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BEFORE THE

LOUISIANA PUBLIC SERVICE COMMISSION

EX PARTE:	)	
APPLICATION OF CLECO	)	
POWER LLC FOR:	)	
(I) IMPLEMENTATION OF	)	**DOCKET NO. U-_____**
CHANGES IN RATES TO BE	)	
EFFECTIVE JULY 1, 2024; AND	)	
(II) EXTENSION OF EXISTING	)	
FORMULA RATE PLAN	)	

DIRECT TESTIMONY

OF

ROGER A. MORIN, PhD

ON BEHALF OF

CLECO POWER LLC

JUNE 30, 2023

I. INTRODUCTION AND SUMMARY OF RECOMMENDATION

Q: PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND OCCUPATION.

A: My name is Dr. Roger A. Morin. My business address is Georgia State University, Robinson College of Business, University Plaza, Atlanta, Georgia, 30303. I am Emeritus Professor of Finance at the Robinson College of Business, Georgia State University and Professor of Finance for Regulated Industry at the Center for the Study of Regulated Industry at Georgia State University. I am also a principal in Utility Research International, an enterprise engaged in regulatory finance and economics consulting to business and government. I am testifying on behalf of Cleco Power LLC ("Cleco Power" or the "Company").

Q: PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.

A: I hold a Bachelor of Engineering degree and an MBA in Finance from McGill University, Montreal, Canada. I received my Ph.D. in Finance and Econometrics at the Wharton School of Finance, University of Pennsylvania.

Q: PLEASE SUMMARIZE YOUR ACADEMIC AND BUSINESS CAREER.

A: I have taught at the Wharton School of Finance, University of Pennsylvania, Amos Tuck School of Business at Dartmouth College, Drexel University, University of Montreal, McGill University, and Georgia State University. I was a faculty member of Advanced Management Research International, and I am currently a faculty member of S&P Global Intelligence (formerly SNL Knowledge Center or SNL), for whom I have conducted frequent national executive-level education seminars throughout the United States. In the last 40 years, I have conducted numerous national seminars on "Utility Finance," "Utility Cost of Capital," "Alternative Regulatory Frameworks," and "Utility Capital Allocation,"

which I have developed on behalf of S&P Global Intelligence. I have authored or co-authored several books, monographs, and articles in academic scientific journals on the subject of finance. They have appeared in a variety of journals, including The Journal of Finance, The Journal of Business Administration, International Management Review, and Public Utilities Fortnightly. I published a widely-used treatise on regulatory finance, *Utilities' Cost of Capital*, Public Utilities Reports, Inc., Arlington, Va. 1984. In late 1994, the same publisher released my book, *Regulatory Finance*, a voluminous treatise on the application of finance to regulated utilities. A revised and expanded edition of this book, *The New Regulatory Finance*, was published in 2006, and my latest book *Modern Regulatory Finance* was recently published in January 2022. I have been engaged in extensive consulting activities on behalf of numerous corporations, legal firms, and regulatory bodies in matters of financial management and corporate litigation.

Please see Exhibit RAM-1 for my professional qualifications.

Q: HAVE YOU PREVIOUSLY TESTIFIED ON COST OF CAPITAL BEFORE UTILITY REGULATORY COMMISSIONS?

A: Yes, I have been a cost of capital witness before nearly 50 regulatory bodies in North America, including the Louisiana Public Service Utilities Commission ("LPSC" or "the Commission") and the Federal Energy Regulatory Commission, among others.

I have testified before the following state, provincial, and other local regulatory commissions:

Alabama	FERC	Missouri	Oklahoma
Alaska	Florida	Montana	Ontario
Alberta	Georgia	Nebraska	Oregon

Arizona	Hawaii	Nevada	Pennsylvania
Arkansas	Illinois	New Brunswick	Quebec
British Columbia	Indiana	New Hampshire	South Carolina
California	Iowa	New Jersey	South Dakota
City of New Orleans	Maine	New Mexico	Tennessee
Colorado	Manitoba	New York	Texas
CRTC	Maryland	Newfoundland	Utah
Delaware	Michigan	Louisiana	Vermont
District of Columbia	Minnesota	North Dakota	Virginia
FCC	Mississippi	Nova Scotia	Washington
		Ohio	West Virginia

The details of my participation in regulatory proceedings are also provided in Exhibit RAM-1.

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

A: The purpose of my testimony in this proceeding is to present an independent appraisal of the fair and reasonable rate of return on common equity ("ROE")[1] on the common equity capital invested in Cleco Power's electric utility operations in the State of Louisiana. Based upon this appraisal, I have formed my professional judgment as to a return on such capital that would:

(1) be fair to ratepayers;

(2) allow Cleco Power to attract the capital needed for infrastructure and reliability investments on reasonable terms;

(3) maintain Cleco Power's financial integrity; and

[1] ROE is synonymous with the cost of equity capital and in this testimony I use these terms interchangeably.

(4) be comparable to returns offered on comparable risk investments.

Q: PLEASE BRIEFLY IDENTIFY THE EXHIBITS AND APPENDICES ACCOMPANYING YOUR TESTIMONY.

A: I have attached to my testimony Exhibit RAM-1 through Exhibit RAM-9, and Appendices A and B. These Exhibits and appendices relate directly to points in my testimony, and are described in further detail in connection with the discussion of those points in my testimony.

Q: PLEASE SUMMARIZE YOUR FINDINGS CONCERNING CLECO POWER'S COST OF COMMON EQUITY.

A: It is my opinion that a fair, reasonable and sufficient ROE for Cleco Power is 10.4%. My recommended return is predicated on the Commission's adoption of Cleco Power's proposed capital structure which consists of 52% common equity capital. A ROE of 10.4% is required in order for the Company to: (i) attract capital on reasonable terms, (ii) maintain its financial integrity, and (iii) provide Cleco Power a fair opportunity to earn a return commensurate with returns on comparable risk investments.

My ROE recommendation is derived from cost of capital studies that I performed using the financial models available to me and from the application of my professional judgment to the results. I applied various cost of capital methodologies, including Discounted Cash Flow ("DCF"), Capital Asset Pricing Model ("CAPM") and Risk Premium methodologies, to a group of investment-grade dividend-paying vertically-integrated electric utilities which are covered in Value Line's Electric Utility Composite. The results of the cost of capital studies I performed are as follows:

Summary of ROE Estimates

STUDY	ROE
DCF Electric Utilities Value Line Growth	9.4%
DCF Electric Utilities Analysts Growth	9.3%
CAPM Electric Utilities	11.0%
Empirical CAPM Electric Utilities	11.2%
Historical Risk Premium Electric Utilities	10.8%
Allowed Risk Premium	10.5%

The average result from the various methodologies is 10.4%. The truncated mean of the results is also 10.4%. Based on those results, my recommended ROE for Cleco Power's electric utility operations in the State of Louisiana is 10.4%.

My recommended ROE reflects the application of my professional judgment to the results in light of the indicated returns from my DCF, CAPM, and Risk Premium analyses.

Q: WOULD IT BE IN THE BEST INTERESTS OF RATEPAYERS FOR THE COMMISSION TO APPROVE A ROE OF 10.4% FOR CLECO POWER'S ELECTRIC UTILITY OPERATIONS?

A: Yes. My analysis shows that a 10.4% ROE fairly compensates investors, maintains Cleco Power's credit strength, and will permit the attraction of capital needed for utility infrastructure and reliability capital investments required in the service territory served by Cleco Power.

Q: PLEASE EXPLAIN HOW LOW ALLOWED ROES CAN INCREASE THE FUTURE COST OF CAPITAL AND RATEPAYER COSTS.

A: If a utility is authorized a ROE below the level required by equity investors, the utility or its parent will find it difficult to access equity capital. Investors will not provide equity capital at the current market price if the earnable ROE is below the level they require given the risks of an equity investment in the utility. The equity market corrects this by generating a stock price in equilibrium that reflects the valuation of the potential earnings stream from an equity investment at the risk-adjusted return that equity investors require. In the case of a utility that has been authorized a return below the level investors believe is appropriate for the risk they bear, the result is a decrease in the utility's market price per share of common stock. This reduces the financial viability of equity financing in two ways. First, because the utility's price per share of common stock decreases, the net proceeds from issuing common stock are reduced. Second, since the utility's market to book ratio decreases with the decrease in the share price of common stock, the potential risk from dilution of equity investments reduces investors' inclination to purchase new issues of common stock. The ultimate effect is the utility will have to rely more on debt financing to meet its capital needs.

However, as a company relies more on debt financing, its capital structure becomes more leveraged. Because debt payments are a fixed financial obligation to the utility, and income available to common equity is subordinate to fixed charges, this decreases the operating income available for dividend and earnings growth. Consequently, equity investors face greater uncertainty about future dividends and earnings from the firm. As a result, the firm's equity becomes a riskier investment. The risk of default on a company's bonds also

increases, making the utility's debt a riskier investment. This increases the cost to the utility for both debt and equity financing and increases the possibility a company will not have access to the capital markets for its outside financing needs. Ultimately, to ensure that Cleco Power has access to capital markets on reasonable terms for its capital needs, a fair and reasonable authorized ROE of 10.4% is required.

