GUNSTER

September 20, 2022

BY E-FILING

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

Re: **Docket No. 20220067-GU: Petition for rate increase by Florida Public Utilities Company, Florida Division of Chesapeake Utilities Corporation, Florida Public Utilities Company - Fort Meade, and Florida Public Utilities Company - Indiantown Division.**

Dear Mr. Teitzman:

Attached, for electronic filing, please find the **Rebuttal Testimony of Paul Moul**, submitted on behalf of Florida Public Utilities Company and the Florida Division of Chesapeake Utilities Corporation.

Sincerely,

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

cc.(Certificate of Service)

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA PUBLIC UTILITIES COMPANY, ET. AL.

Docket No. 20220067-GU

REBUTTAL TESTIMONY

OF

PAUL R. MOUL

Date of Filing: 09/20/2022

1   **INTRODUCTION AND SUMMARY**

2   **Q.   PLEASE STATE YOUR NAME, OCCUPATION AND BUSINESS ADDRESS.**

3   A.   My name is Paul Ronald Moul. My business address is 251 Hopkins Road, Haddonfield,

4   New Jersey 08033-3062. I am Managing Consultant at the firm P. Moul & Associates,

5   an independent financial and regulatory consulting firm.

6   **Q.   DID YOU PREVIOUSLY SUBMIT TESTIMONY IN THIS PROCEEDING ON**

7   **BEHALF OF FLORIDA PUBLIC UTILITIES COMPANY AND ITS**

8   **AFFILIATES ("FPUC" OR THE "COMPANY")?**

9   A.   Yes. I submitted my direct testimony, FPUC Statement No. 11, on May 24, 2022.

10   **Q.   WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?**

11   A.   My rebuttal testimony responds to the direct testimony submitted by David J. Garrett,

12   a witness appearing on behalf of the Office of Public Counsel ("OPC"). If I fail to

13   address each and every issue in the OPC testimony, it does not imply agreement with

14   those issues.

15   **Q.   WHAT ARE THE KEY ASPECTS OF THE RATE OF RETURN ISSUE THAT**

16   **THE FLORIDA PUBLIC SERVICE COMMISSION ("COMMISSION")**

17   **SHOULD CONSIDER WHEN DECIDING THIS ISSUE IN THIS CASE?**

18   A.   The issues involve the Company's cost of equity and the capital structure. Mr. Garrett

19   has opposed the actual capital structure and instead proposed a hypothetical capital

20   structure. He has accepted the embedded cost of long-term debt and short-term debt for

21   FPUC. Foremost, the equity return proposed by Mr. Garrett is entirely too low to reflect

22   the risks of FPUC and the prospective cost of equity. Aside from technical issues that I

23   will discuss later in my rebuttal testimony, the Commission should take into

1   consideration a rate of return that will reflect and be supportive of the Company's

2   financial and risk profile. As I explain below, the OPC recommendation fails to

3   adequately consider this point and thereby understate the required cost of common

4   equity in this proceeding.

5   **Q.   PLEASE SUMMARIZE THE KEY POINTS OF YOUR REBUTTAL**

6   **TESTIMONY.**

7   A.   My key points are:

8   • Capital Structure Ratios – Mr. Garrett's use of a hypothetical capital structure,

9   rather than the Company's projected actual capital structure for the test year,

10   is improper and contrary to past practice in Florida. There are no

11   circumstances in this case that warrant such a deviation from prior Commission

12   practice.

13   • Comparable Companies – Mr. Garrett accepts my proxy group.

14   • Discounted Cash Flow ("DCF") – Mr. Garrett fails to adequately reflect

15   investor expectations of growth that are specific to the natural gas companies

16   included in his proxy group. He errs when using analysts' growth rate forecasts

17   by failing to consider earnings per share growth that is used by investors when

18   pricing the stocks of the proxy group companies.

19   • DCF Leverage Adjustment – Mr. Garrett claims that my leverage adjustment

20   is "incorrect" (see page 51 of OPC Statement No. 1). But he has not shown

21   that the capital structure ratios and calculations of the leverage adjustment that

22   I used are in any way incorrect.

1   • CAPM – A reasonable application of the CAPM mandates using forecast 30-

2   year Treasury bond yields, leverage adjusted betas, and size adjustment and

3   indicates an equity cost rate that is well above 12% in this case.

4   • Additional methods should also be considered when establishing the cost of

5   equity for FPUC. This is especially important because Federal Open Market

6   Committee ("FOMC") policy and inflation in the last few months indicates a

7   higher cost of equity and that he has neglected to even mention in his

8   testimony.

9 **Q. HOW SHOULD THE RATE OF RETURN SET BY THE COMMISSION**

10 **SUPPORT THE COMPANY'S FINANCIAL PROFILE?**

11 A. The Commission should set the Company's return on equity at a level that will attract

12 investment in the Company to ensure the Company's financial ability to render safe and

13 reliable service. Applying this principle, the Commission should reject the proposal by

14 Mr. Garrett to cut the Company's return on common equity to 9.25%. An equity return

15 in this magnitude would be viewed by investors as unsupportive of the Company's

16 financial condition. The consequence of this flawed analysis by OPC is actually not in

17 the best interest of the customers. An artificially low return on common equity, in the

18 long run, only creates higher rates for customers.

