIC SERVICE COMMISSION		
Georgia Power Co.	25060-U	Cost of Capital
FEDERAL ENERGY REGULATORY COMMISSION		

Alabama Power Co.	ER83-369-000	Cost of Capital
Arizona Public Service Co.	ER84-450-000	Cost of Capital
Florida Power & Light	EL83-24-000	Cost Allocation, Rate Design
Florida Power & Light	ER84-379-000	Cost of Capital, Rate Design, Cost of Service
Southern California Edison	ER82-427-000	Forecasting

LOUISIANA PUBLIC SERVICE COMMISSION		
Louisiana Power & Light	U-15684	Cost of Capital, Depreciation
Louisiana Power & Light	U-16518	Interim Rate Relief
Louisiana Power & Light	U-16945	Nuclear Prudence, Cost of Service

MARYLAND PUBLIC SERVICE COMMISSION		
Baltimore Gas and Electric Co.	9173	Financial
Baltimore Gas and Electric Co.	9326	Financial

MINNESOTA PUBLIC UTILITIES COMMISSION		
Continental Telephone	P407/GR-81-700	Cost of Capital
Interstate Power Co.	E001/GR-81-345	Financial
Montana Dakota Utilities	G009/GR-81-448	Financial, Cost of Capital
New ULM Telephone Co.	P419/GR81767	Financial
Norman County Telephone	P420/GR-81-230	Rate Design, Cost of Capital
Northern States Power	G002/GR80556	Statistical Forecasting, Cost of Capital
Northwestern Bell	P421/GR80911	Rate Design, Forecasting

MISSUORI PUBLIC SERVICE COMMISSION

Missouri Gas Energy	GR-2009-0355	Financial
Ameren UE	ER-2010-0036	Financial

FLORIDA PUBLIC SERVICE COMMISSION		
Progress Energy	070052-EI	Cost Recovery
Florida Power and Light	080677-EI	Financial
Florida Power and Light	090130-EI	Depreciation
Progress Energy	090079-EI	Depreciation
Florida Power and Light	120015-EI	Financial Metrics
Florida Power and Light	140001-EI	Economic and Regulatory Policy Issues
Florida Power and Light	150001-EI	Economic and Regulatory Policy Issues Financial Gas Hedging
Florida Power and Light	160001-EI	Economic and Regulatory Policy Issues Financial Gas Hedging
Florida Power and Light	160021-EI	Equity Bonus Rewards & Financial Metrics
Florida Power and Light	20170057-EI	Economic and Regulatory Policy Issues Financial Gas Hedging
Gulf Power Company & Florida Public Utilities Company	20200151-EI & 20200194-PU	Deferred Accounting
Florida Power and Light	20210015-EI	Economic and Regulatory Policy Issues, Equity Bonus Rewards & Financial Metrics

NORTH CAROLINA UTILITIES COMMISSION		
North Carolina Natural Gas	G-21, Sub 235	Forecasting, Cost of Capital, Cost of Ser

OKLAHOMA PUBLIC SERVICE COMMISSION		
Arkansas Oklahoma Gas Corp.	200300088	Cost of Capital
Public Service Co. of Oklahoma	200600285	Cost of Capital
Public Service Co. of Oklahoma	200800144	Cost of Capital
Public Service Co. of Oklahoma	201200054	Financial and Earnings Related
Oklahoma Natural Gas	201500213	Return on Equity, Financial, capital Structure

PUBLIC SERVICE COMMISSION OF INDIANA		
Kokomo Gas & Fuel Company	38096	Cost of Capital

PUBLIC UTILITIES COMMISSION OF NEVADA		
Nevada Bell	99-9017	Cost of Capital
Nevada Power Company	99-4005	Cost of Capital
Sierra Pacific Power Company	99-4002	Cost of Capital
Nevada Power Company	08-12002	Cost of Capital
Southwest Gas Corporation	09-04003	Cost of Capital
Sierra Pacific Power Company	10-06001 & 10-06002	Cost of Capital & Financial

Nevada Power Co. and Sierra Pacific Power Co.	11-06006 11-06007 11-06008	Cost of Capital
Southwest Gas Corp.	12-04005	Cost of Capital
Sierra Power Company	13-06002 13-06003 13-06003	Cost of Capital
NV Energy & MidAmerican Energy Holdings Co.	13-07021	Merger and Public Interest Financial
Sierra Pacific Power Company	16-06006	Cost of Capital
Nevada Power Company	17-06003	Cost of Capital
Nevada Power & Sierra Pacific	18-02012 Consolidated	Tax Cut and Jobs Act Issues
Southwest Gas	18-05031	Cost of Capital
Sierra Pacific Power Company	19-06002	Cost of Capital
Nevada Power	20-06003	Cost of Capital
Southwest Gas Southwest Gas	20-02023 21-09001	Cost of Capital Cost of Capital
Sierra Power Company	22-06014	Cost of Capital
Nevada Power	23-06007	Cost of Capital
Southwest Gas	23-09012	Cost of Capital
SIERRA POWER ELECTRIC & GAS	24-02026 & 24-02027	COST OF CAPITAL

PUBLIC SERVICE COMMISSION OF UTAH		
PacifiCorp	04-035-42	Cost of Capital
Rocky Mountain Power	08-035-38	Cost of Capital
Rocky Mountain Power	09-035-23	Cost of Capital
Rocky Mountain Power	10-035-124	Cost of Capital
Rocky Mountain Power	11-035-200	Cost of Capital
Questar Gas Company	13-057-05	Cost of Capital
Rocky Mountain Power	13-035-184	Cost of Capital
Dominion Energy Utah	19-057-13	Capital Structure & Imputed Debt
Dominion Energy Utah	22-057-03	Cost of Capital

SOUTH CAROLINA PUBLIC SERVICE COMMISSION		
Piedmont Municipal Power	82-352-E	Forecasting

PUBLIC UTILITY COMMISSION OF TEXAS		
Central Power & Light Co.	6375	Cost of Capital, Financial Integrity
Central Power & Light Co.	9561	Cost of Capital, Revenue Requirements
Central Power & Light Co.	7560	Deferred Accounting
Central Power & Light Co.	8646	Rate Design, Excess Capacity
Central Power & Light Co.	12820	STP Adj. Cost of Capital, Post Test-year adjustments, Rate Case Expenses
Central Power & Light Co.	14965	Salary & Wage Exp., Self-Ins. Reserve, Plant Held for Future use, Post Test Year

		Adjustments, Demand Side Management, Rate Case Exp.
Central Power & Light Co.	21528	Securitization of Regulatory Assets
El Paso Electric Co.	9945	Cost of Capital, Revenue Requirements, Decommissioning Funding
El Paso Electric Co.	12700	Cost of Capital, Rate Moderation Plan, CWIP, Rate Case Expenses
El Paso Electric Co.	46831	Cost of Capital, Decommissioning Funding, Allocation
El Paso Electric Co.	52195	Cost of Capital and Jurisdictional Allocation
Entergy Gulf States Inc.	16705	Cost of Service, Rate Base, Revenues, Cost of Capital, Quality of Service
Entergy Gulf States Inc.	21111	Cost Allocation
Entergy Gulf States Inc.	21984	Unbundling
Entergy Gulf States Inc.	22344	Capital Structure
Entergy Gulf States Inc.	22356	Unbundling
Entergy Gulf States Inc.	24336	Price to Beat
Gulf States Utilities Co.	5560	Cost of Service
Gulf States Utilities Co.	6525	Cost of Capital, Financial Integrity
Gulf States Utilities Co.	6755/7195	Cost of Service, Cost of Capital, Excess Capacity
Gulf States Utilities Co.	8702	Deferred Accounting, Cost of Capital, Cost of Service
Gulf States Utilities Co.	10894	Affiliate Transaction
Gulf States Utilities Co.	11793	Section 63, Affiliate Transaction
Gulf States Utilities Co.	12852	Deferred acctng., self-Ins. reserve, contra AFUDC adj., River Bend Plant specifically assignable to Louisiana, River Bend Decomm., Cost of Capital, Financial Integrity, Cost of Service, Rate Case

		Expenses
GTE Southwest, Inc.	15332	Rate Case Expenses
Houston Lighting & Power	6765	Forecasting
Houston Lighting & Power	18465	Stranded costs
Lower Colorado River Authority	8400	Debt Service Coverage, Rate Design
Southwestern Electric Power Co.	5301	Cost of Service
Southwestern Electric Power Co.	4628	Rate Design, Financial Forecasting
Southwestern Electric Power Co.	24449	Price to Beat Fuel Factor
Southwestern Bell Telephone Co.	8585	Yellow Pages
Southwestern Bell Telephone Co.	18509	Rate Group Re-Classification
Southwestern Public Service Co.	13456	Interruptible Rates
Southwestern Public Service Co.	11520	Cost of Capital
Southwestern Public Service Co.	14174	Fuel Reconciliation
Southwestern Public Service Co.	14499	TUCO Acquisition
Southwestern Public Service Co.	19512	Fuel Reconciliation
Southwestern Public Service Co. Southwestern Public Service Co.	47527 49831	Cost of Capital Cost of Capital
Texas-New Mexico Power Co.	9491	Cost of Capital, Revenue Requirements, Prudence
Texas-New Mexico Power Co.	10200	Prudence
Texas-New Mexico Power Company	17751	Rate Case Expenses
Texas-New Mexico Power Company	21112	Acquisition risks/merger benefits
Texas Utilities Electric Co.	9300	Cost of Service, Cost of Capital
Texas Utilities Electric Co.	11735	Revenue Requirements

TXU Electric Company	21527	Securitization of Regulatory Assets
West Texas Utilities Company	7510	Cost of Capital, Cost of Service
West Texas Utilities Company	13369	Rate Design

RAILROAD COMMISSION OF TEXAS		
Energas Company	5793	Cost of Capital
Energas Company	8205	Cost of Capital
Energas Company	9002-9135	Cost of Capital, Revenues, Allocation
Lone Star Gas Company	8664	Rate Design, Cost of Capital, Accumulated Depr. & DFIT, Rate Case Exp.
Lone Star Gas Company-Transmission	8935	Implementation of Billing Cycle Adjustment
Southern Union Gas Company	6968	Rate Relief
Southern Union Gas Company	8878	Test Year Revenues, Joint and Common Costs
Texas Gas Service Company	9465	Cost of Capital, Cost of Service, Allocation
TXU Lone Star Pipeline	8976	Cost of Capital, Capital Structure
TXU-Gas Distribution	9145-9151	Cost of Capital, Transport Fee, Cost Allocation, Adjustment Clause
TXU-Gas Distribution	9400	Cost of Service, Allocation, Rate Base, Cost of Capital, Rate Design
Westar Transmission Company	4892/5168	Cost of Capital, Cost of Service
Westar Transmission Company	5787	Cost of Capital, Revenue Requirement
Atmos	10000	Cost of Capital
ATMOS	10580	Cost of Capital
ATMOS PIPELINE TEXAS	GS23-000013758	COST OF CAPITAL

TEXAS WATER COMMISSION		
Southern Utilities Company	7371-R	Cost of Capital, Cost of Service

SCOTSBLUFF, NEBRASKA CITY COUNCIL		
K. N. Energy, Inc.		Cost of Capital

HOUSTON CITY COUNCIL		
Houston Lighting & Power Company		Forecasting

PUBLIC UTILITY REGULATION BOARD OF EL PASO, TEXAS		
Southern Union Gas Company		Cost of Capital

DISTRICT COURT CAMERON COUNTY, TEXAS		
City of San Benito, et. al. vs. PGE Gas Transmission et. al.	96-12-7404	Fairness Hearing

DISTRICT COURT HARRIS COUNTY, TEXAS		
City of Wharton, et al vs. Houston Lighting & Power	96-016613	Franchise fees

DISTRICT COURT TRAVIS COUNTY, TEXAS		
City of Round Rock, et al vs. Railroad Commission of Texas et al	GV 304,700	Mandamus

DISTRICT COURT SOUTH DAYTONA, FLORIDA		
City of South Daytona v. Florida Power and Light	2008-30441-CICI	Stranded Costs

DUKE ENERGY FLORIDA
DOCKET NO. 20240025-EI
MULTI-YEAR TEST PERIOD CALENDAR YEARS ENDING 2025, 2026, AND 2027
ELECTRIC COMPARABLE GROUP CAPITAL STRUCTURE