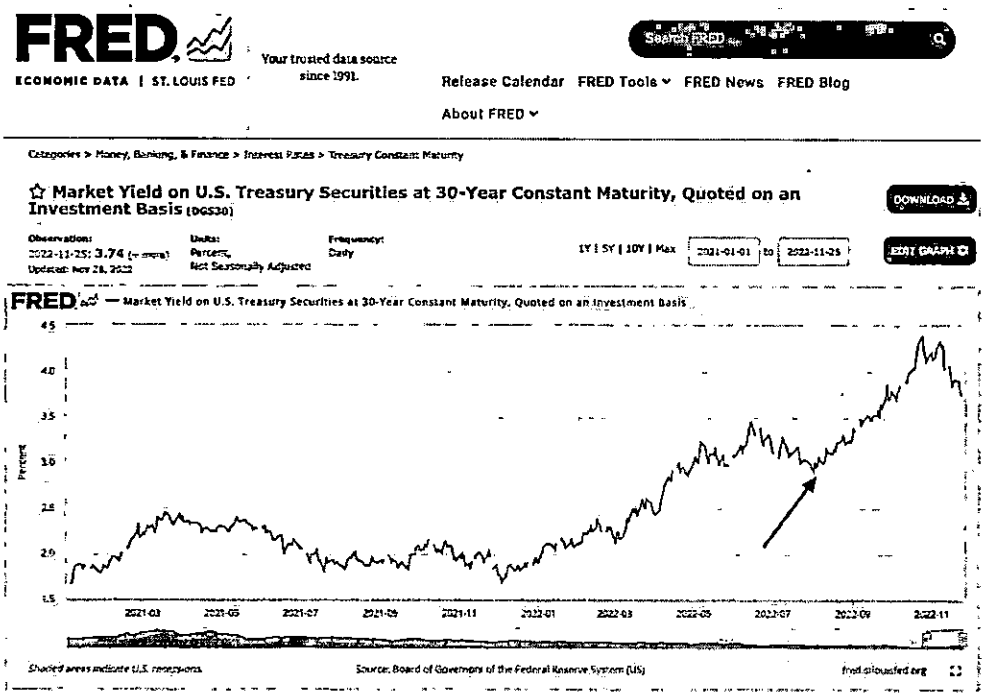
Cleco Power must secure outside funds from capital markets to finance required utility plant and equipment investments irrespective of capital market conditions, interest rate conditions and the quality consciousness of market participants. Thus, appropriate rate relief and fair supportive regulation, including approval of my recommended ROE, are essential requirements.

Q: ARE CAPITAL MARKET CONDITIONS IMPORTANT IN DETERMINING THE COST OF CAPITAL FOR A PUBLIC UTILITY?

A: Yes, they are. The cost of capital is determined in part by the level and trend of interest rates, by the level of inflation, by investor risk assessments, and by current and prospective economic conditions.

Q: WHAT HAS BEEN THE RECENT TREND IN INTEREST RATES AND ITS IMPACT ON THE COST OF CAPITAL?

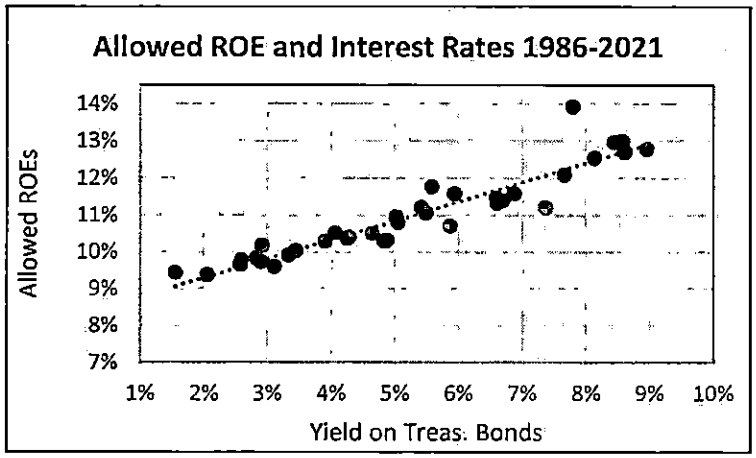
A: The steady decline in interest rates over the last decade has ended. As the graph below demonstrates, the current 30-year Treasury bond yield has risen from the 2% level to the 4% level, and is expected to rise further in response to record-high inflation, a more robust economic growth, and the Federal Reserve's restrictive monetary policy in an attempt to lower high inflation rates.



1

2 **Q: HOW DO INTEREST RATES IMPACT A UTILITY COMPANY'S COST OF**
3 **EQUITY CAPITAL AND ALLOWED RETURN ON EQUITY?**

4 **A:** The higher the level of interest rates, the higher is the cost of equity capital and the allowed
5 ROE, and conversely as well. This is clearly seen in the graph below which shows the
6 positive relationship between allowed ROEs and the yield on long-term Treasury bonds
7 over the 1986-2021 period.



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Allowed returns have typically tracked the level of interest rates as the above graph demonstrates. Hence, it is no surprise that ROE estimates, including my own, have risen in response to both higher interest rates and a higher risk profile for electric utilities. With regards to the latter, as I discuss later in my testimony, a "Perfect Storm" is impacting electric utilities[2]: declining sales per customer, coupled with rising costs, at a time when huge capital investments are required due to aging infrastructure. It is no surprise that investor risk perceptions and return requirements have increased in response to not only higher interest rates but also to this paradigm shift in the electric utility industry's risk profile.

Q: PLEASE DESCRIBE HOW THE REMAINDER OF YOUR TESTIMONY IS ORGANIZED.

A: The remainder of my testimony is divided into four broad sections:

(II) Regulatory Framework and Rate of Return;

(III) Cost of Equity Estimates;

(IV) Summary of Results;

(V) Economic Conditions in Louisiana.

Section II discusses the rudiments of rate of return regulation and the basic notions underlying cost of equity capital. Section III contains the application of DCF, Risk Premium, and CAPM tests. Section IV discusses the economic conditions in Louisiana relative to those in the national economy. Section V summarizes the results from the various approaches used in determining a fair return.

[2] The "perfect storm" issue is addressed later in the testimony.

II. REGULATORY FRAMEWORK AND RATE OF RETURN

Q: PLEASE EXPLAIN HOW A REGULATED COMPANY'S RATES SHOULD BE SET UNDER TRADITIONAL COST OF SERVICE REGULATION.

A: Regardless of whether a regulated utility is publicly-held or privately-held, under the traditional regulatory process, a regulated company's rates should be set so that the company has a fair opportunity to recover its prudently incurred costs, including taxes and depreciation, plus a fair and reasonable return on its invested capital. The allowed rate of return must necessarily reflect the cost of the funds obtained, that is, investors' return requirements. In determining a company's required rate of return, the starting point is investors' return requirements in financial markets. A rate of return can then be set at a level sufficient to permit a company the fair opportunity to earn a return commensurate with the cost of those funds.

Funds can be obtained in two general forms, debt capital and equity capital. The cost of debt funds can be easily ascertained from an examination of the contractual interest payments. The cost of common equity funds (i.e., investors' required rate of return on this source of financing) is more difficult to estimate. It is the purpose of the next section of my testimony to estimate a fair and reasonable ROE for Cleco Power's electric utility operations in the State of Louisiana.

Q: WHAT FUNDAMENTAL PRINCIPLES UNDERLIE THE DETERMINATION OF A FAIR AND REASONABLE ROE?

A: The heart of utility regulation is the setting of just and reasonable rates by way of a fair and reasonable return. There are two landmark United States Supreme Court cases that define

the legal principles underlying the regulation of a public utility's rate of return and provide the foundations for the notion of a fair return:

1. *Bluefield Water Works & Improvement Co. v. Public Service Commission of West Virginia*, 262 U.S. 679 (1923); and
2. *Federal Power Commission v. Hope Natural Gas Co.*, 320 U.S. 591 (1944).

The *Bluefield* case set the standard against which just and reasonable rates of return are measured:

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public *equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties* ... The *return should be reasonable*, sufficient to assure confidence in the financial soundness of the utility, and should be adequate, under efficient and economical management, to *maintain and support its credit* and *enable it to raise money* necessary for the proper discharge of its public duties.[3]

The *Hope* case expanded on the guidelines to be used to assess the reasonableness of the allowed return. The Court reemphasized its statements in the *Bluefield* case and recognized that revenues must cover "capital costs." The Court stated:

> From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock ... By that standard *the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks*. That return, moreover, should be sufficient to *assure confidence in the financial integrity of the enterprise, so as to maintain its credit and attract capital.*[4]

[3] *Bluefield Water Works & Improvement Co.*, 262 U.S. at 692 (emphasis added).

[4] *Hope Natural Gas Co.*, 320 U.S. at 603 (emphasis added).

The United States Supreme Court reiterated the criteria set forth in *Hope* in *Federal Power Commission v. Memphis Light, Gas & Water Division*, 411 U.S. 458 (1973); in *Permian Basin Rate Cases*, 390 U.S. 747 (1968); and, most recently, in *Duquesne Light Co. v. Barasch*, 488 U.S. 299 (1989). In the *Permian Basin Rate Cases*, the Supreme Court stressed that a regulatory agency's rate of return order should

> *reasonably be expected to maintain financial integrity, attract necessary capital, and fairly compensate investors for the risks they have assumed.*[5]

Therefore, the "end result" of this Commission's decision should be to allow Cleco Power the opportunity to earn a ROE that is:

(i) commensurate with returns on investments in other firms having corresponding risks;

(ii) sufficient to assure confidence in Cleco Power's financial integrity; and

(iii) sufficient to maintain Cleco Power's creditworthiness and ability to attract capital on reasonable terms.

Q: HOW IS THE FAIR RATE OF RETURN DETERMINED?

A: The aggregate return required by investors is called the "cost of capital." The cost of capital is the opportunity cost, expressed in percentage terms, of the total pool of capital employed by the utility. It is the composite weighted cost of the various classes of capital (e.g., bonds and common stock) used by the utility, with the weights reflecting the proportions of the

[5] *Permian Basin Rate Cases*, 390 U.S. at 792.

total capital that each class of capital represents. The fair return in dollars is obtained by multiplying the rate of return set by the regulator by the utility's "rate base." The rate base is essentially the net book value of the utility's plant and other assets used to provide utility service in a particular jurisdiction.

Although utilities like Cleco Power enjoy varying degrees of monopoly in the sale of public utility services, they (or their parent companies) must compete with everyone else in the free, open market for the input factors of production, whether labor, materials, machines, or capital, including the capital investments required to support the utility infrastructure. The prices of these inputs are set in the competitive marketplace by supply and demand, and it is these input prices that are incorporated in the cost of service computation. This is just as true for capital as for any other factor of production. Since utilities and other investor-owned businesses must go to the open capital market and sell their securities in competition with every other issuer, there is obviously a market price to pay for the capital they require (e.g., the interest on debt capital or the expected ROE relative to the utility's credit quality). In order to attract the necessary capital, utilities must compete with alternative uses of capital and offer a return commensurate with the associated risks.