19 **Q. WOULD YOU PLEASE ELABORATE HOW IS MR. GARRETT'S PROPOSAL**

20 **INCORRECT?**

21 A. Mr. Garrett's proposed return is completely unreasonable and incorrect from a

22 regulatory perspective because it is much too low to allow FPUC to achieve the level of

23 returns that meet investors' expectations. This is required to comply with accepted rate

Rebuttal Testimony of Paul Moul

1   setting standards. FPUC has an obligation to serve and it should have an opportunity to

2   earn a rate of return that will allow it to provide service sufficiently, safely, and at

3   reasonable rates. Mr. Garrett's proposed rate of return jeopardizes the Company's

4   ability to obtain capital at reasonable rates, thus resulting in a financial profile that

5   encourages higher rates in the future. Indeed, Mr. Garrett actually claims that the FPUC

6   cost of equity is just 7.8%, but he "graciously" increases it to 9.25%. I have failed to

7   identify the link that he made between these two returns. Rather, there have been

8   dramatic increases in inflation and interest rates, prompting the FOMC to increase the

9   federal funds rate to combat inflation. This fact has not even been mentioned in the

10   testimony of Mr. Garrett. However, the Commission cannot ignore this. Further,

11   acceptance of Mr. Garrett's approach would ultimately lead to even lower ROEs in the

12   future since the 9.25% is simply a process to reduce ROEs based on his gradualism

13   approach to ratchet downward the ROE. Rather, based on the factors listed below, and

14   for technical reasons set forth later in my rebuttal testimony, the Commission should

15   adopt a substantially higher ROE.

16   **Q.   HOW DOES MR. GARRETT'S 7.8% COST OF EQUITY PROPOSAL**

17   **COMPARE TO OTHER RECOGNIZED RETURNS?**

18   A.   Mr. Garrett determined that the DCF cost of equity is 6.7% with sustainable growth (see

19   page 45 of OPC Statement No. 1) and the CAPM cost of equity is 7.9% (see page 62 of

20   OPC Statement No. 1). These returns compare to the returns recently requested in a

21   filing by Duke Energy Florida LLC to increase its return to a midpoint of 10.10% and

22   by Tampa Electric Company to increase its return to a midpoint 10.20% based upon

1   "triggers" approved in 2021. These filings were made in August 2022 in response to

2   higher yields on 30-year Treasury bonds.

3 **Q. ARE THERE ADDITIONAL ISSUES THAT THE COMMISSION SHOULD**

4   **CONSIDER WHEN SETTING THE COMPANY'S RETURN?**

5 A.   Yes. The investment community would be very concerned if the Commission were to

6   adopt the position of the OPC in this case. If it were to do so, investors would see Florida

7   regulation as less supportive of the Company at a time of high levels of capital

8   investment and increasing capital cost rates. If the Commission were to follow the

9   proposal of reducing the authorized return as proposed by the OPC, Florida's regulatory

10   support would certainly be viewed by investors as being reduced, particularly in the

11   context of rising capital costs due to inflation. Investment and access to capital at

12   reasonable rates follows constructive regulatory treatment. I would reiterate there are

13   no circumstances in this case that warrant the Commission's deviation from past

14   practice. The return on equity used by the Commission to set rates embodies in a single

15   numerical value a clear signal of regulatory support for the financial strength of the

16   utilities that it regulates. Although cost allocations, rate design issues, and regulatory

17   policies relative to the cost of service are important considerations, the opportunity to

18   achieve a reasonable return on equity represents a direct signal to the investment

19   community of regulatory support (or lack thereof) for the utility's financial strength. In

20   a single figure, the return on equity utilized to set rates provides a common and widely

21   understood benchmark that can be compared from one company to another and is the

22   basis by which returns on all financial assets (stocks – both utility and non-regulated,

23   bonds, money market instruments, and so forth) can be measured. So, while varying

1   degrees of sophistication are required to interpret the meaning of specific Commission

2   policies on technical matters, the return on equity figure is universally understood and

3   communicates to investors the types of returns that they can reasonably expect from an

4   investment in utilities operating in Florida.

5   The rate of return on common equity of 9.25% proposed by Mr. Garrett is

6   seriously deficient and will not provide FPUC with the opportunity to earn its investor

7   required cost of capital for the test year ending December 31, 2023. As explained below,

8   this is not the time for the Commission to be reducing the Company's authorized return

9   when there is a compelling need for capital investment and no evidence to the contrary.