LINE NO.	COMPANY NAME	SYMBOL	HISTORICAL EQUITY RATIO 2023	FORECASTED EQUITY RATIO 2024	FORECASTED EQUITY RATIO 2025	FORECASTED EQUITY RATIO 2027-2029	BETA	CAPITAL SPENDING PER SHARE 2025	CAPITAL SPENDING PER SHARE 2027 - 2029
	COMPANY PROPOSED COMPARABLE GROUP								
1	ALLIANT ENERGY CORP	LNT	45.20%	43.50%	45.00%	48.00%	0.900	$5.60	$5.40
2	CONSOLIDATED EDISON	ED	49.10%	49.00%	49.00%	46.00%	0.800	$14.50	$15.50
3	NEXTERA ENERGY, INC.	NEE	43.60%	41.50%	40.50%	42.00%	1.000	$11.00	$12.00
4	OGE ENERGY CORP	OGE	48.00%	48.00%	48.50%	50.00%	1.050	$4.75	$4.75
5	PINNACLE WEST CAPITAL	PNW	45.00%	47.50%	46.00%	48.00%	0.950	$16.80	$17.20
6	PORTLAND GENERAL ELECTRIC CO.	POR	44.20%	41.50%	40.00%	40.00%	0.900	$11.75	$11.00
7	PPL CORPORATION	PPL	48.80%	49.00%	49.00%	50.50%	1.150	$3.70	$4.00
8	WEC ENERGY CORP	WEC	44.50%	44.50%	44.50%	44.50%	0.850	$9.30	$9.25
9	XCEL ENERGY, INC.	XEL	41.40%	39.50%	37.50%	37.50%	0.850	$16.40	$11.65
10	MEAN		45.53%	44.89%	44.44%	45.17%	0.939	$10.42	$10.08
11	MEDIAN		45.00%	44.50%	45.00%	46.00%	0.900	$11.00	$11.00
	DUKE ENERGY FLORIDA PROPOSED			\	53.00%	53.00%			
	AVERAGE DIFFERENCE FROM DUKE				8.00%	7.00%			
12	SOURCES:								
13	VALUE LINE INVESTMENT SURVEY ELECTRIC UTILITY (EAST MAY 10, 2024), (CENTRAL MARCH 8, 2024), (WEST APRIL 19, 2024)								

	ELECTRIC UTILITY COMPARABLE GROUP		HISTORICAL EQUITY RATIO 2023	FORECASTED EQUITY RATIO 2024	FORECASTED EQUITY RATIO 2025	FORECASTED EQUITY RATIO 2027-2029	BETA	CAPITAL SPENDING PER SHARE 2025	CAPITAL SPENDING PER SHARE 2027 - 2029
1	ALLIANT ENERGY CORP	LNT	45.20%	43.50%	45.00%	48.00%	0.900	$5.60	$5.40
2	AMEREN CORP	AEE	43.80%	46.00%	47.00%	48.50%	0.900	$12.80	$13.00
3	AMERICAN ELECTRIC POWER	AEP	42.00%	42.00%	42.00%	42.50%	0.800	$14.10	$14.00
4	AVISTA CORP	AVA	48.80%	49.00%	49.00%	49.50%	0.950	$7.15	$7.50
5	DUKE ENERGY CORPORATION	DUK	40.40%	41.00%	40.50%	37.50%	0.900	$17.75	$16.75
6	ENTERGY CORP	ETR	38.60%	39.00%	39.00%	39.00%	0.950	$22.00	$19.75
7	EVERGY ENERGY, INC	EVRG	48.50%	48.50%	48.00%	48.50%	0.950	$9.30	$9.50
8	IDACORP INC	IDA	51.20%	51.00%	50.50%	50.50%	0.850	$14.00	$12.00
9	MGE ENERGY, INC	MGEE	61.50%	62.00%	62.50%	62.50%	0.800	$6.20	$7.00
10	NEXTERA ENERGY, INC.	NEE	43.60%	41.50%	40.50%	42.00%	1.000	$11.00	$12.00
11	NORTHWESTERN CORPORATION	NW'E	50.90%	50.00%	49.00%	49.50%	0.950	$8.15	$8.25
12	OGE ENERGY CORP	OGE	48.00%	48.00%	48.50%	50.00%	1.050	$4.75	$4.75
13	PINNACLE WEST CAPITAL	PNW	45.00%	47.50%	46.00%	48.00%	0.950	$16.80	$17.20
14	PORTLAND GENERAL ELECTRIC CO.	POR	44.20%	41.50%	40.00%	40.00%	0.900	$11.75	$11.00
15	SOUTHERN COMPANY	SO	37.60%	36.00%	36.00%	37.00%	0.950	$8.75	$8.50
16	XCEL ENERGY, INC.	XEL	41.40%	39.50%	37.50%	37.50%	0.850	$16.40	$11.65
17	MEAN		45.70%	45.50%	45.07%	45.50%	0.92	$12.06	$11.52
18	MEDIAN		44.20%	46.00%	46.00%	48.00%	0.95	$11.75	$11.65
19	DUKE ENERGY FLORIDA PROPOSED			53.00%	53.00%	53.00%			
20	AVERAGE DIFFERENCE FROM DEF			7.00%	7.00%	5.00%			
	SOURCES:								
	VALUE LINE INVESTMENT SURVEY ELECTRIC UTILITY (EAST MAY 10, 2024), (CENTRAL MARCH 8, 2024), (WEST APRIL 19, 2024)								

DUKE ENERGY FLORIDA
DOCKET NO. 20240025-EI
MULTI-YEAR TEST PERIOD CALENDAR YEARS ENDING 2025, 2026, AND 2027
GOVERNMENT BOND YIELDS JANUARY 2020 THROUGH APRIL 2024

	A	B	C
DATE	30 YEAR US TREASURY	20 YEAR US TREASURY	10 YEAR US TREASURY
1/1/2020	2.22%	2.07%	1.76%
2/1/2020	1.97%	1.81%	1.50%
3/1/2020	1.46%	1.26%	0.87%
4/1/2020	1.27%	1.06%	0.66%
5/1/2020	1.38%	1.12%	0.67%
6/1/2020	1.49%	1.27%	0.73%
7/1/2020	1.31%	1.09%	0.62%
8/1/2020	1.36%	1.14%	0.65%
9/1/2020	1.42%	1.21%	0.68%
10/1/2020	1.57%	1.34%	0.79%
11/1/2020	1.62%	1.40%	0.87%
12/1/2020	1.67%	1.47%	0.93%
1/1/2021	1.82%	1.63%	1.08%
2/1/2021	2.04%	1.88%	1.26%
3/1/2021	2.34%	2.24%	1.61%
4/1/2021	2.30%	2.20%	1.64%
5/1/2021	2.32%	2.22%	1.62%
6/1/2021	2.16%	2.09%	1.52%
7/1/2021	1.94%	1.87%	1.32%
8/1/2021	1.92%	1.83%	1.28%
9/1/2021	1.94%	1.87%	1.37%
10/1/2021	2.06%	2.03%	1.58%
11/1/2021	1.94%	1.97%	1.56%
12/1/2021	1.85%	1.90%	1.47%
1/1/2022	2.10%	2.15%	1.76%
2/1/2022	2.25%	2.31%	1.93%
3/1/2022	2.41%	2.51%	2.13%
4/1/2022	2.81%	2.99%	2.75%
5/1/2022	3.07%	3.26%	2.90%
6/1/2022	3.25%	3.48%	3.14%
7/1/2022	3.10%	3.35%	2.90%
8/1/2022	3.13%	3.35%	2.90%
9/1/2022	3.56%	3.82%	3.52%
10/1/2022	4.04%	4.28%	3.98%
11/1/2022	4.00%	4.22%	3.89%
12/1/2022	3.66%	3.87%	3.62%
1/1/2023	3.66%	3.81%	3.53%
2/1/2023	3.80%	3.95%	3.75%
3/1/2023	3.77%	3.94%	3.66%
4/1/2023	3.68%	3.80%	3.46%
5/1/2023	3.86%	3.96%	3.57%
6/1/2023	3.87%	4.04%	3.75%
7/1/2023	3.96%	4.15%	3.90%
8/1/2023	4.28%	4.46%	4.17%
9/1/2023	4.47%	4.65%	4.38%
10/1/2023	4.95%	5.13%	4.80%
11/1/2023	4.66%	4.84%	4.50%
12/1/2023	4.14%	4.32%	4.02%
1/1/2024	4.26%	4.39%	4.06%
2/1/2024	4.38%	4.49%	4.21%
3/1/2024	4.36%	4.46%	4.21%
4/1/2024	4.61%	4.71%	4.41%
AVERAGE	**2.84%**	**2.86%**	**2.46%**
3 MONTH AVG	**4.45%**	**4.55%**	**4.28%**
MINIMUM	**1.27%**	**1.06%**	**0.62%**
MAXIMUM	**4.95%**	**5.13%**	**4.80%**

SOURCES: COLUMNS A-C FROM www.federalreserve.gov; H-15 DATA

DUKE ENERGY FLORIDA
DOCKET NO. 20240025-EI
MULTI-YEAR TEST PERIOD CALENDAR YEARS ENDING 2025, 2026, AND 2027
ELECTRIC COMPARABLE GROUP EQUITY RETURN FORECAST

SLIDE 1 DUKE COMPARBALE GROUP		A	B	C	D	E	F	G	H	I	J	K
COMPANY NAME	SYMBOL	BETA	EQUITY RATIO 2023	EQUITY RATIO 2024	EQUITY RATIO 2025	EQUITY RATIO 2027-2029	FORECASTED EARNINGS PER SHARE 2027 - 2029	FORECASTED BOOK VALUE PER SHARE 2027-2029	FORECASTED BASE EQUITY RETURN 2027-2029	EQUITY RETURN ADJUSTMENT FACTOR 2027-2029	FORECASTED EQUITY RETURN 2027-2029	ADJUSTED EQUITY RETURN 2027-2029
COMPANY PROPOSED COMPARABLE GROUP												
ALLIANT ENERGY CORP	LNT	0.90	45.20%	43.50%	45.00%	48.00%	$3.90	$31.90	12.23%	1.0189	12.46%	**12.46%**
CONSOLIDATED EDISON	ED	0.80	49.10%	46.00%	47.00%	48.50%	$6.60	$74.50	8.86%	1.0179	9.02%	**9.02%**
NEXTERA ENERGY, INC.	NEE	1.00	43.60%	42.00%	42.00%	42.50%	$4.55	$34.50	13.19%	1.0444	13.77%	**13.77%**
OGE ENERGY CORP	OGE	1.05	48.00%	49.00%	49.00%	49.50%	$2.75	$26.25	10.48%	1.0142	10.62%	**10.62%**
PINNACLE WEST CAPITAL	PNW	0.95	45.00%	41.00%	40.50%	37.50%	$6.00	$70.15	8.55%	1.0355	8.86%	**8.86%**
PORTLAND GENERAL ELECTRIC CO.	POR	0.90	44.20%	39.00%	39.00%	39.00%	$3.85	$39.75	9.69%	1.0235	9.91%	**9.91%**
PPL CORPORATION	PPL	1.15	48.80%	48.50%	48.00%	48.50%	$2.25	$23.45	9.59%	1.0217	9.80%	**9.80%**
WEC ENERGY CORP	WEC	0.85	48.80%	51.00%	50.50%	50.50%	$6.30	$42.00	15.00%	1.0126	15.19%	
XCEL ENERGY, INC.	XEL	0.85	41.40%	39.50%	37.50%	37.50%	$4.70	$41.35	11.37%	1.0313	11.72%	**11.72%**
MEAN		**0.939**	**46.01%**	**44.39%**	**44.28%**	**44.61%**	**$4.54**	**$42.65**	**10.99%**	**1.0244**	**11.26%**	**10.77%**
MEDIAN		**0.900**	**45.20%**	**43.50%**	**45.00%**	**48.00%**	**$4.55**	**$39.75**	**10.48%**	**1.0217**	**10.62%**	**10.27%**

SOURCES:
COLUMNS A - G: VALUE LINE INVESTMENT SURVEY ELECTRIC UTILITY (EAST MAY 10, 2024), (CENTRAL MARCH 8, 2024), (WEST APRIL 19, 2024)
COLUMN H: COLUMN F / COLUMN G
COLUMN I: CONVERT YEAR END VALUES TO AVERAGE VALUES
COLUMN J: COLUMN H * I
COLUMN K: EXCLUDES WEC ENERGY OUTLIER