Q: HOW DOES THE CONCEPT OF A FAIR RETURN RELATE TO THE CONCEPT OF OPPORTUNITY COST?

A: The concept of a fair return is intimately related to the economic concept of "opportunity cost." When investors supply funds to a utility by buying its stocks or bonds, they are not only postponing consumption, giving up the alternative of spending their dollars in some other way, they are also exposing their funds to risk and forgoing returns from investing their money in alternative comparable risk investments. The compensation they require is

the price of capital. If there are differences in the risk of the investments, competition among firms for a limited supply of capital will bring different prices. The capital markets translate these differences in risk into differences in required return, in much the same way that differences in the characteristics of commodities are reflected in different prices. The important point is that the required return on capital is set by supply and demand and is influenced by the relationship between the risk and return expected for those securities and the risks expected from the overall menu of available securities.

Q: WHAT ECONOMIC AND FINANCIAL CONCEPTS HAVE GUIDED YOUR ASSESSMENT OF CLECO POWER'S COST OF COMMON EQUITY?

A: Two fundamental economic principles underlie the appraisal of Cleco Power's cost of equity, one relating to the supply side of capital markets, the other to the demand side. On the supply side, the first principle asserts that rational investors maximize the performance of their portfolios only if they expect the returns on investments of comparable risk to be the same. If not, rational investors will switch out of those investments yielding lower returns at a given risk level in favor of those investment activities offering higher returns for the same degree of risk. This principle implies that a company will be unable to attract capital funds unless it can offer returns to capital suppliers that are comparable to those achieved on competing investments of similar risk. On the demand side, the second principle asserts that a company will continue to invest in real physical assets if the expected return on these investments equals, or exceeds, a company's cost of capital. This principle is the essence of the regulatory compact. In other words, a regulatory commission should set rates at a level sufficient to create equality between the expected return on physical asset investments and a company's cost of capital.

Failure of the regulator to allow prudent management a fair opportunity to attempt to earn the market required rate of return would be viewed by the capital markets as a breach of the regulatory compact. The financial markets would react to this situation by lowering the utility's common stock price and its credit rating.

Q: HOW DOES CLECO POWER OBTAIN ITS CAPITAL AND HOW IS ITS OVERALL COST OF CAPITAL DETERMINED?

A: The funds employed by Cleco Power are obtained in two general forms, debt capital and equity capital. The cost of debt funds can be ascertained easily from an examination of the contractual interest payments. The cost of common equity funds, that is, equity investors' required rate of return, is more difficult to estimate because there are no contractual payments as in the case of debt funds. Rather, the dividend payments received from common stock are not contractual or guaranteed in nature. This is true regardless of whether a company is publicly-traded or privately-held. While both dividend payments and interest payments are risky, dividend payments can increase, decrease or be omitted. Once a cost of common equity estimate has been developed, it can then be combined with the embedded cost of debt in the utility's capital structure, in order to arrive at the overall cost of capital (overall rate of return).

Q: WHAT IS THE MARKET REQUIRED RATE OF RETURN ON EQUITY CAPITAL?

A: The market required rate of return on common equity, or cost of equity, is the risk-adjusted return demanded by the equity investor. Investors establish the price for equity capital through their buying and selling decisions in capital markets. Investors set return requirements according to their perception of the risks inherent in the investment,

recognizing the opportunity cost of forgone investments in other companies, and the returns available from other investments of comparable risk.

Q: WHAT MUST BE CONSIDERED IN ESTIMATING A FAIR ROE?

A: The basic premise is that the allowable ROE should be commensurate with returns on investments in other firms having corresponding risks. The allowed return should be sufficient to assure confidence in the financial integrity of the firm, in order to maintain creditworthiness and ability to attract capital on reasonable terms. The "attraction of capital" standard focuses on investors' return requirements that are generally determined using market value methods, such as the DCF, CAPM, or Risk Premium methods. These market value tests define "fair return" as the return investors anticipate when they purchase equity shares of comparable risk in the financial marketplace. This is a market rate of return, defined in terms of anticipated dividends and capital gains as determined by expected changes in stock prices, and reflects the opportunity cost of capital. The economic basis for market value tests is that new capital will be attracted to a company only if the return expected by the suppliers of funds is commensurate with that available from alternative investments of comparable risk.

III. COST OF EQUITY CAPITAL ESTIMATES

Q: HOW DID YOU ESTIMATE A FAIR ROE FOR CLECO POWER?

A: To estimate a fair ROE for Cleco Power, I employed three methodologies:

(i) DCF methodology;

(ii) CAPM methodology; and

(iii) Risk Premium methodology.

All three methodologies are market-based methodologies designed to estimate the return required by investors on the common equity capital committed to Cleco Power.

Q: WHY DID YOU USE MORE THAN ONE APPROACH FOR ESTIMATING THE COST OF EQUITY?

A: No one single method provides the necessary level of precision for determining a fair return, but each method provides useful evidence to facilitate the exercise of an informed judgment. Reliance on any single method or preset formula is inappropriate when dealing with investor expectations because of possible measurement difficulties and vagaries in individual companies' market data. Examples of such vagaries include dividend suspension, insufficient or unrepresentative historical data due to a recent merger, impending corporate transformations such as acquisitions, a new corporate identity due to restructuring activities, and weather anomalies (storms, hurricanes, wildfires, etc.). The added advantage of using several different approaches is that the results of each one can be used to check the others.

As a general proposition, it is extremely dangerous to rely on only one generic methodology to estimate equity costs. The difficulty is compounded when only one variant of that methodology is employed. It is compounded even further when that one methodology is applied to a single company. Hence, several methodologies applied to several comparable risk companies should be employed to estimate the cost of common equity.

There are three broad generic market-based methods available to measure the cost of equity: DCF, CAPM, and Risk Premium. All three of these methods are accepted and used by the financial community and firmly supported in the financial literature. The

weight accorded to any one method may vary depending on unusual circumstances in capital market conditions.

Each methodology requires the exercise of professional judgment on the reasonableness of the assumptions underlying the method and on the reasonableness of the proxies used to validate the theory and apply the method. Each method has its own way of examining investor behavior, its own premises, and its own set of simplifications of reality. Investors do not necessarily subscribe to any one method, nor does the stock price reflect the application of any one single method by the price-setting investor. There is no guarantee that a single DCF result is necessarily the ideal predictor of the stock price and of the cost of equity reflected in that price, just as there is no guarantee that a single CAPM or Risk Premium result constitutes the perfect explanation of a stock's price or the cost of equity.

Q: ARE THERE ANY PRACTICAL DIFFICULTIES IN APPLYING COST OF CAPITAL METHODOLOGIES IN ENVIRONMENTS CHARACTERIZED BY VOLATILITY IN CAPITAL MARKETS AND ECONOMIC UNCERTAINTY?

A: Yes, there are. The traditional cost of equity estimation methodologies are difficult to implement when you are dealing with the instability and volatility in the capital markets and the uncertain economy both in the U.S. and abroad. This is not only because stock prices are volatile at this time, but also because utility company historical data have become less meaningful for an industry experiencing substantial change, for example, changing customer expectations, improving energy efficiency technologies, declining per customer usage, the implementation of new grid technologies, the advent of game-changing distributed generation, the transition to stringent carbon-free or renewable energy standards, and the need to secure vast amounts of external capital over the next decade,

regardless of capital market conditions. Past earnings and dividend trends may simply not be indicative of the future. For example, historical growth rates of earnings and dividends have been depressed by eroding margins due to a variety of factors, including the sluggish economy, declining per customer usage, restructuring activity in the industry, and falling margins. As a result, this historical data may not be representative of the future long-term earning power of these companies. Moreover, historical growth rates may not be necessarily representative of future trends for several electric utilities involved in mergers, acquisitions, and corporate transformations as these companies going forward are not the same companies for which historical data are available.

In short, given the volatility in capital markets and economic uncertainties, the utilization of multiple equity estimation methodologies is critical for a more fully representative cost of equity, while the reliance on a single methodology tends to be less representative of the cost of equity, as does the reliance on a small group of peer companies as I discuss below.

A. DCF Estimates

Q: PLEASE DESCRIBE THE DCF APPROACH TO ESTIMATING THE COST OF EQUITY CAPITAL.

A: According to DCF theory, the value of any security to an investor is the expected discounted value of the future stream of dividends or other benefits. One widely used method to measure these anticipated benefits in the case of a non-static company is to examine the current dividend plus the increases in future dividend payments expected by investors. This valuation process can be represented by the following formula, which is the traditional DCF model:

$$K_e = D_1/P_0 + g$$

where: K_e = investors' expected return on equity

D_1 = expected dividend at the end of the coming year

P_0 = current stock price

g = expected growth rate of dividends, earnings, stock price, and book value

The traditional DCF formula states that under certain assumptions, which are described in the next paragraph, the equity investor's expected return (K_e) can be viewed as the sum of an expected dividend yield (D_1/P_0) plus the expected growth rate of future dividends and stock price (g). The returns anticipated at a given market price are not directly observable and must be estimated from statistical market information. The idea of the market value approach is to infer K_e from the observed share price, the observed dividend, and an estimate of investors' expected future growth.

The assumptions underlying this valuation formulation are well known, and are discussed in detail in Chapter 9 of my latest 2022 reference text, Modern Regulatory Finance. The standard DCF model requires the following main assumptions:

(i) a constant average growth trend for dividends and earnings;

(ii) a stable dividend payout policy;

(iii) a discount rate in excess of the expected growth rate; and

(iv) a constant price-earnings multiple, which implies that growth in price is synonymous with growth in earnings and dividends.

The standard DCF model also assumes that dividends are paid at the end of each year when in fact dividend payments are normally made on a quarterly basis.