10   **Q.   SHOULD THE COMMISSION CONSIDER THE FUTURE TREND IN**

11   **CAPITAL COSTS WHEN DECIDING THE RETURN ON EQUITY IN THIS**

12   **CASE?**

13   A.   Yes. Unlike Mr. Garrett, who takes a backward view of interest rates, accommodative

14   policy by the FOMC has ended and higher interest rates have occurred and will continue

15   in the future. Current FOMC policy will produce even higher interest rates prospectively

16   that should be incorporated into the cost of equity now. Indeed, higher inflation

17   expectations are a contributing factor that points to higher interest rates. Higher inflation

18   today is revealed by a 5.9% increase in social security payments announced on October

19   13, 2021, the largest one-year increase in nearly four decades. Even higher social

20   security payments are expected in 2022. The annual inflation rate in July 2022 moved

21   up to 8.5%. After the FOMC ended its bond buying program (i.e., quantitative easing)

22   in March 2022, it now plans to run off its $9 trillion asset portfolio, which will further

23   boost interest rates. Moreover, the first of several Fed Funds increases occurred on

Rebuttal Testimony of Paul Moul

1   March 16, 2022 with an increase of 0.25% and an additional 0.50% increase occurred

2   on May 4, 2022. A 50 basis point increase in the Fed Funds rate has not occurred since

3   2000. Additional increases are expected in 2022 and 2023. Indeed, the Fed Funds rate

4   was increased again on June 15, 2022, when a 0.75% increase occurred. Another 75

5   basis points increase in the Fed Funds rate occurred on July 27, 2022. These increases

6   were the largest since 1994. Higher interest rates clearly point to higher capital costs

7   prospectively. A forward-looking assessment of the capital markets is especially

8   relevant here because the Company's rates will be based on a test year ended December

9   31, 2023. The yield on 10-year Treasury bonds moved above the 3% level on May 2,

10   2022, the first time since late 2018. By August 2022, the yield on 30-year Treasury

11   bonds moved to 3.13%, or an increase of 1.46% (or 87%) since December 2020.

12   Likewise, the yield on A-rated public utility bonds has increased to 4.76% in August

13   2022 from 2.77% in December 2020 – a 199 basis point (or 72%) increase. Higher

14   interest rates clearly point to higher capital costs prospectively. I will describe the

15   forecasts of interest rates and the trend below.

16 **Q.   IS THERE ADDITIONAL EVIDENCE THAT SUGGESTS THAT THE COST**

17   **OF CAPITAL HAS BEEN INCREASING?**

18 A.   Yes. As a preliminary matter, the Company's cost of short-term debt has increased over

19   the rate used in its original filing with the Commission. The Company originally

20   proposed a 3.30% cost of short-term debt. Today, that cost would be 4.57%. To gain a

21   consensus view of future interest rates, I tabulated the forecasts of yields on 10-year

22   Treasury notes published by a variety of well recognized and investor-influencing

1   sources. I chose the 10-year Treasury note because it is available on a consistent basis

2   across all sources. The comparisons are:

	2023	2024	2025	2026	2027
Blue Chip	3.50%	3.50%	3.40%	3.50%	3.50%
EIA	2.06%	2.32%	2.62%	2.83%	2.97%
CBO	2.90%	3.10%	3.20%	3.50%	3.70%

3   The general consensus is that interest rates will maintain elevated levels or increase in

4   the future. The rising level of interest rates represents one key factor that adds to the

5   risk of common equity. It is apparent that the trough in interest rates has passed and the

6   forecasts show interest rates will continue to rise in the future. The Commission should

7   take the forecast trend toward higher interest rates into account when it sets the cost of

8   equity for FPUC. Mr. Garrett's testimony considers only a 30-day historical average of

9   30-year Treasury bond yields ended July 18, 2022. It is therefore indicated that a higher

10   authorized return is warranted

11 **Q.** **HAS THE STOCK MARKET REACTED TO THE CHANGES IN INTEREST**

12   **RATES?**

13 A. Yes. The stock market entered "correction" territory in 2022 and recently approached

14   "bear" market territory. Overall market sentiment is revealed by investor expected

15   volatility, which provides an overall assessment of the risk that prevails in the equity

16   market. The risk associated with common stock investments is revealed by the volatility

17   of the stock market measured by the Chicago Board Options Exchange ("CBOE") VIX.

18   The CBOE VIX is based on real-time prices of options on the S&P 500 Index and is

19   designed to reflect investors' consensus view of future (30-day) expected stock market

1   volatility. It is well-established that greater volatility indicates higher risk, which, all

2   else equal, translates into a higher cost of equity. It is widely accepted that high readings

3   for the CBOE VIX are often accompanied by bearish sentiment and a low CBOE VIX

4   is associated with bullish sentiment. The trading pattern of the CBOE VIX is typically

5   inverse to the level of stock prices. That is to say, the CBOE VIX increases when stock

6   prices are falling, and the CBOE VIX declines when stock prices rise. This situation is

7   sometimes associated with increases in the cost of equity when the CBOE VIX increases

8   and vis-a-versa. For 2022 to date, the CBOE VIX was 27.51. This compares with the

9   CBOE VIX of 16.33 in 2019 prior to the beginning of the financial consequences of the

10   Pandemic. We can see that the CBOE VIX spiked upward with the beginning of the

11   Pandemic. The CBOE VIX has been:

Year	Average VIX
2019	16.33
2020	32.21
2021	22.42
2022 YTD	27.51

12

13

14   While volatility in the stock market has subsided since the beginning of the Pandemic

15   in 2020, it continues to significantly exceed pre-Pandemic levels. The current level of

16   risk associated with common stocks, as revealed by the higher CBOE VIX in 2022,

17   warrants a higher equity return at this time because the higher stock market volatility

18   signifies higher risk that requires higher returns in compensation for the higher risk.