SLIDE 2 ALTERNATIVE COMPARABLE GROUP		A	B	C	D	E	F	G	H	I	J	K
COMPANY NAME	SYMBOL	BETA	EQUITY RATIO 2023	EQUITY RATIO 2024	EQUITY RATIO 2025	EQUITY RATIO 2027-2029	FORECASTED EARNINGS PER SHARE 2027 - 2029	FORECASTED BOOK VALUE PER SHARE 2027-2029	FORECASTED BASE EQUITY RETURN 2027-2029	EQUITY RETURN ADJUSTMENT FACTOR 2027-2029	FORECASTED EQUITY RETURN 2027-2029	ADJUSTED EQUITY RETURN 2027-2029
ALLIANT ENERGY CORP	LNT	0.90	45.20%	43.50%	45.00%	48.00%	$ 3.90	$ 31.90	12.23%	1.0189	12.46%	12.46%
AMEREN CORP	AEE	0.90	43.80%	46.00%	47.00%	48.50%	$ 5.75	$ 52.65	10.92%	1.0269	11.22%	11.22%
AMERICAN ELECTRIC POWER	AEP	0.80	42.00%	42.00%	42.00%	42.50%	$ 7.25	$ 62.55	11.59%	1.0199	11.82%	11.82%
AVISTA CORP	AVA	0.95	48.80%	49.00%	49.00%	49.50%	$ 2.90	$ 35.00	8.29%	1.0178	8.43%	8.43%
DUKE ENERGY CORPORATION	DUK	0.90	40.40%	41.00%	40.50%	37.50%	$ 7.60	$ 70.00	10.86%	1.0096	10.96%	10.96%
ENTERGY CORP	ETR	0.95	38.60%	39.00%	39.00%	39.00%	$ 8.05	$ 84.65	9.51%	1.0300	9.79%	9.79%
EVERGY ENERGY, INC	EVRG	0.95	48.50%	48.50%	48.00%	48.50%	$ 4.75	$ 47.50	10.00%	1.0148	10.15%	10.15%
IDACORP INC	IDA	0.85	51.20%	51.00%	50.50%	50.50%	$ 6.65	$ 69.80	9.53%	1.0237	9.75%	9.75%
MGE ENERGY, INC	MGEE	0.80	61.50%	62.00%	62.50%	62.50%	$ 4.95	$ 36.50	13.56%	1.0138	13.75%	13.75%
NEXTERA ENERGY, INC.	NEE	1.00	43.60%	41.50%	40.50%	42.00%	$ 4.55	$ 34.50	13.19%	1.0444	13.77%	13.77%
NORTHWESTERN CORPORATION	NW'E	0.95	50.90%	50.00%	49.00%	49.50%	$ 4.25	$ 51.85	8.20%	1.0174	8.34%	8.34%
OGE ENERGY CORP	OGE	1.05	48.00%	48.00%	48.50%	50.00%	$ 2.75	$ 26.25	10.48%	1.0142	10.62%	10.62%
PINNACLE WEST CAPITAL	PNW	0.95	45.00%	47.50%	46.00%	48.00%	$ 6.00	$ 70.15	8.55%	1.0355	8.86%	8.86%
PORTLAND GENERAL ELECTRIC CO.	POR	0.90	44.20%	41.50%	40.00%	40.00%	$ 3.85	$ 39.75	9.69%	1.0235	9.91%	9.91%
SOUTHERN COMPANY	SO	0.95	37.60%	36.00%	36.00%	37.00%	$ 5.10	$ 32.25	15.81%	1.0095	15.96%	
XCEL ENERGY, INC.	XEL	0.85	41.40%	39.50%	37.50%	37.50%	$ 4.70	$ 41.35	11.37%	1.0313	11.72%	11.72%
MEAN		**0.92**	**45.67%**	**45.38%**	**45.06%**	**45.66%**	**$ 5.19**	**$ 49.17**	**10.86%**	**1.0219**	**11.10%**	**10.77%**
MEDIAN		**0.93**	**44.60%**	**44.75%**	**45.50%**	**48.00%**	**$ 4.85**	**$ 44.43**	**10.67%**	**1.0194**	**10.79%**	**10.62%**
SIERRA CAPITAL STRUCTURE EQUITY					54.90%							

SOURCES:
COLUMNS A - G: VALUE LINE INVESTMENT SURVEY ELECTRIC UTILITY (EAST MAY 10, 2024), (CENTRAL MARCH 8, 2024), (WEST APRIL 19, 2024)
COLUMN H: COLUMN F / COLUMN G
COLUMN I: CONVERT YEAR END EQUITY RETURN VALUES TO AVERAGE VALUES
COLUMN J: COLUMN H * COLUMN I
COLUMN K: EXCLUDES SOUTHERN COMPANY OUTLIER

DUKE ENERGY FLORIDA
DOCKET NO. 20240025-EI
MULTI-YEAR TEST PERIOD CALENDAR YEARS ENDING 2025, 2026, AND 2027
COMPARABLE GROUP PRICES AND YIELD

			A	B	C	D	E	F	G	H	I	J	K	L	M	N
LINE NO.	COMPANY NAME	SYMBOL	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	6-MONTH Average	3-MONTH Average	52-WEEK LOW STOCK PRICE	52-WEEK HIGH STOCK PRICE	52-WEEK HIGH-LOW AVERAGE STOCK PRICE	Quarterly Dividend	Annual DIVIDEND	BASE DIVIDENDYIELD AVG.THREE MONTHS
	COMPANY PROPOSED COMPARABLE GROUP															
1	ALLIANT ENERGY CORP	LNT	$50.31	$47.72	$47.29	$49.91	$49.32	$52.17	$49.45	$50.47	$45.15	$56.26	$50.71	$0.48	$1.92	3.80%
2	CONSOLIDATED EDISON	ED	89.36	89.29	85.67	90.04	93.6	95.52	$93.97	$93.97	$80.46	$98.85	$89.66	$0.83	$3.32	3.53%
3	NEXTERA ENERGY, INC.	NEE	$60.19	$58.10	$54.69	$63.91	$66.97	$76.95	$63.47	$69.28	$47.15	$79.78	$63.47	$0.52	$2.06	2.97%
4	OGE ENERGY CORP	OGE	$34.10	$32.45	$32.51	$33.88	$34.23	$37.20	$34.06	$35.10	$31.25	$38.04	$34.65	$0.42	$1.67	4.76%
5	PINNACLE WEST CAPITAL	PNW	$70.11	$67.24	$67.53	$73.85	$72.78	$78.62	$71.69	$75.08	$65.20	$86.03	$75.62	$0.88	$3.52	4.69%
6	PORTLAND GENERAL ELECTRIC CO.	POR	$42.37	$40.46	$39.71	$41.52	$43.23	$43.30	$41.77	$42.68	$38.01	$51.58	$44.80	$0.48	$1.90	4.45%
7	PPL CORPORATION	PPL	$26.59	$25.95	$26.12	$27.27	$27.46	$29.84	$27.53	$27.53	$22.20	$29.89	$26.05	$0.26	$1.03	3.75%
8	WEC ENERGY CORP	WEC	$82.46	$79.12	$76.89	$81.32	$81.83	$83.75	$76.55	$76.55	$75.13	$93.37	$84.25	$0.84	$3.34	4.36%
9	XCEL ENERGY, INC.	XEL	$69.74	$59.23	$52.13	$53.18	$53.73	$56.74	$57.46	$54.55	$46.79	$71.32	$59.06	$0.55	$2.19	4.02%
	MEAN								$57.33	$58.36	$50.15	$67.24	$58.69	$0.58	$2.33	$0.04
	MEDIAN								$57.46	$54.55	$46.79	$71.32	$59.06	$0.52	$2.06	$0.04

SOURCES:

COLUMNS A - G: YAHOO FINANCE STOCK PRICES RETRIEVED MAY 22, 2024.

COLUMN G & H: 6-MONTH AND 3-MONTH AVERAGES OF PRICE DATA

COLUMNS I & J: ZACKS.COM RETRIEVED APRIL 20, 2024. AND 5/22/24

COLUMN K: AVERAGE OF COLUMNS I & J.

COLUMN M: COLUMNL * 4 QUARTERS

COLUMN N:COLUMN M (YIELD)/COLUMN H (3-MONTH PRICE)

	ALTERNATIVE ELECTRIC UTILITY COMPARABLE GROUP		A	B	C	D	E	F	G	H	I	J	K	L	M	N
	COMPANY	SYMBOL	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	6-MONTH Average	3-MONTH Average	52-WEEK LOW STOCK PRICE	52-WEEK HIGH STOCK PRICE	52-WEEK HIGH-LOW AVERAGE STOCK PRICE	Quarterly Dividend	Annual DIVIDEND	BASE DIVIDENDYIELD AVG.THREE MONTHS
1	ALLIANT ENERGY CORP	LNT	$50.08	$50.80	$48.19	$47.75	$50.40	$50.37	$49.60	$49.51	$45.15	$56.26	$50.71	$0.480	$1.92	**3.88%**
2	AMEREN CORP	AEE	$76.26	$71.10	$68.94	$70.54	$73.29	$74.71	$72.47	$72.85	$67.03	$91.18	$79.11	$0.630	$2.52	**3.46%**
3	AMERICAN ELECTRIC POWER	AEP	$77.76	$80.30	$77.25	$84.22	$86.10	$85.56	$81.87	$85.29	$42.20	$69.38	$94.73	$0.880	$3.52	**4.13%**
4	AVISTA CORP	AVA	$33.04	$35.25	$33.54	$32.74	$35.02	$35.58	$34.20	$34.45	$30.53	$44.83	$37.68	$0.475	$1.90	**5.52%**
5	DUKE ENERGY CORPORATION	DUK	$90.20	$95.95	$94.75	$90.80	$96.71	$98.96	$94.56	$95.49	$83.06	$100.39	$91.73	$1.025	$4.10	**4.29%**
6	ENTERGY CORP	ETR	$99.08	$100.03	$98.62	$100.41	$105.68	$107.18	$101.83	$104.42	$87.10	$109.70	$98.40	$1.130	$4.52	**4.33%**
7	EVERGY ENERGY, INC	EVRG	$49.76	$51.55	$50.13	$48.92	$52.71	$52.25	$50.89	$51.29	$46.92	$63.84	$55.38	$0.643	$2.57	**5.01%**
8	IDACORP INC	IDA	$95.65	$97.46	$91.77	$87.34	$92.89	$94.32	$93.24	$91.52	$86.43	$112.96	$99.70	$0.830	$3.32	**3.63%**
9	MGE ENERGY, INC	MGEE	$72.83	$71.82	$64.06	$62.77	$78.72	$78.97	$71.53	$73.49	$61.94	$83.27	$72.61	$0.428	$1.71	**2.33%**
10	NEXTERA ENERGY, INC.	NEE	$57.51	$60.19	$58.10	$54.69	$63.91	$66.20	$60.10	$61.60	$47.15	$79.78	$63.47	$0.515	$2.06	**3.34%**
11	NORTHWESTERN CORPORATION	NW'E	$49.06	$49.62	$47.49	$47.29	$50.26	$50.45	$49.03	$49.33	$45.97	$60.56	$53.27	$0.650	$2.60	**5.27%**
12	OGE ENERGY CORP	OGE	$34.22	$34.10	$32.45	$32.51	$33.88	$33.51	$33.45	$33.30	$31.25	$38.04	$34.65	$0.418	$1.67	**5.02%**
13	PINNACLE WEST CAPITAL	PNW	$74.00	$70.94	$68.04	$68.33	$74.73	$74.50	$71.76	$72.52	$65.20	$86.03	$75.62	$0.880	$3.52	**4.85%**
14	PORTLAND GENERAL ELECTRIC CO.	POR	$40.14	$42.37	$40.46	$39.71	$41.52	$43.69	$41.32	$41.64	$38.01	$51.58	$44.80	$0.475	$1.90	**4.56%**
15	SOUTHERN COMPANY	SO	$69.54	$69.39	$68.79	$66.55	$71.74	$73.25	$69.88	$70.51	$61.56	$75.80	$68.68	$0.700	$2.80	**3.97%**
16	XCEL ENERGY, INC.	XEL	$68.89	$69.11	$68.00	$62.78	$65.67	$66.69	$66.86	$65.05	$46.79	$71.32	$59.06	$0.548	$2.19	**3.37%**
17	MEAN		**$64.88**	**$65.62**	**$63.16**	**$62.33**	**$67.08**	**$67.89**	**$65.16**	**$65.77**	**$55.39**	**$74.68**	**$67.47**	**$0.67**	**$2.68**	**4.19%**
18	MEDIAN		**$69.22**	**$69.25**	**$66.03**	**$62.78**	**$68.71**	**$69.97**	**$68.37**	**$67.78**	**$47.04**	**$73.56**	**$66.07**	**$0.64**	**$2.55**	**4.21%**

SOURCES:

COLUMNS A - G: YAHOO FINANCE STOCK PRICES RETRIEVED APRIL 25, 2024.