Q: HOW DID YOU ESTIMATE CLECO POWER'S COST OF EQUITY WITH THE DCF MODEL?

A: In estimating Cleco Power's cost of equity, I applied the DCF model to a group of investment-grade, dividend-paying, electric utilities that are covered in the Value Line database. The group is described in further detail below.

In order to apply the DCF model, two components are required: the expected dividend yield (D_1/P_0), and the expected long-term growth (g). The expected dividend (D_1) in the annual DCF model can be obtained by multiplying the current indicated annual dividend rate by the growth factor (1 + g).

Q: HOW DID YOU ESTIMATE THE DIVIDEND YIELD COMPONENT OF THE DCF MODEL?

A: From a conceptual viewpoint, the stock price to employ in calculating the dividend yield is the then-current price of the security at the time of estimating the cost of equity. This is because current stock prices incorporate all publicly available information regarding financial market expectations for that stock which provide the best indication of the true stock prices than any other price in an efficient market. An efficient market implies that prices adjust rapidly to the arrival of new information. Therefore, current prices reflect the fundamental economic value of a security. A considerable body of empirical evidence indicates that capital markets are efficient with respect to a broad set of information. This implies that observed current prices represent the fundamental value of a security, and that a DCF estimate should start with current prices.

In implementing the DCF model, I have used the spot divided yield, that is, the current dividend yields reported on the Zacks Investment Research website ("Zacks"). Basing

dividend yields on average results from a large group of companies reduces the concern that the vagaries of individual company stock prices will result in an unrepresentative dividend yield.

Q: WHY DID YOU MULTIPLY THE SPOT DIVIDEND YIELD BY (1 + g) RATHER THAN BY (1 + 0.5g)?

A: Some analysts multiply the spot dividend yield by one plus one half the expected growth rate (1 + 0.5g) rather than the conventional one plus the expected growth rate (1 + g). This procedure understates the return expected by the investor.

The fundamental assumption of the basic annual DCF model is that dividends are received annually at the end of each year and that the first dividend is to be received one year from now. Thus, the appropriate dividend to use in a DCF model is the full prospective dividend to be received at the end of the year. Since the appropriate dividend to use in a DCF model is the prospective dividend one year from now rather than the dividend one-half year from now, multiplying the spot dividend yield by (1 + 0.5g) understates the proper dividend yield.

Moreover, multiplying the spot dividend yield by (1 + g) is actually a conservative attempt to capture the reality of quarterly dividend payments typically employed by publicly-traded electric utility holding companies. Use of this method is conservative in the sense that the annual DCF model fully ignores the more frequent compounding of quarterly dividends.

Q: HOW DID YOU ESTIMATE THE GROWTH COMPONENT OF THE DCF MODEL?

A: The principal difficulty in calculating the required return by the DCF approach is in ascertaining the growth rate that investors currently expect. Since no explicit estimate of expected growth is observable, proxies must be employed.

As proxies for expected growth, I examined the consensus growth estimate developed by professional analysts. Projected long-term growth rates actually used by institutional investors to determine the desirability of investing in different securities influence investors' growth anticipations. These forecasts are made by large reputable organizations, and the data are readily available and are representative of the consensus view of investors and are thus consistent with the use of current market prices. Because of the dominance of institutional investors in investment management and security selection, and their influence on individual investment decisions, analysts' growth forecasts influence investor growth expectations and provide a sound basis for estimating the cost of equity with the DCF model.

Growth rate forecasts of several analysts are available from published investment newsletters and from systematic compilations of analysts' forecasts, such as those tabulated by Value Line and Zacks. As proxies for investors' growth expectations in applying the DCF model I used both analysts' long-term growth forecasts reported in Zacks and Value Line's growth forecasts.

Q: WHY DID YOU REJECT THE USE OF HISTORICAL GROWTH RATES IN APPLYING THE DCF MODEL TO UTILITIES?

A: I have rejected historical growth rates as proxies for expected growth in the DCF calculation for two reasons. First, historical growth patterns are already incorporated in analysts' growth forecasts that should be used in the DCF model, and are therefore

redundant. Second, published studies in the academic literature demonstrate that growth forecasts made by security analysts are reasonable indicators of investor expectations, and that investors rely on analysts' forecasts. This considerable literature is summarized in Chapter 12 of my most recent 2022 textbook, Modern Regulatory Finance.

Q: DID YOU CONSIDER ANY OTHER METHOD OF ESTIMATING EXPECTED GROWTH TO APPLY THE DCF MODEL?

A: Yes, I did. I considered using the so-called "sustainable growth" method, also referred to as the "retention growth" method. According to this method, future growth is estimated by multiplying the fraction of earnings expected to be retained by a company, 'b', by the expected return on book equity, ROE, as follows:

where: g = expected growth rate in earnings/dividends

b = expected retention ratio

ROE = expected return on book equity

Q: DO YOU HAVE ANY RESERVATIONS IN REGARD TO THE SUSTAINABLE GROWTH METHOD?

A: Yes, I do. First, the sustainable method of predicting growth contains a logic trap: the method requires an estimate of expected return on book equity to be implemented. But if the expected return on book equity input required by the model differs from the recommended ROE, a fundamental contradiction in logic follows. Second, the empirical finance literature demonstrates that the sustainable growth method of determining growth is not as significantly correlated to measures of value, such as stock prices and price/earnings ratios, as analysts' growth forecasts. I therefore chose not to rely on this method.

Q: DID YOU CONSIDER DIVIDEND GROWTH IN APPLYING THE DCF MODEL?

A: No, not at this time. The reason is that as a practical matter, while there is an abundance of earnings growth forecasts, there are very few forecasts of dividend growth. Moreover, it is reasonable to expect some utilities to lower their dividend payout ratios over the next several years in response to heightened business risk and the need to fund very significant construction programs and infrastructure upgrades over the next decade. Dividend growth has remained largely stagnant in past years as utilities are increasingly conserving financial resources in order to hedge against rising business risks and finance large infrastructure investments. As a result, investors' attention has shifted from dividends to earnings. Therefore, earnings growth provides a more meaningful guide to investors' long-term growth expectations. Indeed, it is growth in earnings that will support future dividends and share prices.

Q: IS THERE ANY EMPIRICAL EVIDENCE DOCUMENTING THE IMPORTANCE OF EARNINGS IN EVALUATING INVESTORS' EXPECTATIONS?

A: Yes, there is an abundance of evidence attesting to the importance of earnings in assessing investors' expectations. First, the sheer volume of earnings forecasts available from the investment community relative to the scarcity of dividend forecasts attests to their importance. To illustrate, Value Line, Yahoo Finance, Zacks, First Call Thompson, Reuters, and IBES provide comprehensive compilations of investors' earnings forecasts. The fact that these investment information providers focus on growth in earnings rather than growth in dividends indicates that the investment community regards earnings growth as a superior indicator of future long-term growth. Second, Value Line's principal

investment rating assigned to individual stocks, Timeliness Rank, is based primarily on earnings, which accounts for 65% of the ranking.

Q: HOW DID YOU APPROACH THE COMPOSITION OF COMPARABLE GROUPS IN ORDER TO ESTIMATE CLECO POWER'S COST OF EQUITY WITH THE DCF METHOD?

A: Because Cleco Power is not publicly traded, the DCF model cannot be applied directly to Cleco Power and proxies must be used. In the uncertain capital market and industry environment, it is important to select relatively large sample sizes representative of the utility industry as a whole, as opposed to small sample sizes consisting of a handful of companies. This is because the equity market as a whole and utility industry capital market data are volatile. As a result of this volatility, the composition of small groups of companies is very fluid, with companies exiting the sample due to dividend suspensions or reductions, insufficient or unrepresentative historical data due to recent mergers, impending merger or acquisition, and changing corporate identities due to restructuring activities.

From a statistical standpoint, confidence in the reliability of the DCF model result is considerably enhanced when applying the DCF model to a large group of companies. Any distortions introduced by measurement errors in the two DCF components of equity return for individual companies, namely dividend yield and growth, are mitigated. Utilizing a large portfolio of companies reduces the influence of either overestimating or underestimating the cost of equity for any one individual company. For example, in a large group of companies, positive and negative deviations from the expected growth will tend

to cancel out owing to the law of large numbers, provided that the errors are independent.[6] The average growth rate of several companies is less likely to diverge from expected growth than is the estimate of growth for a single firm. More generally, the assumptions of the DCF model are more likely to be fulfilled for a large group of companies than for any single firm or for a small group of companies.

Moreover, small samples are subject to measurement error, and in violation of the Central Limit Theorem of statistics.[7] From a statistical standpoint, reliance on robust sample sizes mitigates the impact of possible measurement errors and vagaries in individual companies' market data, such as those I listed above.

The point of all this is that the use of a handful of companies in a highly fluid and unstable industry produces fragile and statistically unreliable results. A far safer procedure is to employ large sample sizes representative of the industry as a whole and apply subsequent

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[6] If σ_i^2 represents the average variance of the errors in a group of N companies, and σ_{ij} the average covariance between the errors, then the variance of the error for the group of N companies, σ_N^2 is:

$$\sigma_N^2 = \frac{1}{N}\bar{\sigma}_i^2 + \frac{N-1}{N}\bar{\sigma}_{ij}$$

If the errors are independent, the covariance between them (σ_{ij}) is zero, and the variance of the error for the group is reduced to:

$$\sigma_N^2 = \frac{1}{N}\sigma_i^2$$

As seen in the equation above, as the denominator N gets progressively larger, the variance gets smaller and smaller.

[7] The Central Limit Theorem describes the characteristics of the distribution of values we would obtain if we were able to draw an infinite number of random samples of a given size from a given population and we calculated the mean of each sample. The Central Limit Theorem asserts: [1] The mean of the sampling distribution of means is equal to the mean of the population from which the samples were drawn. [2] The variance of the sampling distribution of means is equal to the variance of the population from which the samples were drawn divided by the size of the samples. [3] If the original population is distributed normally, the sampling distribution of means will also be normal. If the original population is not normally distributed, the sampling distribution of means will increasingly approximate a normal distribution as sample size increases.

risk adjustments to the extent that a company's risk profile differs from that of the industry average.