19   Hence, the risk for common equity, which translates into the cost of equity, does not

20   support a low equity return as suggested by Mr. Garrett.

21

Rebuttal Testimony of Paul Moul

1   **Q.   HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?**

2   A.   I will cover the issues of (i) capital structure, (ii) the weight to be given to the DCF

3   method, (iii) the DCF growth rate, (iv) the leverage adjustment to the DCF and CAPM

4   methods, (v) the Risk Premium analysis, and (vi) Comparable Earnings.

5   **CAPITAL STRUCTURE RATIOS**

6   **Q.   IS THERE A DIFFERENCE IN THE PROPOSED CAPITAL STRUCTURE**

7   **RATIOS UTILIZED BY MR. GARRETT IN THIS CASE?**

8   A.   Yes. Mr. Garrett is advocating a hypothetical capital structure for FPUC. Mr. Garrett's

9   position is clearly contrary to Commission policy concerning capital structure ratios that

10   typically reflect the use of the utility's own capital structure. To propose a hypothetical

11   capital structure ratio that includes more financial leverage, i.e., the 48.2% hypothetical

12   common equity ratio vs. the Company's actual 55.05% common equity, would threaten

13   the credit quality rating of CUC, who is the source of all investor provided capital for

14   FPUC. I say this because the actual 55.05% common equity ratio of CUC is the one that

15   supports the Company's "2b" designation in the NAIC credit quality ranking system.

16   As noted in my direct testimony, the "2b" designation is equivalent to the Baa/BBB

17   ratings by Moody's and S&P. By proposing the more highly leverage capital structure,

18   Mr. Garrett's proposal could move the Company's credit quality toward the "junk" bond

19   status.

20   **Q.   IS THERE ANY BASIS TO DEVIATE FROM THE COMPANY'S ACTUAL**

21   **CAPITAL STRUCTURE TO SET THE RATE OF RETURN IN THIS CASE?**

1   A.   No.   Mr. Garrett proposes a hypothetical capital structure for FPUC without ever

2   demonstrating that the Company's proposed capital structure is unreasonable.   Rather,

3   his proposed capital structure merely lowers the Company's revenue requirements.

4   In reaching his conclusion on capital structure ratios, Mr. Garrett examined (i) the debt

5   ratios of the companies in his proxy group, and (ii) the debt ratios of thousands of other

6   companies, which is a position that is inconsistent with his rejection of the Comparable

7   Earnings approach to measuring the cost of equity.

8   Under the facts of this case, the use of the actual capital structure ratios comports

9   with Commission practice.   I have established that the CUC's actual capital structure

10   ratios (including the 55.1% common equity ratio) fall within the range of the proxy

11   group. This is sufficient to meet the reasonableness standard that makes the actual CUC

12   capital structure appropriate in this case. Mr. Garrett never established that his analysis

13   is applicable for FPUC in the test year.   I have verified the reasonableness of the

14   Company's common equity ratio by considering the historical capital structure ratios for

15   the Gas Group and analysts' forecasts, which influence investor expectations.

16   Historically, the Gas Group has had a 50.5% average common equity ratio (see page 5

17   of FPUC Exhibit PRM-1). The range of common equity ratios for the proxy group was

18   33.2% to 57.6% in 2021 and was 35.5% to 60.1% as the five-year average. I have also

19   compared the Company's proposed common equity ratio to that of the Gas Group based

20   upon forecast data widely available to investors from Value Line. Those ratios are:

Rebuttal Testimony of Paul Moul

Company	2025-2027
Atmos Energy Corp.	60.0%
Chesapeake Utilities Corp.	60.0%
New Jersey Resources Corp.	45.0%
NiSource Inc.	39.5%
Northwest Natural Holding Company	52.0%
ONE Gas, Inc.	51.0%
Southwest Gas Holdings, Inc.	47.5%
Spire, Inc.	45.0%
Range:	
High	60.0%
Low	39.5%

Source: The Value Line Investment Survey, August 26, 2022

1   The <u>Value Line</u> data shows that CUC has a common equity ratio for the test year that is

2   within the range for the barometer group and that its actual capital structure has adequate

3   support. Moreover, when proposing a hypothetical debt ratio, Mr. Garrett creates a

4   mismatch between the cost of long-term debt and his hypothetic debt ratio that he

5   advocates. This mismatch arises because the hypothetical long-term debt ratio contains

6   more debt than the amount of long-term debt that is actually outstanding for FPUC.