COLUMN G & H: 6-MONTH AND 3-MONTH AVERAGES OF PRICE DATA

COLUMNS I & J: ZACKS.COM RETRIEVED APRIL 20, 2024. AND 5/22/24

COLUMN K: AVERAGE OF COLUMNS I & J.

COLUMN M: COLUMNL * 4 QUARTERS

COLUMN N:COLUMN M (YIELD)/COLUMN H (3-MONTH PRICE)

DUKE ENERGY FLORIDA
DOCKET NO. 20240025-EI
MULTI-YEAR TEST PERIOD CALENDAR YEARS ENDING 2025, 2026, AND 2027
COMPARABLE GROUP GROWTH RATES

			A	B	C	D	E	F	G	H	I	J	K	L	M
	GAS UTILITY COMPARABLE GROUP		HISTORICAL GROWTH RATES								FORECAST GROWTH RATES				
LINE NO.	COMPANY	SYMBOL	EPS 10 YR GROWTH	DPS 10 YR GROWTH	BVPS 10 YR GROWTH	EPS 5 YR GROWTH	DPS 5 YR GROWTH	BVPS 5 YR GROWTH	HISTORICAL AVERAGE	EPS VL FORECAST	YAHOO EPS	ZACKS EPS	"br+sv" INTERNAL GROWTH	AVERAGE EPS FORECAST	AVERAGE OF ALL GROWTH FORECAST
1															
	COMPANY PROPOSED COMPARABLE GROUP														
1	ALLIANT ENERGY CORP	LNT	6.00%	6.50%	6.00%	7.00%	6.50%	6.50%	6.42%	6.50%	6.55%	6.10%	4.78%	6.38%	5.58%
2	CONSOLIDATED EDISON	ED	2.00%	2.50%	4.00%	2.00%	2.50%	3.50%	2.75%	6.00%	6.05%	7.39%	3.83%	6.48%	5.15%
3	NEXTERA ENERGY, INC.	NEE	9.50%	11.00%	8.00%	12.50%	11.50%	6.00%	9.75%	8.00%	7.84%	8.18%	6.59%	8.01%	7.30%
4	OGE ENERGY CORP	OGE	3.00%	7.50%	4.00%	4.50%	6.50%	1.50%	4.50%	6.50%		5.00%	3.48%	5.75%	4.61%
5	PINNACLE WEST CAPITAL	PNW	3.50%	4.00%	4.00%	2.00%	5.00%	3.50%	3.67%	4.50%	6.90%	7.55%	3.96%	6.32%	5.14%
6	PORTLAND GENERAL ELECTRIC CO.	POR	3.50%	5.00%	3.50%	3.00%	6.00%	3.00%	4.00%	6.00%	12.50%		4.06%	9.25%	6.65%
7	PPL CORPORATION	PPL						4.00%	4.00%	7.50%	6.80%	6.82%	3.89%	7.04%	5.47%
8	WEC ENERGY CORP	WEC	6.50%	10.00%	7.00%	7.00%	6.50%	3.50%	6.75%	6.00%	7.21%	7.95%	5.95%	7.05%	6.50%
9	XCEL ENERGY, INC.	XEL	5.50%	6.00%	5.00%	6.50%	6.50%	6.00%	5.92%	7.00%	6.70%	6.02%	5.89%	6.57%	6.23%
	MEAN		**4.94%**	**6.56%**	**5.19%**	**5.56%**	**6.38%**	**4.17%**	**5.31%**	**6.44%**	**7.57%**	**6.88%**	**4.71%**	**6.98%**	**5.85%**
	MEDIAN		**4.50%**	**6.25%**	**4.50%**	**5.50%**	**6.50%**	**3.50%**	**4.50%**	**6.50%**	**6.85%**	**7.11%**	**4.06%**	**6.57%**	**5.58%**
1	COLUMNS A - H: VALUE LINE INVESTMENT SURVEY GAS UTILITY FEBRUARY 23, 2024														
2	COLUMN I: PER YAHOO FINANCE RETRIEVED APRIL 11, 2024														
3	COLUMN J: PER ZACKS RETRIEVED APRIL 11, 2024														
4	ALL NEGATIVE & NEGLIGBLE (LESS THAN 1%) GROWTH RATES OMITTED														
5															

			A	B	C	D	E	F	G	H	I	J	K	L	M
	ELECTRIC UTILITY COMPARABLE GROUP		HISTORICAL GROWTH RATES								FORECAST GROWTH RATES				
	COMPANY	SYMBOL	EPS 10 YR GROWTH	DPS 10 YR GROWTH	BVPS 10 YR GROWTH	EPS 5 YR GROWTH	DPS 5 YR GROWTH	BVPS 5 YR GROWTH	HISTORICAL AVERAGE	EPS VL FORECAST	YAHOO EPS	ZACKS EPS	"br+sv" INTERNAL GROWTH	AVERAGE EPS FORECAST	AVERAGE GROWTH FORECAST
1	ALLIANT ENERGY CORP	LNT	6.00%	6.50%	6.00%	7.00%	6.50%	6.50%	6.42%	6.50%	6.55%	6.10%	4.78%	6.38%	5.58%
2	AMEREN CORP	AEE	4.00%	3.50%	2.00%	8.00%	5.00%	5.50%	4.67%	6.50%	4.80%	6.48%	6.33%	5.93%	6.13%
3	AMERICAN ELECTRIC POWER	AEP	5.00%	5.00%	3.50%	4.00%	5.00%	3.50%	4.33%	6.50%	5.72%	5.11%	6.00%	5.78%	5.89%
4	AVISTA CORP	AVA	3.00%	4.50%	4.00%	1.00%	4.50%	3.50%	3.42%	6.00%	6.20%		2.62%	6.10%	4.36%
5	DUKE ENERGY CORPORATION	DUK	3.00%	3.00%	2.00%	4.50%	3.50%	1.00%	2.83%	5.00%	6.86%	6.28%	4.85%	6.05%	5.45%
6	ENTERGY CORP	ETR	2.50%	2.00%	2.00%	5.50%	3.00%	6.50%	3.58%		6.80%	7.01%	4.82%	6.91%	5.86%
7	EVERGY ENERGY, INC	EVRG								7.50%	2.50%	5.00%	3.63%	5.00%	4.32%
8	IDACORP INC	IDA	4.00%	8.00%	4.50%	3.50%	6.50%	4.50%	5.17%	5.00%	4.40%		4.28%	4.70%	4.49%
9	MGE ENERGY, INC	MGEE	4.50%	4.00%	5.50%	5.50%	4.00%	5.50%	4.83%	6.00%	5.40%		8.33%	5.70%	7.02%
10	NEXTERA ENERGY, INC.	NEE	9.50%	11.00%	8.00%	12.50%	11.50%	6.00%	9.75%	8.00%	7.84%	6.18%	6.59%	7.34%	6.96%
11	NORTHWESTERN CORPORATION	NW'E	3.50%	5.50%	6.00%		3.50%	4.00%	4.50%	4.00%	4.50%		3.10%	4.25%	3.68%
12	OGE ENERGY CORP	OGE	3.00%	7.50%	4.00%	4.50%	6.50%	1.50%	4.50%	6.50%		5.00%	3.48%	5.75%	4.61%
13	PINNACLE WEST CAPITAL	PNW	3.50%	4.00%	4.00%	2.00%	5.00%	3.50%	3.67%	4.50%	6.90%	7.55%	3.96%	6.32%	5.14%
14	PORTLAND GENERAL ELECTRIC CO.	POR	3.50%	5.00%	3.50%	3.00%	6.00%	3.00%	4.00%	6.00%	12.50%		4.06%	9.25%	6.65%
15	SOUTHERN COMPANY	SO	3.00%	3.50%	3.00%	3.00%	3.50%	2.50%	3.08%	6.50%	7.30%	4.00%	6.37%	5.93%	6.15%
16	XCEL ENERGY, INC.	XEL	5.50%	6.00%	5.00%	6.50%	6.50%	6.00%	5.92%	7.00%	6.70%	6.02%	5.89%	6.57%	6.23%
17	MEAN		**4.23%**	**5.27%**	**4.20%**	**5.04%**	**5.37%**	**4.20%**	**4.71%**	**6.10%**	**6.33%**	**5.88%**	**4.94%**	**6.12%**	**5.53%**
18	MEDIAN		**3.50%**	**5.00%**	**4.00%**	**4.50%**	**5.00%**	**4.00%**	**4.50%**	**6.50%**	**6.55%**	**6.10%**	**4.80%**	**5.99%**	**5.72%**
	SOURCES:														
	COLUMNS A - H: VALUE LINE INVESTMENT SURVEY ELECTRIC UTILITY (EAST MAY 10, 2024), (CENTRAL MARCH 8, 2024), (WEST APRIL 19, 2024)														
	COLUMN I: YAHOOFINANCE.COM RETRIEVED APRIL 20, 2024														
	COLUMN J: ZACKS.COM RETRIEVED APRIL 20, 2024														
	COLUMN K: PER THIS SCHEDULE 6 AT PAGE 2														
	COLUMN L: AVERAGE EPS FORECAST COLUMNS H,I, AND J														
	COLUMN M: AVERAGE COLUMNS K AND L														
	ALL NEGATIVE & NEGLIGBLE (LESS THAN 1%) GROWTH RATES OMITTED														

DUKE ENERGY FLORIDA
DOCKET NOS. 20240025-EI
MULTI-YEAR TEST PERIOD CALENDAR YEARS ENDING 2025, 2026, AND 2027
"BR"+"SV" COMPARABLE GROUP GROWTH RATES

LINE NO.		SYMBOL	1 EPS	2 DPS	3 BVPS	4 b	5 r	6 ADJUSTMENT FACTOR	7 ADJUSTED "r"	8 "br"	9 "s"	10 "v"	11 "sv"	12 "br" + "sv"
			2027 - 2029											
	COMPANY PROPOSED COMPARABLE GROUP													
1	ALLIANT ENERGY CORP	LNT	$3.90	$2.43	$31.90	37.69%	12.23%	1.019	12.46%	4.70%	0.0016	0.560	0.001	4.78%
2	CONSOLIDATED EDISON	ED	$6.60	$3.95	$74.50	40.15%	8.86%	1.018	9.02%	3.62%	0.0075	0.273	0.002	3.83%
3	NEXTERA ENERGY, INC.	NEE	$4.55	$2.85	$34.50	37.36%	13.19%	1.044	13.77%	5.15%	0.0238	0.606	0.014	6.59%
4	OGE ENERGY CORP	OGE	$2.75	$1.85	$26.25	32.73%	10.48%	1.014	10.62%	3.48%	0.0000	0.344	0.000	3.48%
5	PINNACLE WEST CAPITAL	PNW	$6.00	$3.79	$70.15	36.83%	8.55%	1.036	8.86%	3.26%	0.0266	0.262	0.007	3.96%
6	PORTLAND GENERAL ELECTRIC CO.	POR	$3.85	$2.46	$39.75	36.10%	9.69%	1.023	9.91%	3.58%	0.0142	0.338	0.005	4.06%
7	PPL CORPORATION	PPL	$2.25	$1.36	$23.45	39.56%	9.59%	1.022	9.80%	3.88%	0.0004	0.375	0.000	3.89%
8	WEC ENERGY CORP	WEC	$6.30	$3.83	$42.00	39.21%	15.00%	1.013	15.19%	5.95%	0.0000	0.671	0.000	5.95%
9	XCEL ENERGY, INC.	XEL	$4.70	$2.67	$41.35	43.19%	11.37%	1.031	11.72%	5.06%	0.0172	0.483	0.008	5.89%
	MEAN		**$4.54**	**$2.80**	**$42.65**	**$0.38**	**10.99%**	**1.024**	**11.26%**	**4.30%**	**0.010**	**0.434**	**$0.00**	**4.71%**
	MEDIAN		**$4.55**	**$2.67**	**$39.75**	**$0.38**	**10.48%**	**1.022**	**10.62%**	**3.88%**	**0.008**	**0.375**	**$0.00**	**4.06%**