Q: PLEASE DESCRIBE THE PROXY GROUP FOR CLECO POWER'S UTILITY BUSINESS?

A: As proxies for Cleco Power, I examined a group of investment-grade dividend-paying vertically-integrated electric utilities covered in Value Line's Electric Utility industry group, meaning that these companies all possess utility assets similar to Cleco Power's. I began with all the companies designated as electric utilities that are covered in the Value Line Survey as shown on Exhibit RAM-2. Pacific Gas & Electric was eliminated because of suspended dividends. AvantGrid and PNM Resources were eliminated on account of the ongoing political controversies surrounding that merger. Companies who are primarily distribution-only electric utilities were eliminated so as to focus primarily on vertically-integrated electric utilities like Cleco Power. Private partnerships, private companies, and companies below investment-grade (with a Moody's bond rating below Baa3) were eliminated. Unitil was eliminated on account of its very small size and in order to minimize any stock price anomalies due to thin trading.[8]

The final group of twenty-four companies that comprise the proxy group is shown on Exhibit RAM-2. I stress that this proxy group must be viewed as a portfolio reflecting the risk of the vertically-integrated electric utility industry as a whole. It would be inappropriate to select any particular company or subset of companies from this group and

[8] This is necessary in order to minimize the well-known thin trading bias in measuring beta. Unitil was excluded for this reason.

infer the cost of common equity from that company or subset alone without rigorously determining to what degree the subject company is similar in risk to that company or subset.

Q: WHAT DCF RESULTS DID YOU OBTAIN FOR CLECO POWER USING VALUE LINE GROWTH PROJECTIONS?

A: Exhibit RAM-3 Page 1 displays the DCF analysis using Value Line growth projections for the twenty-four companies in Cleco Power's proxy group. As shown on column 3, line 26 of Exhibit RAM-3 Page 1, the average long-term earnings per share growth forecast obtained from Value Line is 5.90% for Cleco Power's proxy group. Combining this growth rate with the average expected dividend yield of 3.79% shown on column 4, line 26 of Exhibit RAM-3 Page 1 produces an estimate of equity costs of 9.69% for Cleco Power's proxy group, as shown on column 5, line 26 of Exhibit RAM-3. Recognition of flotation costs brings the required return estimate to 9.89% for the group, shown in Column 6. The need for a flotation cost allowance is discussed at length later in my testimony.

Page 2 of Exhibit RAM-3 replicates the exact same analysis but without Edison International's ROE estimate of 21%. The resulting average DCF estimate for the group is 9.38%.

Q: WHAT DCF RESULTS DID YOU OBTAIN FOR CLECO POWER USING ANALYSTS' CONSENSUS GROWTH FORECASTS?

A: Exhibit RAM-4 displays the DCF analysis using analysts' consensus growth forecasts for the companies in Cleco Power's proxy group. Please note that the growth forecast for Otter Tail was drawn from the Value Line growth forecast since the Zacks growth forecast were not available for that company.

As shown on column 3, line 26 of Exhibit RAM-4, the average long-term earnings per share growth forecast obtained from analysts is 5.35% for Cleco Power's proxy group. Combining this growth rate with the average expected dividend yield of 3.77% shown on column 4, line 25, produces an estimate of equity costs of 9.12% for Cleco Power's proxy group unadjusted for flotation cost, as shown on column 5, line 26, of Exhibit RAM-4. Recognition of flotation costs brings the required return on equity estimate to 9.32%, shown in Column 6, line 26. It is noteworthy that both DCF estimates are nearly identical.

Q: PLEASE SUMMARIZE THE DCF ESTIMATES FOR CLECO POWER.

A: Table 1 below summarizes the DCF estimates for Cleco Power:

Table 1. DCF Estimates for Cleco Power

DCF STUDY	ROE
Electric Utilities Value Line Growth	9.38%
Electric Utilities Analysts Growth	9.32%

B. CAPM Estimates

Q: PLEASE DESCRIBE YOUR APPLICATION OF THE CAPM RISK PREMIUM APPROACH.

A: My first two risk premium estimates are based on the CAPM and on an empirical approximation to the CAPM ("ECAPM"). The CAPM is a fundamental paradigm of finance. Simply put, the fundamental idea underlying the CAPM is that risk-averse investors demand higher returns for assuming additional risk, and higher-risk securities are priced to yield higher expected returns than lower-risk securities. The CAPM quantifies the additional return, or risk premium, required for bearing incremental risk. It provides a formal risk-return relationship anchored on the basic idea that only market risk matters, as measured by beta (β). According to the CAPM, securities are priced such that:

EXPECTED RETURN = RISK-FREE RATE + RISK PREMIUM

Denoting the risk-free rate by R_F and the return on the market as a whole by R_M, the CAPM is stated as follows:

$$K = R_F + \beta \times (R_M - R_F)$$

where: K = investors' expected return on equity
R_F = risk-free rate
R_M = return on the market as a whole
β = systematic risk (i.e., change in a security's return relative to that of the market)

This is the seminal CAPM expression, which states that the return required by investors is made up of a risk-free component, R_F, plus a risk premium determined by β x (R_M - R_F).The bracketed expression (R_M - R_F) is known as the market risk premium (MRP) and sometimes known as the equity risk premium (ERP). To derive the CAPM estimate of the cost of equity, three quantities are required: the risk-free rate (R_F), beta (β), and the MRP.

For the risk-free rate (R_F), I used 4.3%, based on consensus yield forecasts. For beta (β), I used 0.89 based on Value Line estimates. For the MRP, that is, (R_M - R_F), I used 7.3% based on historical and prospective market risk premium studies. These inputs to the CAPM are explained below.

C. CAPM Risk-Free Rate

Q: HOW DID YOU ARRIVE AT YOUR RISK-FREE RATE ESTIMATE OF 4.3% IN YOUR CAPM AND RISK PREMIUM ANALYSES?

A: To implement the CAPM and Risk Premium methods, an estimate of the risk-free rate is required. I relied on the consensus interest rate forecast reported in the November 2022 edition of Blue Chip Economic Indicators which calls for a rising interest rates in 2023 in response to high inflation rates, a restrictive monetary policy by the Federal Reserve Bank,

and high federal deficits. Based on fifty interest rate forecast from a wide variety of prominent sources including financial institutions, banks, economic consultants, investment bankers, investment research firms, rating agencies among others, the consensus forecast yield on 10-year U.S. Treasury bonds for 2023 is 3.8% and 4.3% on 30-year U.S. Treasury bonds.[9]

Q: WHY DID YOU RELY ON LONG-TERM BONDS INSTEAD OF SHORT-TERM BONDS?

A: The appropriate proxy for the risk-free rate in the CAPM is the return on the longest-term Treasury bond possible. This is because common stocks are very long-term instruments more akin to very long-term bonds rather than to short-term Treasury bills or intermediate-term Treasury notes. In a CAPM or Risk Premium analysis, the ideal estimate for the risk-free rate has a term to maturity equal to the security being analyzed. Common stock is a very long-term investment because the cash flows to investors in the form of dividends last indefinitely, therefore the yield on the longest-term possible government bonds, that is the yield on 30-year Treasury bonds, is the best measure of the risk-free rate for use in the CAPM. The expected common stock return is based on very long-term cash flows, regardless of an individual's holding period. Moreover, utility asset investments generally have very long-term useful lives and should correspondingly be matched with very long-term maturity financing instruments.

While long-term Treasury bonds are potentially subject to interest rate risk, this is only true if the bonds are sold prior to maturity. A substantial fraction of bond market participants,

[9] When only forecasts of 10-year U.S. Treasury notes are available, 50 basis points are added to obtain the 30-year forecast, based on the historical spread between 30-year and 10-year U.S. Treasury bond yields

usually institutional investors with long-term liabilities (*e.g.*, pension funds and insurance companies), in fact hold bonds until they mature, and therefore are not subject to interest rate risk. Moreover, institutional bondholders neutralize the impact of interest rate changes by matching the maturity of a bond portfolio with the investment planning period. Or they engage in hedging transactions in the financial futures markets. Both academicians and practitioners have extensively documented the merits and mechanics of such immunization strategies.

Another reason for utilizing the longest maturity Treasury bond possible is that the inflation expectations embodied in common equity market-required rates of return will therefore be equal to the inflation rate anticipated to prevail over the very long term. The same expectation should be embodied in the risk-free rate used in applying the CAPM model. It stands to reason that the yields on 30-year Treasury bonds will more closely incorporate within their yields the inflation expectations that influence the prices of common stocks than do short-term Treasury bills or intermediate-term U.S. Treasury notes.

Among U.S. Treasury securities, 30-year Treasury bonds have the longest term to maturity and the yields on such securities should be used as proxies for the risk-free rate in applying the CAPM. Therefore, I have relied on the forecast yields on 30-year Treasury bonds in implementing the CAPM and Risk Premium methods.

Q: ARE THERE OTHER REASONS WHY YOU REJECT SHORT-TERM INTEREST RATES AS PROXIES FOR THE RISK-FREE RATE IN IMPLEMENTING THE CAPM?

A: Yes. Short-term rates are volatile, fluctuate widely, and are subject to more random disturbances than are long-term rates. Short-term rates are largely administered rates. For

example, Treasury bills are used by the Federal Reserve as a policy vehicle to stimulate the economy and to control the money supply. They are also used by governments, companies, and individuals as a temporary safe-house for money.

As a practical matter, it makes no sense to match the return on common stock to the yield on 90-day Treasury bills. This is because short-term rates, such as the yield on 90-day Treasury bills, fluctuate widely, leading to volatile and unreliable equity return estimates. Moreover, yields on 90-day Treasury bills typically do not match the equity investor's planning horizon. Equity investors generally have an investment horizon far in excess of 90 days.