7   **<u>COST OF COMMON EQUITY - DISCOUNTED CASH FLOW (DCF)</u>**

8   **Q.**   **THE DCF MODEL HAS BEEN USED BY MR. GARRETT AND YOU AS ONE**

9   **METHOD TO MEASURE THE COST OF EQUITY. WHAT IS YOUR**

10   **POSITION CONCERNING THE USEFULNESS OF THE DCF METHOD?**

11   A.   While the results of a DCF analysis should certainly be given weight, the use of more

12   than one method provides a superior foundation for the cost of equity determination.

13   Since all cost of equity methods contain certain unrealistic and overly restrictive

14   assumptions, the use of more than one method will capture the multiplicity of factors

15   that motivate investors to commit capital to an enterprise (i.e., current income, capital

16   appreciation, preservation of capital, level of risk bearing). The simplified DCF model

1   assumes that there is a single constant growth rate, there is a constant dividend payout

2   ratio, that price–earnings multiples do not change, and that the price of stock, earnings

3   per share, dividends per share, and book value per share all have the same growth rate.

4   We know from experience that those assumptions are not realistic because the stock

5   market reveals performance that is very different from the assumptions of the DCF. The

6   use of multiple methods provides a more comprehensive and reliable basis to establish

7   a reasonable equity return for FPUC.

8   <div align="center">**DCF GROWTH RATE**</div>

9   **Q.**   **AS TO THE DCF GROWTH COMPONENT, WHAT FINANCIAL VARIABLES**

10   **SHOULD BE GIVEN GREATEST WEIGHT WHEN ASSESSING INVESTOR**

11   **EXPECTATIONS?**

12   A.   The theory of the DCF holds that (i) the value of a firm's equity (i.e., share price) will

13   grow at the same rate as earnings per share with a constant P-E ratio, and (ii) dividend

14   growth will equal earnings growth with a constant payout ratio. Therefore, to properly

15   reflect investor expectations within the limitations of the DCF model, earnings per share

16   growth, which is the basis for the capital gains yield and the source of dividend

17   payments, must be given greatest weight. The reason that earnings per share growth is

18   the primary determinant of investor expectations rests with the fact that the capital gains

19   yield (i.e., price appreciation) will track earnings growth with a constant price earnings

20   multiple (a key assumption of the DCF model). It is also important to recognize that

21   analysts' earnings growth rate forecasts significantly influence investor growth

22   expectations. It is for this reason that GDP growth rates submitted by Mr. Garrett are

23   an inappropriate representation of investor growth rate expectations. Moreover, it is

1   instructive to note that Professor Myron Gordon, the foremost proponent of the DCF

2   model in public utility rate cases, has established that the best measure of growth for use

3   in the DCF model are forecasts of earnings per share growth.

4 **Q. IN HIS TESTIMONY, MR. GARRETT PROPOSES TO USE A**

5   **"SUSTAINABLE" GROWTH RATE THAT IS NOT SPECIFIC TO HIS PROXY**

6   **GROUP OF GAS COMPANIES. DOES THIS FOLLOW THE TRADITIONAL**

7   **APPROACH FOR APPLYING THE DCF MODEL?**

8 A. No. His testimony does not follow the normal, or typical, processes of applying the

9   DCF model for determining the return on equity. I say this because, as I previously

10   explained, Myron Gordon established that analysts' forecast of earnings growth are the

11   correct input for the DCF for each member of the proxy group. And, of course, Mr.

12   Garrett's chart on page 16 of OPC Statement No. 1 provides an invalid comparison

13   because it rests on Mr. Garrett's view of the cost of equity that is deficient for the reasons

14   I explain in my rebuttal.

15 **Q. WHAT DCF GROWTH RATE DID MR. GARRETT ACTUALLY USE IN HIS**

16   **DCF?**

17 A. On Exhibit DJG-6, Mr. Garrett provides two very different expressions of DCF. One

18   DCF calculation uses Mr. Garrett's unique view of sustainable growth and the second

19   DCF results reflects analysts' growth rates. The most obvious problem with Mr.

20   Garrett's testimony concerns his development of the sustainable growth rate form of the

21   DCF model for determining the ROE. In this regard, he advances the proposition that

22   the growth rate for a utility can never exceed the long-term gross domestic product

23   ("GDP") of the country. As I have explained in my direct testimony, companies,

Rebuttal Testimony of Paul Moul

1   including utilities, can cycle through the growth phases. While Mr. Garrett lists other

2   lower criteria for determining the long-term growth rate, he states in his testimony that

3   he is being "charitable" by selecting the maximum long-term estimate of GDP growth

4   of 3.8%, OPC Statement No. 1, page 45. This growth rate is well below analysts'

5   projections of earnings growth used by me, and it produces a nonsensical DCF cost rate

6   of 6.7%.