SOURCES:

COLUMNS 1 - 3: VALUE LINE INVESTMENT SURVEY GAS UTILITY FEBRUARY 23, 2024

LINE NO.	ELEC TRIC UTIL;ITY GROUP COMPANY+B25:B33	SYMBOL	1 EPS	2 DPS	3 BVPS	4 b	5 r	6 ADJUSTMENT FACTOR	7 ADJUSTED "r"	8 "br"	9 "s"	10 "v"	11 "sv"	12 "br" + "sv"
			2027 - 2029											
1	ALLIANT ENERGY CORP	LNT	$3.90	$2.43	$31.90	37.69%	12.23%	1.019	12.46%	4.70%	0.0016	0.56	0.09%	4.78%
2	AMEREN CORP	AEE	$5.75	$3.30	$52.65	42.61%	10.92%	1.027	11.22%	4.78%	0.0287	0.54	1.56%	6.33%
3	AMERICAN ELECTRIC POWER	AEP	$7.25	$4.16	$62.55	42.62%	11.59%	1.020	11.82%	5.04%	0.0185	0.52	0.96%	6.00%
4	AVISTA CORP	AVA	$2.90	$2.25	$35.00	22.41%	8.29%	1.018	8.43%	1.89%	0.0245	0.30	0.73%	2.62%
5	DUKE ENERGY CORPORATION	DUK	$7.60	$4.30	$70.00	43.42%	10.86%	1.010	10.96%	4.76%	0.0019	0.46	0.09%	4.85%
6	ENTERGY CORP	ETR	$8.05	$5.00	$84.65	37.89%	9.51%	1.030	9.79%	3.71%	0.0268	0.42	1.11%	4.82%
7	EVERGY ENERGY, INC	EVRG	$4.75	$3.05	$47.50	35.79%	10.00%	1.015	10.15%	3.63%	0.0000	0.42	0.00%	3.63%
8	IDACORP INC	IDA	$6.65	$4.25	$69.80	36.09%	9.53%	1.024	9.75%	3.52%	0.0169	0.45	0.76%	4.28%
9	MGE ENERGY, INC	MGEE	$4.95	$1.95	$36.50	60.61%	13.56%	1.014	13.75%	8.33%	0.0000	0.59	0.00%	8.33%
10	NEXTERA ENERGY, INC.	NEE	$4.55	$2.85	$34.50	37.36%	13.19%	1.044	13.77%	5.15%	0.0238	0.61	1.44%	6.59%
11	NORTHWESTERN CORPORATION	NW'E	$4.25	$2.76	$51.85	35.06%	8.20%	1.017	8.34%	2.92%	0.0106	0.17	0.18%	3.10%
12	OGE ENERGY CORP	OGE	$2.75	$1.85	$26.25	32.73%	10.48%	1.014	10.62%	3.48%	0.0000	0.34	0.00%	3.48%
13	PINNACLE WEST CAPITAL	PNW	$6.00	$3.79	$70.15	36.83%	8.55%	1.036	8.86%	3.26%	0.0266	0.26	0.70%	3.96%
14	PORTLAND GENERAL ELECTRIC CO.	POR	$3.85	$2.46	$39.75	36.10%	9.69%	1.023	9.91%	3.58%	0.0142	0.34	0.48%	4.06%
15	SOUTHERN COMPANY	SO	$5.10	$3.10	$32.26	39.22%	15.81%	1.010	15.96%	6.26%	0.0019	0.61	0.11%	6.37%
16	XCEL ENERGY, INC.	XEL	$4.70	$2.67	$41.35	43.19%	11.37%	1.031	11.72%	5.06%	0.0172	0.48	0.83%	5.89%
17	**MEAN**		**$5.19**	**$3.14**	**$49.17**	**38.73%**	**10.86%**	**1.0219**	**11.10%**	**4.38%**	**0.0133**	**0.44**	**0.57%**	**4.94%**
18	**MEDIAN**		**$4.85**	**$2.95**	**$44.43**	**37.53%**	**10.67%**	**1.0194**	**10.79%**	**4.20%**	**0.0155**	**0.46**	**0.59%**	**4.80%**

SOURCES:
COLUMNS 1 - 3: VALUE LINE INVESTMENT SURVEY ELECTRIC UTILITY (EAST MAY 10, 2024), (CENTRAL MARCH 8, 2024), (WEST APRIL 19, 2024)
COLUMN 4: 1-(DPS/EPS)
COLUMN 5: (EPS/BVPS)
COLUMN 6: CONVERT YEAR-END VALUES TO AVERAGE VALUES CALCULATED AS [2*(1+(CHANGE IN EQUITY)/(2+(CHANGE IN EQUITY))]
COLUMN 7: COLUMN 5 * COLUMN 6
COLUMN 8: COLUMN 4* COLUMN 7
COLUMN 9: (SCHED (DJL-6 page 3) COLUMN 18 * COLUMN 21
COLUMN 10: BASED ON (1-PRICE/BVPS) IN 20123 ESTIMATE

DUKE ENERGY FLORIDA
DOCKET NO. 20240025-EI
MULTI-YEAR TEST PERIOD CALENDAR YEARS ENDING 2025, 2026, AND 2027
"BR"+"SV" COMPARABLE GROUP GROWTH RATES INPUTS

LINE NO.			11	12	13	14	15	16	17	18	19	20	21
				2023			2027 - 2029		2023 - 2028	2027-2029	2023	2027-2029	
	COMPANY PROPOSED COMPARABLE GROUP	SYMBOL	EQUITY RATIO	TOTAL CAPITAL	COMMON EQUITY	EQUITY RATIO	TOTAL CAPITAL	COMMON EQUITY	CHANGE IN EQUITY	MARKET TO BOOK	COMMON SHARES	COMMON SHARES	GROWTH COMMON SHARES
1	ALLIANT ENERGY CORP	LNT	45.20%	$ 15,002.00	$ 6,780.90	48.00%	$ 17,070.00	$ 8,193.60	3.86%	2.27	256.10	257.00	0.07%
2	CONSOLIDATED EDISON	ED	49.10%	$ 43,085.00	$ 21,154.74	46.00%	$ 55,000.00	$ 25,300.00	3.64%	1.38	345.42	355.00	0.55%
3	NEXTERA ENERGY, INC.	NEE	43.60%	$108,873.00	$ 47,468.63	42.00%	$ 176,200.00	$ 74,004.00	9.29%	2.54	2052.00	2150.00	0.94%
4	OGE ENERGY CORP	OGE	48.00%	$ 9,400.00	$ 4,512.00	50.00%	$ 10,400.00	$ 5,200.00	2.88%	1.52	200.20	200.20	0.00%
5	PINNACLE WEST CAPITAL	PNW	45.00%	$ 13,718.00	$ 6,173.10	48.00%	$ 18,350.00	$ 8,808.00	7.37%	1.35	113.42	125.00	1.96%
6	PORTLAND GENERAL ELECTRIC CO.	POR	44.20%	$ 7,513.00	$ 3,320.75	40.00%	$ 10,500.00	$ 4,200.00	4.81%	1.51	101.16	106.00	0.94%
7	PPL CORPORATION	PPL	48.80%	$ 28,544.00	$ 13,929.47	50.50%	$ 34,280.00	$ 17,311.40	4.44%	1.60	737.13	738.00	0.02%
8	WEC ENERGY CORP	WEC	44.50%	$ 26,279.00	$ 11,694.16	44.50%	$ 29,800.00	$ 13,261.00	2.55%	3.04	315.43	315.43	0.00%
9	XCEL ENERGY, INC.	XEL	41.40%	$ 42,529.00	$ 17,607.01	37.50%	$ 64,200.00	$ 24,075.00	6.46%	1.93	554.94	580.00	0.89%
10	MEAN		45.53%	$32,771.44	$14,737.86	45.17%	$46,200.00	$20,039.22	5.03%	1.90	519.53	536.29	0.60%
11	MEDIAN		45.00%	$26,279.00	$11,694.16	46.00%	$29,800.00	$13,261.00	4.44%	1.60	315.43	315.43	0.55%

SOURCES:

COLUMNS 11,12,14,15,19, 20: VALUE LINE INVESTMENT SURVEY ELECTRIC UTILITY (EAST MAY 10, 2024), (CENTRAL MARCH 8, 2024), (WEST APRIL 19, 2024)

COLUMN 13: COLUMN 11 * COLUMN 12

COLUMN 16: COLUMN 14 * COLUMN 15

COLUMN 17: CAGR 5 YEAR GROWTH

COLUMN 18: FORECAST MARKET PRICE/ BVPS 2028

COLUMN 21: FIVE YEAR CAGR IN ISSUED SHARES
ALL NEGATIVE & NEGLIGBLE (LESS THAN 1%) GROWTH RATES
OMITTED

LINE NO.	ELECTRIC UTILITY GROUP		11	12	13	14	15	16	17	18	19	20	21
				2023			2027 - 2029		2023 - 2028	2027-2029	2023	2027-2029	
	COMPANY	SYMBOL	EQUITY RATIO	TOTAL CAPITAL	COMMON EQUITY	EQUITY RATIO	TOTAL CAPITAL	COMMON EQUITY	CHANGE IN EQUITY	MARKET TO BOOK	COMMON SHARES	COMMON SHARES	GROWTH COMMON SHARES
1	ALLIANT ENERGY CORP	LNT	45.20%	$15,002.00	$6,780.90	48.00%	$17,070.00	$8,193.60	3.86%	2.27	256.10	257.00	0.07%
2	AMEREN CORP	AEE	43.80%	$24,950.00	$10,928.10	48.50%	$29,500.00	$14,307.50	5.54%	2.18	267.00	285.00	1.31%
3	AMERICAN ELECTRIC POWER	AEP	42.00%	$62,950.00	$26,439.00	42.50%	$75,900.00	$32,257.50	4.06%	2.08	526.18	550.00	0.89%
4	AVISTA CORP	AVA	48.80%	$5,091.30	$2,484.55	49.50%	$6,000.00	$2,970.00	3.63%	1.43	78.08	85.00	1.71%
5	DUKE ENERGY CORPORATION	DUK	40.40%	$121,564.00	$49,111.86	37.50%	$144,100.00	$54,037.50	1.93%	1.86	771.00	775.00	0.10%
6	ENTERGY CORP	ETR	38.60%	$37,851.00	$14,610.49	39.00%	$50,555.00	$19,716.45	6.18%	1.71	212.85	230.00	1.56%
7	EVERGY ENERGY, INC	EVRG	48.50%	$20,175.00	$9,784.88	48.50%	$23,400.00	$11,349.00	3.01%	1.74	230.00	230.00	0.00%
8	IDACORP INC	IDA	51.20%	$5,683.40	$2,909.90	50.50%	$7,300.00	$3,686.50	4.84%	1.83	50.62	53.00	0.92%
9	MGE ENERGY, INC	MGEE	61.50%	$1,858.90	$1,143.22	62.50%	$2,100.00	$1,312.50	2.80%	2.47	36.16	36.16	0.00%
10	NEXTERA ENERGY, INC.	NEE	43.60%	$108,873.00	$47,468.63	42.00%	$176,200.00	$74,004.00	9.29%	2.54	2052.00	2150.00	0.94%
11	NORTHWESTERN CORPORATION	NW'E	50.90%	$5,475.40	$2,786.98	49.50%	$6,700.00	$3,316.50	3.54%	1.21	61.25	64.00	0.88%
12	OGE ENERGY CORP	OGE	48.00%	$9,400.00	$4,512.00	50.00%	$10,400.00	$5,200.00	2.88%	1.52	200.20	200.20	0.00%
13	PINNACLE WEST CAPITAL	PNW	45.00%	$13,718.00	$6,173.10	48.00%	$18,350.00	$8,808.00	7.37%	1.35	113.42	125.00	1.96%
14	PORTLAND GENERAL ELECTRIC CO.	POR	44.20%	$7,513.00	$3,320.75	40.00%	$10,500.00	$4,200.00	4.81%	1.51	101.16	106.00	0.94%
15	SOUTHERN COMPANY	SO	37.60%	$83,654.00	$31,453.90	37.00%	$93,500.00	$34,595.00	1.92%	2.56	1091.00	1095.00	0.07%
16	XCEL ENERGY, INC.	XEL	41.40%	$42,529.00	$17,607.01	37.50%	$64,200.00	$24,075.00	6.46%	1.93	554.94	580.00	0.89%
17	MEAN		**45.67%**	**$ 35,393.00**	**$ 14,844.70**	**45.66%**	**$ 45,985.94**	**$ 18,876.82**	**4.51%**	**1.89**	**412.62**	**426.34**	**0.77%**
18	MEDIAN		**44.60%**	**$ 17,588.50**	**$ 8,282.89**	**48.00%**	**$ 20,875.00**	**$ 10,078.50**	**3.96%**	**1.84**	**221.43**	**230.00**	**0.89%**