As a conceptual matter, short-term Treasury bill yields reflect the impact of factors different from those influencing the yields on long-term securities such as common stock. For example, the premium for expected inflation embedded into 90-day Treasury bills may be far different than the inflationary premium embedded into long-term securities yields. On grounds of stability and consistency, the yields on long-term Treasury bonds match more closely with common stock returns.

Q: WHY DID YOU IGNORE THE CURRENT LEVEL OF INTEREST RATES IN DEVELOPING YOUR PROXY FOR THE RISK-FREE RATE IN A CAPM ANALYSIS?

A: I relied on projected long-term Treasury interest rates for several reasons. First, investors price securities on the basis of long-term expectations, including interest rates expectations. Cost of capital models, including both the CAPM and DCF models, are prospective (i.e., forward-looking) in nature and must take into account current market expectations for the future because investors price securities on the basis of long-term expectations, including

interest rates. As a result, in order to produce a meaningful estimate of investors' required rate of return, the CAPM must be applied using data that reflects the expectations of actual investors in the market. While investors examine history as a guide to the future, it is the expectations of future events that influence security values and the cost of capital.

Second, investors' required returns can and do shift over time with changes in capital market conditions, hence the importance of considering interest rate forecasts. Third, the fact that the numerous organizations cited on the Blue Chip Economic Indicators who provide economic forecasts devote considerable expertise and resources to developing an informed view of the future, and the fact that investors are willing to purchase such expensive services confirm the importance of economic/financial forecasts in the minds of investors. Moreover, the empirical evidence demonstrates that stock prices do indeed reflect prospective financial input data.

Fourth, given that this proceeding is to provide ROE estimates for setting electric rates going forward, forecast interest rates are far more relevant. The use of interest rate forecasts is no different than the use of projections of other financial variables in DCF analyses, such as analysts' growth forecasts.

Q: DR. MORIN, WHAT IS YOUR FINAL ESTIMATE OF THE APPROPRIATE RISK-FREE RATE TO BE USED IN A CAPM ANALYSIS?

A: My final estimate of the appropriate risk-free to be used in a CAPM analysis is 4.3%. This is based on the consensus Blue Chip Economic Indicators estimate of 4.3%.

D. CAPM BETA ESTIMATE

Q: HOW DID YOU SELECT THE BETA FOR YOUR CAPM ANALYSIS?

A: A major thrust of modern financial theory as embodied in the CAPM is that perfectly diversified investors can eliminate the company-specific component of risk, and that only market risk remains. The latter is technically known as "beta" (β), or "systematic risk." The beta coefficient measures the change in a security's return relative to that of the market. The beta coefficient represents the extent and direction of movement in the rate of return on a stock relative to the movement in the rate of return on the market as a whole. It indicates the change in the rate of return on a stock associated with a one percentage point change in the rate of return on the market. It measures the degree to which a particular stock shares the risk of the market as a whole. Modern financial theory has established that beta incorporates several economic characteristics of a corporation that are reflected in investors' return requirements.

Cleco Power is not publicly traded. Therefore, proxies must be used. In the discussion of DCF estimates of the cost of common equity earlier, I examined a sample of investment-grade dividend-paying electric utilities covered by Value Line. The average beta for Cleco Power's proxy group is 0.89. Please see Exhibit RAM-5, for the beta estimates of the proxy group for Cleco Power. Based on these results, I shall use 0.89 as an estimate for the beta applicable to Cleco Power. I note that the average beta estimate of 0.89 represents a dramatic increase in the average beta of the electric utility industry when compared to historical levels of 0.60 - 0.70. This is not surprising given the rising risks of the electric industry which I discuss further in my testimony.

E. CAPM MARKET RISK PREMIUM

Q: WHAT MRP DID YOU USE IN YOUR CAPM ANALYSIS?

A: For the MRP, I used 7.4%. This estimate was based on the results of both historical and prospective studies of long-term risk premiums.

Q: CAN YOU DESCRIBE THE HISTORICAL MRP STUDY USED IN YOUR CAPM ANALYSIS?

A: Yes. The historical MRP estimate is based on the results obtained in Kroll's 2022 SBBI Yearbook (formerly published by Duff & Phelps and earlier by Morningstar), which compiles historical returns from 1926 to 2021. This well-known study summarized on Exhibit 6.8 of the handbook shows that a very broad market sample of common stocks outperformed long-term U.S. Government bonds by 6.3%. The historical MRP over the income component of long-term U.S. Government bonds, rather than over the total bond return, is 7.4%.

The historical MRP should be computed using the income component of bond returns because the intent, even using historical data, is to identify an expected MRP. When Treasury bonds are issued, the income return on the bond is risk free, but the total return, which includes both income and capital gains or losses, is not. Thus, the income return should be used in the CAPM because it is only the income return that is risk free. Moreover, the income component of total bond return (*i.e.*, the coupon rate) is a far better estimate of expected return than the total return (*i.e.*, the coupon rate + capital gain), because both realized capital gains and realized losses are largely unanticipated by bond investors. The long-horizon (1926-2021) MRP is 7.4%.

Q: ON WHAT MATURITY BOND DOES THE KROLL HISTORICAL RISK PREMIUM DATA RELY?

A: Because 30-year bonds were not always traded or even available throughout the entire study period covered in the Kroll study of historical returns, the latter study relied on bond return data based on 20-year Treasury bonds. Given that the normal yield curve is virtually flat above maturities of 20 years for most of the period covered in the Kroll study, the difference in yield is not material.

Q: WHY DID YOU USE LONG TIME PERIODS IN ARRIVING AT YOUR HISTORICAL MRP ESTIMATE?

A: Because realized returns can be substantially different from prospective returns anticipated by investors when measured over short time periods, it is important to employ returns realized over long time periods rather than returns realized over shorter periods when estimating the MRP with historical returns. Therefore, a Risk Premium study should consider the longest possible period for which data are available. Short-run periods during which investors earned a lower risk premium than expected are offset by short-run periods during which investors earned a higher risk premium than expected. Only over long-time periods will investor return expectations and realizations converge.

I have therefore ignored realized risk premiums measured over short time periods. Instead, I relied on results over periods of enough length to smooth out short-term aberrations, and to encompass several business and interest rate cycles. The use of the entire study period in estimating the appropriate MRP minimizes subjective judgment and encompasses many diverse regimes of inflation, interest rate cycles, and economic cycles.

To the extent that the estimated historical equity risk premium follows what is known in statistics as a random walk, one should expect the equity risk premium to remain at its historical mean. Since there is no evidence that the MRP in common stocks has changed over time, that is, no significant serial correlation in the Kroll study prior to that time, it is reasonable to assume that these quantities will remain stable in the future.

Q: SHOULD STUDIES OF HISTORICAL RISK PREMIUMS RELY ON ARITHMETIC AVERAGE RETURNS OR GEOMETRIC AVERAGE RETURNS?

A: Whenever relying on historical risk premiums, only arithmetic average returns over long periods are appropriate for forecasting and estimating the cost of capital. Geometric average returns are not appropriate.[10]

Q: PLEASE EXPLAIN HOW THE ISSUE OF WHAT IS THE PROPER "MEAN" AVERAGE HISTORICAL RETURN ARISES IN THE CONTEXT OF ANALYZING THE COST OF EQUITY?

A: The issue arises in applying methods that derive estimates of a utility's cost of equity from historical relationships between bond yields and earned returns on equity for individual companies or portfolios of several companies. Those methods produce series of numbers representing the annual difference between bond yields and stock returns over long historical periods. The question is how to translate those series into a single number that can be added to a current bond yield to estimate the current cost of equity for a stock or a

[10] *See* Roger A. Morin, Ph.D., Modern Regulatory Finance, Chapter 5 (2022); Richard A. Brealey, et al., Principles of Corporate Finance (11th ed. 2014); Roger A. Morin, Ph.D., The New Regulatory Finance: Utilities' Cost of Capital, Chapter 4 (2006).

portfolio. Calculating geometric and arithmetic means are two ways of converting series of numbers to a single, representative figure.

Q: IF THE ARITHMETIC AND THE GEOMETRIC MEANS ARE BOTH "REPRESENTATIVE" OF THE SERIES, WHAT IS THE DIFFERENCE BETWEEN THE TWO MEANS?

A: Each mean represents different information about the series. The geometric mean of a series of numbers is the value which, if compounded over the period examined, would have made the starting value grow to the ending value. The arithmetic mean is simply the average of the numbers in the series. Where there is any annual variation (volatility) in a series of numbers, the arithmetic mean of the series, which reflects volatility, will always exceed the geometric mean, which ignores volatility. Because investors require higher expected returns to invest in a company whose earnings are volatile than one whose earnings are stable, the geometric mean is not useful in estimating the expected rate of return which investors require to make an investment.

Q: CAN YOU PROVIDE A NUMERICAL EXAMPLE TO ILLUSTRATE THIS DIFFERENCE BETWEEN GEOMETRIC AND ARITHMETIC MEANS?

A: Yes. Table 2 below compares the geometric and arithmetic mean returns of a hypothetical Stock A, whose yearly returns over a ten-year period are very volatile, with those of a hypothetical Stock B, whose yearly returns are perfectly stable during that period. Consistent with the point that geometric returns ignore volatility, the geometric mean returns for the two series are identical (11.6% in both cases), whereas the arithmetic mean return of the volatile stock (26.7%) is much higher than the arithmetic mean return of the stable stock (11.6%).

If relying on geometric means, investors would require the same expected return to invest in both of these stocks, even though the volatility of returns in Stock A is very high while Stock B exhibits perfectly stable returns. That is clearly contrary to the most basic financial theory; that is, the higher the risk, the higher the expected return.

Chapter 5, Appendix A of my latest cost of capital textbook Modern Regulatory Finance contains a detailed and rigorous discussion of the impropriety of using geometric averages in estimating the cost of capital. Briefly, the disparity between the arithmetic average return and the geometric average return raises the question as to what purposes should these different return measures be used. The answer is that the geometric average return should be used for measuring historical returns that are compounded over multiple time periods. The arithmetic average return should be used for future-oriented analysis, where the use of expected values is appropriate.