7   Mr. Garrett attempts to downplay the growth phase argument by arguing that growth in

8   rate base due to replacement of aging infrastructure is not growth (OPC Statement No.

9   1, pages 40-41).   The fallacy of his argument rests with the fact that replacement of

10   utility plant at the end of its life occurs at much higher costs than those same facilities

11   installed 20, 30 or 40 years ago. This can only be accomplished today by raising

12   extensive amounts of new capital including equity capital. Attraction of new capital can

13   only be accomplished with supportive regulation, including a reasonable ROE. His

14   argument that analysts' earnings forecasts are not long term are belied by the long-term

15   life of utility plant.

16   It seems obvious that imposing a noncompetitive return on replacement of utility

17   facilities by understating the growth rate in the DCF violates the regulatory compact.

18   Utilities accept an obligation to provide reliable and safe service under all situations in

19   exchange for the opportunity to earn a fair return on capital employed. Reducing the

20   ROE during the replacement of aging infrastructure would be counter-productive and

21   place FPUC at a disadvantage to other utilities in raising the capital it needs to undertake

22   the replacements.

Rebuttal Testimony of Paul Moul

1   **Q. DO THE DCF GROWTH RATES PROPOSED BY MR. GARRETT PROVIDE A**

2   **REASONABLE INPUT IN THE COST OF EQUITY ANALYSIS USING THE**

3   **DCF MODEL?**

4   A. No. Witness Garrett states that "…awarded ROEs are often based primarily on a

5   comparison with other awarded ROEs around the country," but he offers no support for

6   or citation for this conclusion. (OPC Statement No. 1, p. 18). Further, Mr. Garrett admits

7   that many utility analysts, as well as public utility commissions, use financial analysts'

8   projected growth rates in estimating the ROE. Yet, he offers no evidence that any

9   commission has accepted his calculation of the growth rate. (OPC Statement No. 1 page

10   45).

11   Mr. Garrett indicates that his method for analyzing sustainable growth rate rests on: (i)

12   nominal GDP, (ii) real GDP, and (iii) the risk-free rate. There are many problems with

13   his approach. First, the combination of the real GDP growth and inflation equals

14   nominal GDP, i.e. $(1.018) * (1.020) = (1.0380 - 1) = 3.8\%$. Hence, both nominal and

15   real GDP growth cannot be viewed separately. Second, the risk-free rate provides no

16   guide to the growth that a company can realize in its earnings. Earnings growth occurs

17   through revenue growth, net of: O&M, depreciation, taxes, and interest. None of these

18   factors are addressed with the risk-free rate of return. Third, Mr. Garrett is essentially

19   developing a generic growth rate that would apply to any, or all, companies, whether

20   they are regulated or non-regulated companies. However, each company has a unique

21   company-specific growth rate. His approach is simply incompatible with the basic

22   concept of the DCF, where future cash flows for each company are systematically

23   related to one another by a constant growth rate that represents a basic tenant of the

Rebuttal Testimony of Paul Moul

1   single-stage DCF. It is also incompatible with the use of the growth rates of a comparable

2   barometer group of companies to meet the requirement that a utility is to be permitted

3   to earn a return equal to comparable companies. The DCF equation is $P = D / (k-g)$.

4   Mr. Garrett's growth rate does not fit within this equation.

5 **Q. DOES MR. GARRETT'S ALTERNATIVE DCF CALCULATION PROVIDE AN**

6   **IMPROVEMENT   ON   HIS   PREFERRED   SUSTAINABLE   DCF**

7   **CALCULATION?**

8 A.   It is a step in the right direction, but it too is deficient. While using analysts' forecasts,

9   which have been demonstrated to be a superior growth rate measure in the DCF , it too

10   falls short. This is because Mr. Garrett erroneously used the <u>Value Line</u> forecast growth

11   rate of dividends per share rather than earnings per share. Correcting for this error, he

12   would have produced a DCF return of 10.7% with the quarterly form of the DCF

13   proposed by him. This shows that his DCF return is completely inadequate for the

14   reasons explained above.

15   **<u>LEVERAGE ADJUSTMENT</u>**

16 **Q. MR. GARRETT CRITICIZED THE LEVERAGE ADJUSTMENT THAT YOU**

17   **PROPOSE   TO   ACCOUNT   FOR   THE   DIVERGENCE   OF   MARKET**

18   **CAPITALIZATION AND BOOK VALUE CAPITALIZATION.   PLEASE**

19   **COMMENT.**

20 A.   At pages 48-52 of OPC Statement No. 1, Mr. Garrett never really refutes my leverage

21   adjustment. Indeed, he says that I misapplied the Hamada formula leverage adjustment

22   approach. First, in the DCF approach, I did not use the Hamada formula, but rather I

23   used the Modigliani & Miller approach. Second, at page 51 of OPC Statement No. 1,

1   Mr. Garrett claims that the Hamada formula generates an unlevered beta of 0.49. But

2   what I have shown is that the correct unlevered beta is 0.55 (see Schedule 10 of FPUC

3   Exhibit PRM-1).   The reason for the difference is that I correctly use the market

4   capitalization for my calculation, including the market value of debt, and Mr. Garrett

5   did not because he used the book value capital structure ratios of FPUC (see Exhibit

6   DJG-16). Indeed, there, Mr. Garrett used the actual capital structure ratios of FPUC,

7   rather than the hypothetical ratios he proposes, which is an inconsistent analysis.