SOURCES:

COLUMNS 11,12,14,15,20: VALUE LINE INVESTMENT SURVEY ELECTRIC UTILITY (EAST MAY 10, 2024), (CENTRAL MARCH 8, 2024), (WEST APRIL 19, 2024)

COLUMN 13: COLUMN 11 * COLUMN 12

COLUMN 16: COLUMN 14 * COLUMN 15

COLUMN 17: CAGR 5 YEAR GROWTH

COLUMN 18: FORECAST MARKET PRICE/ BVPS 2028

COLUMN 21: FIVE YEAR CAGR IN ISSUED SHARES
ALL NEGATIVE & NEGLIGBLE (LESS THAN 1%) GROWTH RATES
OMITTED

DUKE ENERGY FLORIDA
DOCKET NOS. 20240025-EI
MULTI-YEAR TEST PERIOD CALENDAR YEARS ENDING 2025, 2026, AND 2027
CONSTANT GROWTH DISCOUNTED CASH FLOW

SLIDE 1 DUKE UTILITY COMPARABLE GROUP

LINE NO.	COMPANY	SYMBOL	A AVERAGE PRICE	B DIVIDEND	C DIVIDEND YIELD	D ADJUSTED DIVIDEND YIELD EPS GROWTH	E SUSTAINABLE GROWTH RATE	F ROE HIGH RANGR
	COMPANY PROPOSED COMPARABLE GROUP+B11:B24							
1	ALLIANT ENERGY CORP	LNT	$50.47	$1.92	3.80%	3.90%	4.78%	8.68%
2	CONSOLIDATED EDISON	ED	$93.97	$3.32	3.53%	3.60%	3.83%	7.43%
3	NEXTERA ENERGY, INC.	NEE	$69.28	$2.06	2.97%	3.07%	6.59%	9.66%
4	OGE ENERGY CORP	OGE	$35.10	$1.67	4.76%	4.85%	3.48%	8.32%
5	PINNACLE WEST CAPITAL	PNW	$75.08	$3.52	4.69%	4.78%	3.96%	8.74%
6	PORTLAND GENERAL ELECTRIC CO.	POR	$42.68	$1.90	4.45%	4.54%	4.06%	8.60%
7	PPL CORPORATION	PPL	$27.53	$1.03	3.75%	3.82%	3.89%	7.71%
8	WEC ENERGY CORP	WEC	$76.55	$3.34	4.36%	4.49%	5.95%	10.45%
9	XCEL ENERGY, INC.	XEL	$54.55	$2.19	4.02%	4.14%	5.89%	10.03%
10	AVERAGE		**$ 58.36**	**$ 2.33**	**4.04%**	**4.13%**	**4.71%**	**8.85%**
10	MEDIAN		**$ 54.55**	**$ 2.06**	**4.02%**	**4.14%**	**4.06%**	**8.68%**
11	SOURCES:							
12	COLUMN A & B: PER SCHED (DJL-5)							
	COLUMN C: COLUMN B/ COLUMN A							
	COLUMN D:COLUMN C INCREASED BY 1/2 OF COLUMN E GROWTH RATE							
	COLUMN E: PER SCHED. (DJL-6)							
	COLUMN F; COLUMN D + COLUMN E ALLETE IS REMOVED FROM THE FINAL AVERAGE AND MEDIAN							

SLIDE 2 ALTERNATIVE COMPARABLE GROUP

LINE NO.	COMPANY	SYMBOL	A AVERAGE PRICE	B DIVIDEND	C DIVIDEND YIELD	D ADJUSTED DIVIDEND YIELD	E GROWTH RATE	F ROE
1	ALLIANT ENERGY CORP	LNT	$49.51	$1.92	3.88%	3.97%	4.78%	8.76%
2	AMEREN CORP	AEE	$72.85	$2.52	3.46%	3.57%	6.33%	9.90%
3	AMERICAN ELECTRIC POWER	AEP	$85.29	$3.52	4.13%	4.25%	6.00%	10.25%
4	AVISTA CORP	AVA	$34.45	$1.90	5.52%	5.59%	2.62%	8.21%
5	DUKE ENERGY CORPORATION	DUK	$95.49	$4.10	4.29%	4.40%	4.85%	9.25%
6	ENTERGY CORP	ETR	$104.42	$4.52	4.33%	4.43%	4.82%	9.26%
7	EVERGY ENERGY, INC	EVRG	$51.29	$2.57	5.01%	5.11%	3.63%	8.74%
8	IDACORP INC	IDA	$91.52	$3.32	3.63%	3.71%	4.28%	7.99%
9	MGE ENERGY, INC	MGEE	$73.49	$1.71	2.33%	2.43%	8.33%	10.76%
10	NEXTERA ENERGY, INC.	NEE	$61.60	$2.06	3.34%	3.45%	6.59%	10.04%
11	NORTHWESTERN CORPORATION	NW'E	$49.33	$2.60	5.27%	5.35%	3.10%	8.46%
12	OGE ENERGY CORP	OGE	$33.30	$1.67	5.02%	5.11%	3.48%	8.59%
13	PINNACLE WEST CAPITAL	PNW	$72.52	$3.52	4.85%	4.95%	3.96%	8.91%
14	PORTLAND GENERAL ELECTRIC CO.	POR	$41.64	$1.90	4.56%	4.66%	4.06%	8.71%
15	SOUTHERN COMPANY	SO	$70.51	$2.80	3.97%	4.10%	6.37%	10.47%
16	XCEL ENERGY, INC.	XEL	$65.05	$2.19	3.37%	3.47%	5.89%	9.36%
17	MEAN		**$65.77**	**$2.68**	**4.19%**	**4.28%**	**4.94%**	**9.23%**
18	MEDIAN		**$67.78**	**$2.55**	**4.21%**	**4.32%**	**4.80%**	**9.08%**
19	MEDIAN							
	SOURCES:							
	COLUMN A & B: PER SCHED (DJL-5)							
	COLUMN C: COLUMN B/ COLUMN A							
	COLUMN D:COLUMN C INCREASED BY 1/2 OF COLUMN E GROWTH RATE							
	COLUMN E: PER SCHED. (DJL-6)							
	COLUMN F; COLUMN D + COLUMN E ALLETE IS REMOVED FROM THE FINAL AVERAGE AND MEDIAN							

DUKE ENERGY FLORIDA
DOCKET NO. 20240025-EI
MULTI-YEAR TEST PERIOD CALENDAR YEARS ENDING 2025, 2026, AND 2027
COMPARABLE GROUP TWO-STAGE GROWTH DCF

SLIDE 1 DUKE PROPOSED COMPARABLE GROUP

LINE NO.	COMPANY	SYMBOL	A DPS 2025	B DPS 2027-2029	C ANNUAL CHANGE IN DIVIDEND	D PRICE	E YEAR 1 DIVIDEND	F YEAR 2 DIVIDEND	G YEAR 3 DIVIDEND	H YEAR 4 DIVIDEND	I YEAR 5 DIVIDEND	J GROWTH YEARS 5-150	K TWO-STAGE ROE
1	ALLIANT ENERGY CORP	LNT	$2.04	$2.43	$0.13	$50.47	$2.04	$2.17	$2.30	$2.43	$2.57	5.58%	**9.66%**
2	CONSOLIDATED EDISON	ED	$3.40	$3.95	$0.18	$93.97	$3.40	$3.58	$3.77	$3.95	$4.15	5.15%	**8.75%**
3	NEXTERA ENERGY, INC.	NEE	$2.25	$2.85	$0.20	$69.28	$2.25	$2.45	$2.65	$2.85	$3.06	7.30%	**10.59%**
4	OGE ENERGY CORP	OGE	$1.73	$1.85	$0.04	$35.10	$1.73	$1.77	$1.81	$1.85	$1.94	4.61%	**9.24%**
5	PINNACLE WEST CAPITAL	PNW	$3.61	$3.79	$0.06	$75.08	$3.61	$3.67	$3.73	$3.79	$3.98	5.14%	**9.51%**
6	PORTLAND GENERAL ELECTRIC CO.	POR	$2.08	$2.46	$0.13	$42.68	$2.08	$2.21	$2.33	$2.46	$2.62	6.65%	**11.41%**
7	PPL CORPORATION	PPL	$1.10	$1.36	$0.09	$27.53	$1.10	$1.19	$1.27	$1.36	$1.43	5.47%	**9.65%**
8	WEC ENERGY CORP	WEC	$3.57	$3.83	$0.09	$76.55	$3.57	$3.66	$3.74	$3.83	$4.08	6.50%	**10.67%**
9	XCEL ENERGY, INC.	XEL	$2.30	$2.67	$0.12	$54.55	$2.30	$2.42	$2.55	$2.67	$2.84	6.23%	**10.31%**
10	**MEAN**		**$2.45**	**$2.80**	**$0.12**	**$58.36**	**$2.45**	**$2.57**	**$2.68**	**$2.80**	**$2.96**	**5.85%**	**9.98%**
11	**MEDIAN**		**$2.25**	**$2.67**	**$0.12**	**$54.55**	**$2.25**	**$2.42**	**$2.55**	**$2.67**	**$2.84**	**5.58%**	**9.66%**

12 COLUMNS A - C, E - H: VALUE LINE INVESTMENT SURVEY GAS UTILITY FEBRUARY 23, 2024
13 COLUMN D: SCHEDULE DJL-5
14 COLUMN J: SCHEDULE DJL-6 PAGE 1
15 COLUMN K: IRR CALCULATION OF ROE. ALLETE IS REMOVED FROM THE AVERAGE AND MEDIAN