Table 2 Arithmetic vs Geometric Mean Returns

Year	Stock A	Stock B
2012	50.0%	11.6%
2013	-54.7%	11.6%
2014	98.5%	11.6%
2015	42.2%	11.6%
2016	-32.3%	11.6%
2017	-39.2%	11.6%
2018	153.2%	11.6%
2019	-10.0%	11.6%
2020	38.9%	11.6%
2021	20.0%	11.6%
Std. Deviation	**64.9%**	**0.0%**
Arith. Mean	**26.7%**	**11.6%**
Geom. Mean	**11.6%**	**11.6%**

Q: CAN YOU DESCRIBE THE PROSPECTIVE MRP ESTIMATE USED IN YOUR CAPM ANALYSIS?

A: As a second estimate of the MRP, I examined Value Line's dividend yield and growth forecasts for the stocks in the S&P 500 Stock Index, that is, for the broad U.S. economy. Exhibit RAM-6 provides a prospective DCF analysis of the dividend-paying stocks that make up the S&P 500 Index using Value Line's screening software. The dividend yield (D_0/P) on the dividend-paying stocks in the S&P 500 Index is 2.4%, and the average projected long-term growth rate (g) is 9.1%. Adding the expected dividend yield (D_1/P) to the growth component produces an expected market return on aggregate equities of 11.5%. Subtracting the prospective risk-free rate of 4.3% from the latter, the implied risk premium is 7.2% over long-term U.S. Treasury bonds. This estimate is nearly identical to the 7.4% estimate obtained from the historical MRP study.

The average of the historical and prospective MRP estimates is 7.3% which is my final estimate of the MRP for purposes of implementing the CAPM.

Q: IS YOUR MRP ESTIMATE OF 7.3% CONSISTENT WITH THE ACADEMIC LITERATURE ON THE SUBJECT?

A: Yes, it is. Based on all the empirical evidence and the vast relevant literature on the subject, it is fair to conclude that a MRP range of 6% - 8% is a reasonable estimate for purposes of estimating the cost of equity with the CAPM in a regulatory setting.

The historical MRP approach is very simple and difficult to improve upon when you consider the variability and instability of the input data in alternative approaches. It is reasonable to conclude that over the long term, the MRP is likely to be similar to what it has been in the past.

In their authoritative corporate finance textbook, Professors Brealey, Myers, and Allen[11] state:

"Many financial economists rely on the evidence of history and therefore work with a risk premium of about 7%. Brealey, Myers, and Allen have no official position on the issue, but we believe that a range of 5% to 8% is reasonable for the risk premium in the United States."

A similar sentiment is echoed by Professors Ross, Westerfield and Jordan (2013) in their well-known textbook, who cite:

"We are comfortable with an estimate based on the historical U.S. equity risk premium of about 7 percent, but estimates of the future U.S. equity risk premium that are somewhat higher or lower could be reasonable if we have good reason to believe the past is not representative of the future. The bottom line is that any estimate of the future equity risk premium will involve assumptions about the future risk environment as well as the amount of risk aversion of future investors". Page 326

My own survey of the considerable literature on the MRP, which appears in Chapter 6 of my latest 2022 textbook, Modern Regulatory Finance, is also consistent with this view.

Q: WHAT IS YOUR ESTIMATE OF CLECO POWER'S COST OF EQUITY USING THE CAPM APPROACH?

A: For each company in the group, inserting, a risk-free rate of 4.3%, the company's own beta estimate, and a MRP of 7.3%, into the CAPM equation, the average CAPM cost of common

[11] Richard A. Brealey, Stewart C. Myers, and Paul Allen, Principles of Corporate Finance, Irwin McGraw-Hill (11th ed. 2014).

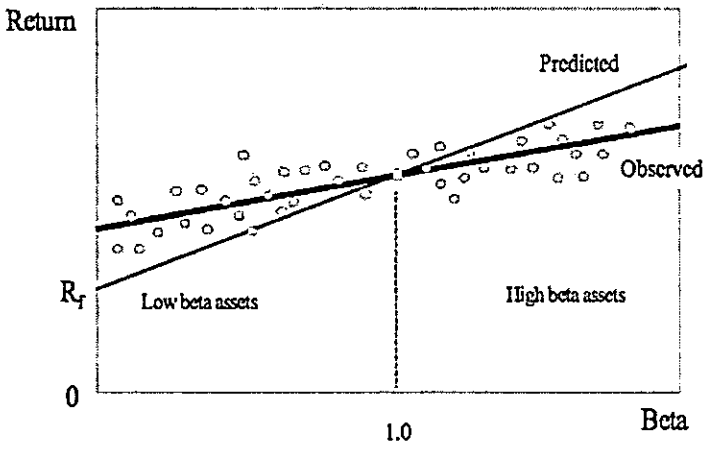
equity estimate for the group is 11.02% inclusive of flotation costs. Please see Exhibit RAM-7 for a detailed description of the CAPM analysis.

Q: CAN YOU DESCRIBE YOUR APPLICATION OF THE EMPIRICAL VERSION OF THE CAPM?

A: There have been countless empirical tests of the CAPM to determine to what extent security returns and betas are related in the manner predicted by the CAPM. This literature is summarized in Chapter 7 of my latest book, Modern Regulatory Finance. The results of the tests support the idea that beta is related to security returns, that the risk-return tradeoff is positive, and that the relationship is linear. The contradictory finding is that the risk-return tradeoff is not as steeply sloped as the predicted CAPM. That is, empirical research has long shown that low-beta securities earn returns somewhat higher than the CAPM would predict, and high-beta securities earn less than predicted.

A CAPM-based estimate of cost of capital underestimates the return required from low-beta securities and overstates the return required from high-beta securities, based on the empirical evidence. This is one of the most well-known results in finance. It is displayed graphically below.

CAPM: Predicted vs Observed Returns



A number of variations on the original CAPM theory have been proposed to explain this finding. The ECAPM makes use of these empirical findings. The ECAPM estimates the cost of capital with the equation:

$$K = R_F + \alpha + \beta \times ((R_M - R_F) - \alpha)$$

where the symbol alpha, α, represents the "constant" of the risk-return line, MRP is the market risk premium (R_M - R_F), and the other symbols are defined as previously noted. Inserting the risk-free rate, an alpha in the range of 1% - 2%, and reasonable values of beta and the MRP in the above equation produces results that are indistinguishable from the following more tractable ECAPM expression:

$$K = R_F + 0.25 \times (R_M - R_F) + 0.75\beta \times (R_M - R_F)$$

An alpha range of one to two percent is somewhat lower than that estimated empirically. The use of a lower value for alpha leads to a lower estimate of the cost of capital for low-beta stocks such as regulated utilities. This is because the use of a long-term risk-free rate rather than a short-term risk-free rate already incorporates some of the desired effects of

using the ECAPM. In other words, the long-term risk-free rate version of the CAPM has a higher intercept and a flatter slope than the short-term risk-free version which has been tested. This is also because the use of adjusted betas rather than the use of raw betas incorporates some of the desired effect of using the ECAPM.[12] Thus, it is reasonable to apply a conservative alpha adjustment. Please see Appendix A for a discussion of the CAPM and the ECAPM.

In short, the following equation provides a viable approximation to the observed relationship between risk and return, and provides the following cost of equity capital estimate:

$$K = R_F + 0.25\,(R_M - R_F) + .\,0.75 \times \beta \times (R_M - R_F)$$

For each company in the group, inserting the risk-free rate of 4.3%; a MRP of 7.3% for $(R_M - R_F)$ and that company's beta estimate in the above equation, the average cost of common equity for the group is return on common equity is 11.22% inclusive of flotation costs. Please see Exhibit RAM-7 for a detailed description of the ECAPM analysis.

Q: IS THE USE OF THE ECAPM CONSISTENT WITH THE USE OF ADJUSTED BETAS?

A: Yes, it is. Some have argued that the use of the ECAPM is inconsistent with the use of adjusted betas, such as those supplied by Value Line and Bloomberg. The reasoning to support the inconsistency argument is that the reason for using the ECAPM is to allow for

[12] The regression tendency of betas to converge to 1.0 over time is very well known and widely discussed in the financial literature. As a result, several commercial beta producers adjust their forecasted betas toward 1.00 in an effort to improve their forecasts. Value Line and Bloomberg betas are adjusted for their long-term tendency to regress toward 1.0 by giving approximately 66% weight to the measured raw beta and 33% weight to the prior value of 1.0 for each stock: $\beta_{adjusted} = 0.33 + 0.66\ \beta_{raw}$

the tendency of betas to regress toward the mean value of 1.00 over time, and, since Value Line betas are already adjusted for such trend, an ECAPM analysis results in double-counting. But this reasoning is erroneous.

Fundamentally, the ECAPM is not an adjustment, increase, or decrease in beta. The observed return on high beta securities is actually lower than that produced by the CAPM estimate, and conversely. The ECAPM is a formal recognition that the observed risk-return tradeoff is flatter than predicted by the CAPM based on myriad empirical evidence. The ECAPM (which adjusts the slope of the Capital Market Line) and the use of adjusted betas (which addresses the tendency of betas to regress to the value of 1.0) comprise two separate features of asset pricing. Even if a company's beta is estimated accurately, the CAPM still understates the return for low-beta stocks and overstates the return for high beta stocks. And even if the ECAPM is used, the return for low-beta securities is understated if the betas are understated. Referring back to the previous graph, the ECAPM is a return (vertical axis) adjustment and not a beta (horizontal axis) adjustment. Both adjustments are necessary. Moreover, the use of adjusted betas has the added benefit to compensate for interest rate sensitivity of utility stocks not captured by unadjusted betas.

Q: PLEASE SUMMARIZE YOUR CAPM ESTIMATES.

A: Table 3 below summarizes the common equity estimates obtained from the CAPM studies.