8   **COST OF COMMON EQUITY - CAPITAL ASSET PRICING MODEL**

9 **Q. DO   YOU   HAVE   CONCERNS   REGARDING   MR.   GARRETT'S**

10   **APPLICATIONS OF THE CAPM?**

11 A. Yes. Mr. Garrett uses an inappropriate 30-day average yield on 30-year Treasury bonds,

12   a beta that is not leverage adjusted, an unrealistic market risk premium, and ignores the

13   size adjustment. He therefore proposes a totally unrealistic 7.9% CAPM result. This

14   compares with my CAPM of 14.41%.

15 **Q. MR. GARRETT HAS ALSO PERFORMED A CAPM CALCULATION IN**

16   **ADDITION TO HIS DCF ANALYSIS.   ARE THE RESULTS OF HIS CAPM**

17   **USEFUL IN SETTING THE COMPANY'S EQUITY RETURN IN THIS CASE?**

18 A. No. There are a variety of problems with Mr. Garrett's CAPM approach that makes it

19   not useful in this case. He makes CAPM calculations that produce results of 7.9%,

20   which on its face is simply not credible. First, Mr. Garrett uses a backward looking

21   3.2% yield on 30-year Treasury bonds. A 30-day historical average period is not

22   compatible with the forecast Treasury yields. Second, the 5.6% equity risk premium

23   ("ERP") selected by Mr. Garrett is completely off the mark. The principal departure

1   from the normal input is in his calculation of the ERP. He rejects the use of both historic

2   ERPs and projected ERPs calculated based on projected market returns. Instead, he

3   reviews "Expert Surveys" and his own calculations. He then uses the 2022 survey

4   conducted by IESE Business School, indicating that it provides the highest ERP of 5.6%.

5   There is no evidence that investors use this source of the ERP in their CAPM

6   calculations. Furthermore, the implied total market return using Mr. Garrett's final

7   inputs is just 8.82% (3.22% + 5.6%), which is clearly incompatible with actual stock

8   market returns of 18.40% in 2020, 28.71% in 2021, and 12.33% on average for the past

9   96 years (1926-2021).

10   **Q.   AT PAGES 65-67 OF OPC STATEMENT 2, MR. GARRETT ALSO**

11   **CHALLENGES THE ADJUSTMENT THAT YOU MADE TO THE RESULTS**

12   **OF THE CAPM FOR THE SIZE OF THE GAS GROUP. PLEASE RESPOND.**

13   A.   A size adjustment is necessary because the financial impact of changes in specific dollar

14   amounts of revenues and costs have a magnified influence on a small company because

15   there are fewer dollars over which those revenues or costs can be spread.

16   **Q.   HOW DOES SIZE AFFECT THE FINANCIAL PERFORMANCE OF A SMALL**

17   **COMPANY?**

18   A.   Examples of the financial consequences of external factors that can influence the

19   financial performance of a small company include loss of a large customer and the

20   effect of unexpected changes in expense.

21

22

23

Rebuttal Testimony of Paul Moul

1   **COST OF COMMON EQUITY - RISK PREMIUM ANALYSIS**

2   **Q. DO YOU BELIEVE THE RISK PREMIUM METHOD PROVIDES**

3   **SIGNIFICANT EVIDENCE OF THE COST OF EQUITY?**

4   A.   Yes. In my opinion, the Risk Premium results should be given serious consideration.

5   The Risk Premium method is straight-forward, understandable and has intuitive appeal

6   because it is based on a company's own borrowing rate. The utility's borrowing rate

7   provides the foundation for its cost of equity, which must be higher than the cost of debt

8   in recognition of the higher risk of equity (see FPUC Statement No. 11 pages 46-47).

9   So, while Mr. Garrett declines to use the Risk Premium approach to measure the

10   Company's cost of equity, it is an approach that provides a direct and complete reflection

11   of a utility's risk and return because it considers additional factors not reflected in the

12   beta measure of systematic risk. It is particularly useful when investors expect changes

13   in the cost of debt prospectively, which is currently the expectation of investors, as I

14   have explained above and in FPUC Statement No. 11, pages 42-43. Indeed, the Risk

15   Premium approach provides for direct reflection of prospective interest rates in the

16   model and therefore should be given weight in determining the equity cost rate in this

17   case.