SLIDE 2 ALTERNATIVE COMPARABLE GROUP

ELECTRIC UTILITY COMPARABLE GROUP

LINE NO.	COMPANY	SYMBOL	A DPS 2025	B DPS 2027-2029	C ANNUAL CHANGE IN DIVIDEND	D PRICE	E YEAR 1 DIVIDEND	F YEAR 2 DIVIDEND	G YEAR 3 DIVIDEND	H YEAR 4 DIVIDEND	I YEAR 5 DIVIDEND	J GROWTH YEARS 5-150	K TWO-STAGE ROE
1	ALLIANT ENERGY CORP	LNT	$2.04	$2.43	$0.13	$50.47	$2.04	$2.17	$2.30	$2.43	$2.57	5.58%	9.66%
2	AMEREN CORP	AEE	$2.86	$3.30	$0.15	$72.85	$2.86	$3.01	$3.15	$3.30	$3.50	6.13%	9.91%
3	AMERICAN ELECTRIC POWER	AEP	$3.81	$4.16	$0.12	$85.29	$3.81	$3.93	$4.04	$4.16	$4.40	5.89%	10.01%
4	AVISTA CORP	AVA	$2.00	$2.25	$0.08	$34.45	$2.00	$2.08	$2.17	$2.25	$2.35	4.36%	10.11%
5	DUKE ENERGY CORPORATION	DUK	$4.22	$4.30	$0.03	$95.49	$4.22	$4.25	$4.27	$4.30	$4.53	5.45%	9.31%
6	ENTERGY CORP	ETR	$4.70	$5.00	$0.10	$104.42	$4.70	$4.80	$4.90	$5.00	$5.29	5.86%	9.92%
7	EVERGY ENERGY, INC	EVRG	$2.74	$3.05	$0.10	$51.29	$2.74	$2.84	$2.95	$3.05	$3.18	4.32%	9.56%
8	IDACORP INC	IDA	$3.46	$4.25	$0.26	$91.52	$3.46	$3.72	$3.99	$4.25	$4.44	4.49%	8.53%
9	MGE ENERGY, INC	MGEE	$1.80	$1.95	$0.05	$73.49	$1.80	$1.85	$1.90	$1.95	$2.09	7.02%	9.07%
10	NEXTERA ENERGY, INC.	NEE	$2.25	$2.85	$0.20	$61.60	$2.25	$2.45	$2.65	$2.85	$3.05	6.96%	10.72%
11	NORTHWESTERN CORPORATION	NW'E	$2.64	$2.76	$0.04	$49.33	$2.64	$2.68	$2.72	$2.76	$2.86	3.68%	8.72%
12	OGE ENERGY CORP	OGE	$1.73	$1.85	$0.04	$33.30	$1.73	$1.77	$1.81	$1.85	$1.94	4.61%	9.49%
13	PINNACLE WEST CAPITAL	PNW	$3.61	$3.79	$0.06	$72.52	$3.61	$3.67	$3.73	$3.79	$3.98	5.14%	9.66%
14	PORTLAND GENERAL ELECTRIC CO.	POR	$2.08	$2.46	$0.13	$41.64	$2.08	$2.21	$2.33	$2.46	$2.62	6.65%	11.53%
15	SOUTHERN COMPANY	SO	$2.96	$3.10	$0.05	$70.51	$2.96	$3.01	$3.05	$3.10	$3.29	6.15%	9.84%
16	XCEL ENERGY, INC.	XEL	$2.30	$2.67	$0.12	$65.05	$2.30	$2.42	$2.55	$2.67	$2.84	6.23%	9.63%
17	**MEAN**		**$2.83**	**$3.14**	**$0.10**	**$65.83**	**$2.83**	**$2.93**	**$3.03**	**$3.14**	**$3.31**	**5.53%**	**9.73%**
18	**MEDIAN**		**$2.69**	**$2.95**	**$0.10**	**$67.78**	**$2.69**	**$2.76**	**$2.83**	**$2.95**	**$3.12**	**5.72%**	**9.66%**

SOURCES:
COLUMNS A - C, E - H: VALUE LINE INVESTMENT SURVEY ELECTRIC UTILITY (EAST MAY 10, 2024), (CENTRAL MARCH 8, 2024), (WEST APRIL 19, 2024)
COLUMN D: SCHEDULE DJL-5
COLUMN J: SCHEDULE DJL-6 PAGE 1
COLUMN K: IRR CALCULATION OF ROE.ALLETE IS REMOVED FROM THE AVERAGE AND THE MEDIAN

DUKE ENERGY FLORIDA
DOCKET NOS. 20240025-EI
MULTI-YEAR TEST PERIOD CALENDAR YEARS ENDING 2025, 2026, AND 2027
COMPARABLE GROUP CAPM AND ECAPM CALCULATIONS

			CAPITAL ASSET PRICING MODEL				EMPIRICAL CAPITAL ASSET PRICING MODEL					
	SLIDE 1 DUKE COMPARABLE GROUP		A	B	C	D			E	F	G	H
LINE NO.	COMPANY	SYMBOL	BETA	MARKET RISK PREMIUM	RISK FREE RATE	CAPM	COMPANY	SYMBOL	BETA	MARKET RISK PREMIUM	RISK FREE RATE	ECAPM
1	ALLIANT ENERGY CORP	LNT	0.9	6.58%	3.50%	9.42%	ALLIANT ENERGY CORP	LNT	0.900	6.58%	3.50%	9.59%
2	CONSOLIDATED EDISON	ED	0.8	6.58%	3.50%	8.76%	CONSOLIDATED EDISON	ED	0.800	6.58%	3.50%	9.09%
3	NEXTERA ENERGY, INC.	NEE	1	6.58%	3.50%	10.08%	NEXTERA ENERGY, INC.	NEE	1.000	6.58%	3.50%	10.08%
4	OGE ENERGY CORP	OGE	1.05	6.58%	3.50%	10.41%	OGE ENERGY CORP	OGE	1.050	6.58%	3.50%	10.33%
5	PINNACLE WEST CAPITAL	PNW	0.95	6.58%	3.50%	9.75%	PINNACLE WEST CAPITAL	PNW	0.950	6.58%	3.50%	9.83%
6	PORTLAND GENERAL ELECTRIC CO.	POR	0.9	6.58%	3.50%	9.42%	PORTLAND GENERAL ELECTRIC CO.	POR	0.900	6.58%	3.50%	9.59%
7	PPL CORPORATION	PPL	1.15	6.58%	3.50%	11.07%	PPL CORPORATION	PPL	1.150	6.58%	3.50%	10.82%
8	WEC ENERGY CORP	WEC	0.85	6.58%	3.50%	9.09%	WEC ENERGY CORP	WEC	0.850	6.58%	3.50%	9.34%
9	XCEL ENERGY, INC.	XEL	0.85	6.58%	3.50%	9.09%	XCEL ENERGY, INC.	XEL	0.850	6.58%	3.50%	9.34%
10	MEAN		**0.939**	**6.58%**	**3.50%**	**9.68%**	MEAN		**0.939**	**6.58%**	**3.50%**	**9.78%**
11	MEDIAN		**0.900**	**6.58%**	**3.50%**	**9.42%**	MEDIAN		**0.900**	**6.58%**	**3.50%**	**9.59%**

SOURCES:

COLUMNS A & E: VALUE LINE INVESTMENT SURVEY GAS UTILITY FEBRUARY 23, 2024

COLUMNS B,C, F, G : PER THIS TESTIMONY CAPM & ECAPM DISCUSSIONS

COLUMNS D: CAPM CALCIULATION (ALLETE IS EXCLUDED FROM MEAN & MEDIAN CALCULATION)

COLUMNS H: ECAPM CALCIULATION (ALLETE IS EXCLUDED FROM THE MEAN & MEDIAN CALCULATION)

			CAPITAL ASSET PRICING MODEL				EMPIRICAL CAPITAL ASSET PRICING MODEL					
	SLIDE 2 ALTERNATIVE COMPARABLE GROUP		A	B	C	D			E	F	G	H
	COMPANY	SYMBOL	BETA	MARKET RISK PREMIUM	RISK FREE RATE	CAPM	COMPANY	SYMBOL	BETA	MARKET RISK PREMIUM	RISK FREE RATE	ECAPM
1	ALLIANT ENERGY CORP	LNT	0.90	6.58%	3.50%	9.42%	ALLIANT ENERGY CORP	LNT	0.90	6.580%	3.50%	9.59%
2	AMEREN CORP	AEE	0.90	6.58%	3.50%	9.42%	AMEREN CORP	AEE	0.90	6.580%	3.50%	9.59%
3	AMERICAN ELECTRIC POWER	AEP	0.80	6.58%	3.50%	8.76%	AMERICAN ELECTRIC POWER	AEP	0.80	6.580%	3.50%	9.09%
4	AVISTA CORP	AVA	0.95	6.58%	3.50%	9.75%	AVISTA CORP	AVA	0.95	6.580%	3.50%	9.83%
5	DUKE ENERGY CORPORATION	DUK	0.90	6.58%	3.50%	9.42%	DUKE ENERGY CORPORATION	DUK	0.90	6.580%	3.50%	9.59%
6	ENTERGY CORP	ETR	0.95	6.58%	3.50%	9.75%	ENTERGY CORP	ETR	0.95	6.580%	3.50%	9.83%
7	EVERGY ENERGY, INC	EVRG	0.95	6.58%	3.50%	9.75%	EVERGY ENERGY, INC	EVRG	0.95	6.580%	3.50%	9.83%
8	IDACORP INC	IDA	0.85	6.58%	3.50%	9.09%	IDACORP INC	IDA	0.85	6.580%	3.50%	9.34%
9	MGE ENERGY, INC	MGEE	0.80	6.58%	3.50%	8.76%	MGE ENERGY, INC	MGEE	0.80	6.580%	3.50%	9.09%
10	NEXTERA ENERGY, INC.	NEE	1.00	6.58%	3.50%	10.08%	NEXTERA ENERGY, INC.	NEE	1.00	6.580%	3.50%	10.08%
11	NORTHWESTERN CORPORATION	NW'E	0.95	6.58%	3.50%	9.75%	NORTHWESTERN CORPORATION	NW'E	0.95	6.580%	3.50%	9.83%
12	OGE ENERGY CORP	OGE	1.05	6.58%	3.50%	10.41%	OGE ENERGY CORP	OGE	1.05	6.580%	3.50%	10.33%
13	PINNACLE WEST CAPITAL	PNW	0.95	6.58%	3.50%	9.75%	PINNACLE WEST CAPITAL	PNW	0.95	6.580%	3.50%	9.83%
14	PORTLAND GENERAL ELECTRIC CO.	POR	0.90	6.58%	3.50%	9.42%	PORTLAND GENERAL ELECTRIC CO.	POR	0.90	6.580%	3.50%	9.59%
15	SOUTHERN COMPANY	SO	0.95	6.58%	3.50%	9.75%	SOUTHERN COMPANY	SO	0.95	6.580%	3.50%	9.83%
16	XCEL ENERGY, INC.	XEL	0.85	6.58%	3.50%	9.09%	XCEL ENERGY, INC.	XEL	0.85	6.580%	3.50%	9.34%
17	MEAN		**0.92**	**6.58%**	**3.50%**	**9.52%**	MEAN		**0.92**	**6.58%**	**3.50%**	**9.66%**
18	MEDIAN		**0.93**	**6.58%**	**3.50%**	**9.59%**	MEDIAN		**0.93**	**6.58%**	**3.50%**	**9.71%**

SOURCES:

COLUMNS A & E: VALUE LINE INVESTMENT SURVEY ELECTRIC UTILITY (EAST MAY 10, 2024), (CENTRAL MARCH 8, 2024), (WEST APRIL 19, 2024)

COLUMNS B,C, F, G : PER THIS TESTIMONY CAPM & ECAPM DISCUSSIONS

COLUMNS D: CAPM CALCIULATION (ALLETE IS EXCLUDED FROM MEAN & MEDIAN CALCULATION)

COLUMNS H: ECAPM CALCIULATION (ALLETE IS EXCLUDED FROM THE MEAN & MEDIAN CALCULATION)

DUKE ENERGY FLORIDA
DOCKET NO. 20240025-EI
MULTI-YEAR TEST PERIOD CALENDAR YEARS ENDING 2025, 2026, AND 2027
RISK PREMIUM ROE ESTIMATE

	A	B	C
YEAR	30 YEAR US TREASURY BOND YIELD	AUTHORIZED ELECTRIC UTILITY EQUITY RETURN	ELECTRIC RISK PREMIUM
1981	13.45%	15.22%	1.77%
1982	12.76%	15.76%	3.00%
1983	11.18%	15.36%	4.18%
1984	12.41%	15.32%	2.91%
1985	10.79%	15.20%	4.41%
1986	7.78%	13.93%	6.15%
1987	8.59%	12.99%	4.40%
1988	8.96%	12.79%	3.83%
1989	8.45%	12.97%	4.52%
1990	8.61%	12.70%	4.09%
1991	8.14%	12.55%	4.41%
1992	7.67%	12.09%	4.42%
1993	6.59%	11.41%	4.82%
1994	7.37%	11.34%	3.97%
1995	6.88%	11.55%	4.67%
1996	6.71%	11.39%	4.68%
1997	6.61%	11.40%	4.79%
1998	5.58%	11.66%	6.08%
1999	5.87%	10.77%	4.90%
2000	5.94%	11.43%	5.49%
2001	5.49%	11.09%	5.60%
2002	5.43%	11.16%	5.73%
2003	4.96%	10.97%	6.01%
2004	5.04%	10.75%	5.71%
2005	4.64%	10.54%	5.90%
2006	4.91%	10.36%	5.45%
2007	4.84%	10.30%	5.46%
2008	4.28%	10.41%	6.13%
2009	4.08%	10.52%	6.44%
2010	4.25%	10.37%	6.12%
2011	3.91%	10.29%	6.38%
2012	2.92%	10.17%	7.25%
2013	3.45%	10.03%	6.58%
2014	3.34%	9.91%	6.57%
2015	2.84%	9.84%	7.00%
2016	2.60%	9.77%	7.17%
2017	2.90%	9.74%	6.84%
2018	3.11%	9.60%	6.49%
2019	2.58%	9.66%	7.08%
2020	1.51%	9.44%	7.93%
2021	2.05%	9.38%	7.33%
2022	3.11%	9.46%	6.35%
2023	4.09%	9.59%	5.50%
AVERAGE	**5.97%**	**11.42%**	**5.45%**