18   **Q. PLEASE RESPOND TO MR. GARRETT'S CRITICISMS OF YOUR RISK**

19   **PREMIUM APPROACH.**

20   A.   While Mr. Garrett declines to use the Risk Premium approach to measure the Company's

21   cost of equity, it is an approach that provides a direct and complete reflection of a utility's

22   risk and return because it considers additional factors not reflected in the beta measure

23   of systematic risk. In fact, it is precisely because investors consider the results of other

1   methods that they too should be used in addition to the DCF in the development of the

2   cost of equity in this proceeding. As I explained in my direct testimony, we are facing

3   the prospect of increasing interest rates for the future and the market has increased yields

4   on debt instruments. I incorporated the trend toward higher interest rates when I

5   developed my Risk Premium cost of equity of 10.75% (4.00% interest rate on A-rated

6   public utility bonds + 6.75% equity risk premium). The recent increase in interest rates

7   would support a higher rate today.

8   **COST OF COMMON EQUITY - COMPARABLE EARNINGS APPROACH**

9 Q.   **PLEASE   RESPOND   TO   THE   CRITICISM   OF   THE   COMPARABLE**

10   **EARNINGS APPROACH.**

11 A.   The underlying premise of the Comparable Earnings method is that regulation should

12   emulate results obtained by firms operating in competitive markets and that a utility

13   must be given an opportunity cost of capital equal to that which could be earned if one

14   invested in firms of comparable risk. For non-regulated firms, the cost of capital concept

15   is used to determine whether the expected marginal returns on new projects will be

16   greater than the cost of capital, i.e., the cost of capital provides the hurdle rate at which

17   new projects can be justified, and therefore undertaken. Further, given the 10-year time

18   frame (i.e., five years historical and five years projected) considered by my study, it is

19   unlikely that the earned returns of non-regulated firms would diverge significantly from

20   their cost of capital.

21   The Comparable Earnings approach satisfies the comparability standard established in

22   the landmark decision by the United States Supreme Court, FPC v. Hope Nat. Gas Co.,

23   320 U.S. 591 (1944). In addition, the financial community has expressed the view that

Rebuttal Testimony of Paul Moul

1   the regulatory process must consider the returns that are being achieved in the non-

2   regulated sector to ensure that regulated companies can compete effectively in the

3   capital markets. Moreover, in a 1994 study that addressed the ROE issue, John Olson

4   (then with Merrill Lynch) established that equity returns from non-regulated companies

5   provide better assessment of investor requirements than those available for regulated

6   utilities.

7   **FIRM-SPECIFIC BUSINESS RISK**

8   **Q.   IS MR. GARRETT'S POSITION (SEE OPC STATEMENT NO. 1, PAGES 67-69)**

9   **CORRECT THAT INVESTORS SHOULD NOT BE COMPENSATED FOR**

10   **BUSINESS RISK BECAUSE USE OF A DIVERSIFIED PORTFOLIO**

11   **ELIMINATES BUSINESS RISK?**

12   A.   No. He is incorrect to argue that…"[n]either [DCF or CAPM] model includes an input

13   for business risks due to the well-known truth that investors do not expect a return for

14   such risks." (OPC Statement No. 1, page 69). It is well accepted that higher returns are

15   expected from more-risky businesses. Stated another way, companies with higher

16   returns are associated with the more-risky members of the barometer group and lower

17   returns go with the less risky ones. Through diversification, the barometer group has an

18   average risk profile. This is important because a business risk adjustment is necessary

19   for the higher risks of FPUC as compared to the barometer group companies as a whole.

20   With higher business risk, a company, including utilities, would offset higher business

21   risk with a lower debt ratio.

22   **SUMMARY**

23   **Q.   PLEASE SUMMARIZE YOUR REBUTTAL TESTIMONY.**

Rebuttal Testimony of Paul Moul

1   A.   It is my opinion that the equity allowances proposed by Mr. Garrett seriously understate

2   the cost of common equity for FPUC. In an environment of prospectively higher interest

3   rates and Company-specific risk factors, an opportunity to earn a midpoint cost of equity

4   of 11.25% is reasonable for FPUC.

5   **Q.   DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY AT THIS TIME?**

6   A.   Yes, it does

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Rebuttal Testimony has been

served by Electronic Mail this 20th day of September, 2022, upon the following:

Richard Gentry
P. Christensen
Office of Public Counsel
c/o The Florida Legislature
111 W. Madison Street, Room 812
Tallahassee, FL 32399-1400
Gentry.Richard@leg.state.fl.us
Christensen.patty@leg.state.fl.us

Jennifer Crawford
Ryan Sandy
2540 Shumard Oak Blvd.
Tallahassee, FL 32399
jcrawfor@psc.state.fl.us
rsandy@psc.state.fl.us

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

Mike Cassel
Florida Public Utilities Company
208 Wildlight Ave.
Yulee, FL 32097
mcassel@fpuc.com

   /s/Beth Keating
   Beth Keating, Esquire
   Florida Bar No. 0022756
   Gunster Law Firm
   215 South Monroe Street
   Suite 601
   Tallahassee, FL 32301

   Attorneys for Florida Public Utilities Company