G		
DESCRIPTION	30-YR U.S. TREASURY LOW	30-YR U.S. TREASURY HIGH
CURRENT 30 YEAR US TREASURY	3.00%	4.00%
AVERAGE YIELD IN STUDY PERIOD	5.97%	5.97%
INTEREST RATE DELTA	-2.97%	-1.97%
INTEREST RATE CHANGE IN STUDY	-0.41340049	-0.41340049
ADJUSTMENT TO RISK PREMIUM	1.23%	0.81%
BASIC RISK PREMIUM PER STUDY	5.45%	5.45%
ADJUSTED RISK PREMIUM	6.68%	6.27%
RISK PREMIUM EQUITY RETURN	**9.68%**	**10.27%**

SOURCES:

COLUMNS A: www.federalreserve.gov H-15 Historical Data

COLUMNS B: Authorized Equity Returns per RRA MAJOR RATE CASE DECISIONS & 2007 - 2023 per EEI Rate Review Summary

COLUMNS C: Column B less Column A

CURRENT 30 YEAR US TREASURY YIELDS: BASED ON A 2025 - 2027 RANGE ESTIMATE OF 3.0% - 4.0%

INTEREST RATE CHANGE: RATE OF CHANGE SLOPE OF RISK PREMIUM TO YIELD

DUKE ENERGY FLORIDA
DOCKET NOS. 20240025-EI
MULTI-YEAR TEST PERIOD CALENDAR YEARS ENDING 2025, 2026, AND 2027
COMPANY PROPOSED CONSOLIDATED CAPITAL STRUCTURE SLIDES 1, SLIDE 2, AND SLIDE 3
RECOMMENDED ALTERNATIVE CONSOLIDATED CAPITAL STRUCTURE AND COST RATES AT SLIDES 4, 5, AND 6

SLIDE 1

DUKE ENERGY FLORIDA REQUESTED 2025 CONSOLIDATED CAPITAL STRUCTURE AND CAPITAL COST RATES

LINE NO.	DESCRIPTION	CAPITAL AMOUNT (000'S)	RATIO	COST RATE	WEIGHTED COST	RETURN
1	COMMON EQUITY	$9,366,552	45.61%	11.150%	5.086%	$1,044,371
2	LONG-TERM DEBT	$8,353,323	40.68%	4.490%	1.827%	$375,064
3	SHORT-TERM DEBT	-$40,045	-0.20%	3.250%	-0.006%	-$1,301
4	CUSTOMER DEPOSITS ACTIVE	$156,494	0.76%	2.610%	0.020%	$4,084
5	CUSTOMER DEPOSITS INACTIVE	$1,504	0.01%	0.00%	0.000%	$0
6	INVESTMENT TAX CREDITS	$205,256	1.00%	8.01%	0.080%	$16,441
	DEFERRED INCOME TAXES	$2,491,187	12.13%	0%	0.000%	$0
	TOTAL CAPITAL	$20,534,271	100.00%		7.01%	$1,438,659
7	RATE BASE INVESTMENT			$20,534,271		
8	CAPITAL STRUCTURE AND CAPITAL COST RATES PER COMPANY MFR's A AND D.					
9	RATE BASE PER COMPANY MFR A.					

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11

SLIDE 2

12

DUKE ENERGY FLORIDA REQUESTED 2026 CONSOLIDATED CAPITAL STRUCTURE AND CAPITAL COST RATES

	DESCRIPTION	CAPITAL AMOUNT (000'S)	RATIO	COST RATE	WEIGHTED COST	RETURN
14	COMMON EQUITY	$9,798,611	45.73%	11.150%	5.098%	$1,092,545
15	LONG-TERM DEBT	$8,696,777	40.58%	4.520%	1.834%	$393,094
16	SHORT-TERM DEBT	-$1,328	-0.01%	3.200%	0.000%	-$42
17	CUSTOMER DEPOSITS ACTIVE	$152,630	0.71%	2.610%	0.019%	$3,984
18	CUSTOMER DEPOSITS INACTIVE	$1,467	0.01%	0.00%	0.000%	$0
19	INVESTMENT TAX CREDITS	$199,879	0.93%	8.03%	0.075%	$16,050
20	DEFERRED INCOME TAXES	$2,580,960	12.04%	0%	0.000%	$0
	TOTAL CAPITAL	$21,428,996	100.00%		7.03%	$1,505,631
21	RATE BASE INVESTMENT			$21,428,995		
22	CAPITAL STRUCTURE AND CAPITAL COST RATES PER COMPANY MFR's A AND D.					
23	RATE BASE PER COMPANY MFR A.					

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SLIDE 3

26

DUKE ENERGY FLORIDA REQUESTED 2027 CONSOLIDATED CAPITAL STRUCTURE AND CAPITAL COST RATES

	DESCRIPTION	CAPITAL AMOUNT (000'S)	RATIO	COST RATE	WEIGHTED COST	RETURN
28	COMMON EQUITY	$10,173,270	45.83%	11.150%	5.110%	$1,134,320
29	LONG-TERM DEBT	$8,783,290	39.57%	4.630%	1.832%	$406,666
30	SHORT-TERM DEBT	$243,501	1.10%	3.200%	0.035%	$7,792
31	CUSTOMER DEPOSITS ACTIVE	$149,096	0.67%	2.610%	0.018%	$3,891
32	CUSTOMER DEPOSITS INACTIVE	$1,433	0.01%	0.00%	0.000%	$0
33	INVESTMENT TAX CREDITS	$196,997	0.89%	8.13%	0.072%	$16,016
	DEFERRED INCOME TAXES	$2,650,570	11.94%	0%	0.000%	$0
34	TOTAL CAPITAL	$22,198,157	100.00%		7.07%	$1,568,685
35	RATE BASE INVESTMENT			$22,198,157		
36	CAPITAL STRUCTURE AND CAPITAL COST RATES PER COMPANY MFR's A AND D.					
37	RATE BASE PER COMPANY MFR A.					

DUKE ENERGY FLORIDA
DOCKET NOS. 20240025-EI
MULTI-YEAR TEST PERIOD CALENDAR YEARS ENDING 2025, 2026, AND 2027
COMPANY PROPOSED CONSOLIDATED CAPITAL STRUCTURE SLIDES 1, SLIDE 2, AND SLIDE 3
RECOMMENDED ALTERNATIVE CONSOLIDATED CAPITAL STRUCTURE AND COST RATES AT SLIDES 4, 5, AND 6

SLIDE 4

RECOMMENDED 2025 CONSOLIDATED CAPITAL STRUCTURE AND CAPITAL COST RATES

LINE NO.	DESCRIPTION	CAPITAL AMOUNT (000'S)	RATIO	COST RATE	WEIGHTED COST	RETURN
1	COMMON EQUITY	$9,366,552	45.61%	9.450%	4.311%	$885,139
2	LONG-TERM DEBT	$8,353,323	40.68%	4.490%	1.827%	$375,064
3	SHORT-TERM DEBT	-$40,045	-0.20%	3.250%	-0.006%	-$1,301
4	CUSTOMER DEPOSITS ACTIVE	$156,494	0.76%	2.610%	0.020%	$4,084
5	CUSTOMER DEPOSITS INACTIVE	$1,504	0.01%	0.00%	0.000%	$0
6	INVESTMENT TAX CREDITS	$205,256	1.00%	8.01%	0.080%	$16,441
	DEFERRED INCOME TAXES	$2,491,187	12.13%	0%	0.000%	$0
	TOTAL CAPITAL	$20,534,271	100.00%		6.23%	$1,279,427
7	RATE BASE INVESTMENT			$20,534,271		
8	CAPITAL STRUCTURE AND CAPITAL COST RATES (EXCEPT EQUITY COSTS PER COMPANY MFR's A AND D. RATE BASE PER COMPANY MFR A.					
9	EQUITY RETURN PER THIS TESTIMONY					

SLIDE 5

RECOMMENDED 2026 CONSOLIDATED CAPITAL STRUCTURE AND CAPITAL COST RATES

	DESCRIPTION	CAPITAL AMOUNT (000'S)	RATIO	COST RATE	WEIGHTED COST	RETURN
14	COMMON EQUITY	$9,798,611	45.73%	9.450%	4.321%	$925,969
15	LONG-TERM DEBT	$8,696,777	40.58%	4.520%	1.834%	$393,094
16	SHORT-TERM DEBT	-$1,328	-0.01%	3.200%	0.000%	-$42
17	CUSTOMER DEPOSITS ACTIVE	$152,630	0.71%	2.610%	0.019%	$3,984
18	CUSTOMER DEPOSITS INACTIVE	$1,467	0.01%	0.00%	0.000%	$0
19	INVESTMENT TAX CREDITS	$199,879	0.93%	8.03%	0.075%	$16,050
20	DEFERRED INCOME TAXES	$2,580,960	12.04%	0%	0.000%	$0
	TOTAL CAPITAL	$21,428,996	100.00%		6.25%	$1,339,054
21	RATE BASE INVESTMENT			$21,428,995		
22	CAPITAL STRUCTURE AND CAPITAL COST (EXCEPT LONG-TERM DEBT AND EQUITY COSTS) RATES PER COMPANY MFR's A AND D. RATE BASE PER COMPANY MFR A.					
23	LONG-TERM DEBT COSTS AND EQUITY COSTS PER THIS TESTIMONY					

SLIDE 6

RECOMMENDED 2027 CONSOLIDATED CAPITAL STRUCTURE AND CAPITAL COST RATES

	DESCRIPTION	CAPITAL AMOUNT (000'S)	RATIO	COST RATE	WEIGHTED COST	RETURN
28	COMMON EQUITY	$10,173,270	45.83%	9.450%	4.331%	$961,374
29	LONG-TERM DEBT	$8,783,290	39.57%	4.630%	1.832%	$406,666
30	SHORT-TERM DEBT	$243,501	1.10%	3.200%	0.035%	$7,792
31	CUSTOMER DEPOSITS ACTIVE	$149,096	0.67%	2.610%	0.018%	$3,891
32	CUSTOMER DEPOSITS INACTIVE	$1,433	0.01%	0.00%	0.000%	$0
33	INVESTMENT TAX CREDITS	$196,997	0.89%	8.13%	0.072%	$16,016
	DEFERRED INCOME TAXES	$2,650,570	11.94%	0%	0.000%	$0
34	TOTAL CAPITAL	$22,198,157	100.00%		6.29%	$1,395,740
35	RATE BASE INVESTMENT			$22,198,157		
36	CAPITAL STRUCTURE AND CAPITAL COST (EXCEPT LONG-TERM DEBT AND EQUITY COSTS) RATES PER COMPANY MFR's A AND D. RATE BASE PER COMPANY MFR A.					
37	LONG-TERM DEBT COSTS SEE (DJL-13) AND EQUITY COSTS PER THIS TESTIMONY					

DUKE ENERGY FLORIDA
DOCKET NOS. 20240025-EI
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SUMMARY OF COST OF EQUITY CAPITAL MODELS

COMPANY PROPOSED COMPARABLE GROUP MODEL	LOW	HIGH	MIDPOINT
DISCOUNTED CASH FLOW (DCF)	8.68%	8.85%	8.76%
2 STAGE (DCF)	9.66%	9.98%	9.82%
CAPITAL ASSET PRICING MODEL (CAPM)	9.42%	9.68%	9.55%
EMPIRICAL CAPITAL ASSET PRICING MODEL (ECAPM)	9.59%	9.78%	9.68%
REASONABLE RANGE	9.34%	9.57%	9.45%
MINIMUM			8.68%
MAXIMUM			9.98%
MIDPOINT			9.33%
ALTERNATIVE COMPARABLE GROUP			
DISCOUNTED CASH FLOW (DCF)	9.08%	9.23%	9.15%
2 STAGE (DCF)	9.66%	9.73%	9.70%
CAPITAL ASSET PRICING MODEL (CAPM)	9.52%	9.59%	9.56%
EMPIRICAL CAPITAL ASSET PRICING MODEL (ECAPM)	9.66%	9.71%	9.69%
REASONABLE RANGE	9.48%	9.56%	9.52%
MINIMUM			9.08%
MAXIMUM			9.73%
MIDPOINT			9.40%