Table 3 CAPM Results

CAPM Method	ROE
Traditional CAPM	11.0%
Empirical CAPM	11.2%

F. Historical Risk Premium Estimates

Q: PLEASE DESCRIBE YOUR HISTORICAL RISK PREMIUM ANALYSIS OF THE UTILITY INDUSTRY USING TREASURY BOND YIELDS.

A: A historical risk premium for the utility industry was estimated with an annual time series analysis applied to the utility industry as a whole over the 1930-2021 period, using Standard and Poor's Utility Index (S&P Index) as an industry proxy. The risk premium was estimated by computing the actual realized ROE capital for the S&P Utility Index for each year, using the actual stock prices and dividends of the index, and then subtracting the long-term Treasury bond return for that year. Please see Exhibit RAM-8, for an analysis of the historical risk premium for the utility industry using an annual time series analysis applied to the utility industry as a whole over the 1930-2021 period.

As shown on Exhibit RAM-8, the average risk premium over the period was 5.5% over long-term Treasury bond yields and 6.3% over the income component of bond yields. As discussed previously, the latter is the appropriate risk premium to use. Given the risk-free rate of 4.3%, and using the historical estimate of 6.3% for bond returns, the implied cost of equity is 4.3% + 6.3% = 10.6%. This estimate becomes 10.8% with flotation costs, discussed later in my testimony.

Q: ARE YOU CONCERNED ABOUT THE REALISM OF THE ASSUMPTIONS THAT UNDERLIE THE HISTORICAL RISK PREMIUM METHOD?

A: No, I am not, for they are no more restrictive than the assumptions that underlie the DCF model or the CAPM. While the method looks backward in time and assumes that the risk premium is constant over time, these assumptions are not necessarily restrictive. By employing returns realized over long time periods rather than returns realized over more

recent time periods, investor return expectations and realizations converge. Realized returns can be substantially different from prospective returns anticipated by investors, especially when measured over short time periods. By ensuring that the Risk Premium study encompasses the longest possible period for which data are available, short-run periods during which investors earned a lower risk premium than they expected are offset by short-run periods during which investors earned a higher risk premium than they expected. Only over long time periods will investor return expectations and realizations converge, or else, investors would be reluctant to invest money.

G. Allowed Risk Premium Estimates

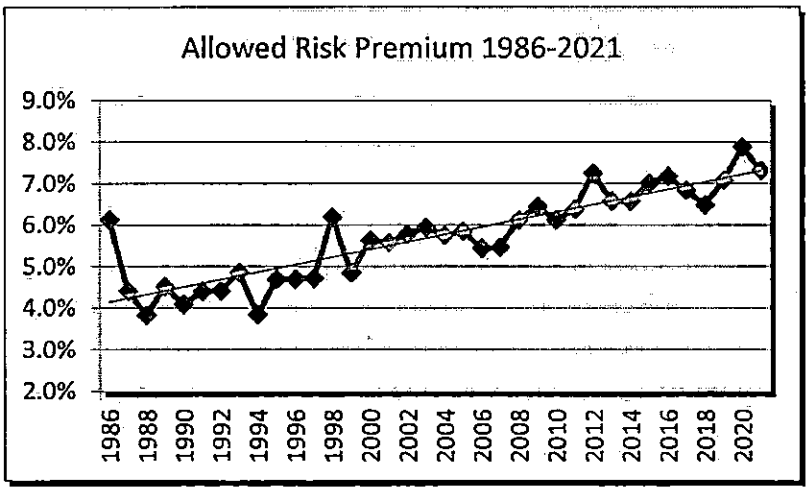
Q: PLEASE DESCRIBE YOUR ANALYSIS OF ALLOWED RISK PREMIUMS IN THE ELECTRIC UTILITY INDUSTRY.

A: To estimate the electric and gas utility industry's cost of common equity, I also examined the historical risk premiums implied in the ROEs allowed by regulatory commissions utilities over the 1986-2021 period for which data were available, relative to the contemporaneous level of the long-term Treasury bond yield. Please see Exhibit RAM-9, for an analysis of historical risk premiums implied in the ROEs allowed by regulatory commissions utilities over the 1986-2021 period.

This variation of the risk premium approach is reasonable because allowed risk premiums are presumably based on the results of market-based methodologies (DCF, CAPM, Risk Premium, etc.) presented to regulators in rate hearings and on the actions of objective unbiased investors in a competitive marketplace. Historical allowed ROE data are readily available over long periods on a quarterly basis from Regulatory Research Associates (now

S&P Global Intelligence) and easily verifiable from prior issues of that same publication and past commission decision archives.

The average ROE spread over long-term Treasury yields was 5.73% over the entire 1986-2021 period for which data were available. The graph below shows the year-by-year allowed risk premium. The escalating trend of the risk premium in response to lower interest rates and rising competition is noteworthy.



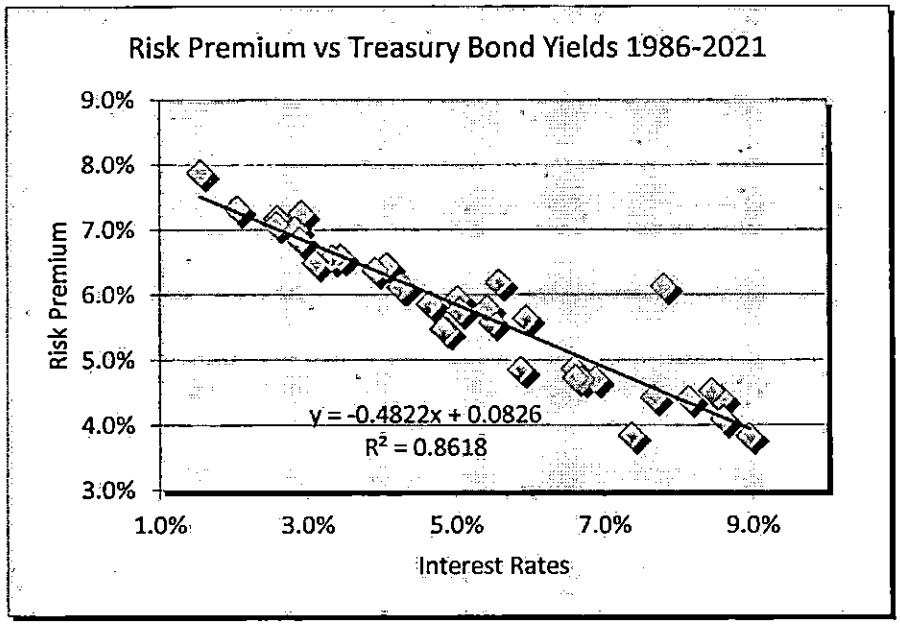
A careful review of these ROE decisions relative to interest rate trends reveals a narrowing of the risk premium in times of rising interest rates, and a widening of the premium as interest rates fall. The following statistical relationship between the risk premium (RP) and interest rates (YIELD) emerges over the 1986-2021 period:

$$RP = 8.2600 - 0.4822\ YIELD \qquad R^2 = 0.86$$

The relationship is highly statistically significant[13] as indicated by the very high R^2. The graph below shows a clear inverse relationship between the allowed risk premium and interest rates as revealed in past ROE decisions.

[13] The coefficient of determination R^2, sometimes called the "goodness of fit measure," is a measure of the degree of explanatory power of a statistical relationship. It is simply the ratio of the explained portion to the total sum

Inserting the long-term Treasury bond yield of 4.3% in the above equation suggests a risk premium estimate of 6.2%, implying a cost of equity of 10.5%. There is no need to adjust this figure for flotation cost given that the ROE data are based on allowed returns on book equity (and should already include an implicit or explicit flotation cost adjustment) rather than on market-based returns.



Q: DO INVESTORS TAKE INTO ACCOUNT ALLOWED RETURNS IN FORMULATING THEIR RETURN EXPECTATIONS?

A: Yes, among many other factors, investors do indeed take into account returns granted by various regulators in formulating their risk and return expectations, as evidenced by the availability of commercial publications disseminating such data, including Value Line and S&P Global Intelligence (formerly SNL and Regulatory Research Associates). Allowed returns, while certainly not a precise indication of a particular company's cost of equity

of squares. The higher R^2 the higher is the degree of the overall fit of the estimated regression equation to the sample data.

capital, are nevertheless important determinants of investor growth perceptions and investor expected returns.

Q: PLEASE SUMMARIZE YOUR RISK PREMIUM ESTIMATES.

A: Table 5 below summarizes the ROE estimates obtained from the two Risk Premium studies.

Table 4 Risk Premium Estimates for Cleco Power

Risk Premium Method	ROE
Historical Risk Premium	10.8%
Allowed Risk Premium	10.5%

H. Need for Flotation Cost Adjustment

Q: PLEASE DESCRIBE THE NEED FOR A FLOTATION COST ALLOWANCE.

A: All the market-based estimates reported above include an adjustment for flotation costs. The simple fact of the matter is that issuing common equity capital is not free. Flotation costs associated with stock issues are similar to the flotation costs associated with bonds and preferred stocks. Flotation costs are not expensed at the time of issue, and therefore must be recovered via a rate of return adjustment. This is done routinely for bond and preferred stock issues by most regulatory commissions, including FERC. Clearly, the common equity capital accumulated by the Company is not cost-free. The flotation cost allowance to the cost of common equity capital is discussed and applied in most corporate finance textbooks; it is unreasonable to ignore the need for such an adjustment.

Flotation costs are very similar to the closing costs on a home mortgage. In the case of issues of new equity, flotation costs represent the discounts that must be provided to place the new securities. Flotation costs have a direct and an indirect component. The direct

component is the compensation to the security underwriter for his marketing/consulting services, for the risks involved in distributing the issue, and for any operating expenses associated with the issue (e.g., printing, legal, prospectus). The indirect component represents the downward pressure on the stock price as a result of the increased supply of stock from the new issue. The latter component is frequently referred to as "market pressure."

Investors must be compensated for flotation costs on an ongoing basis to the extent that such costs have not been expensed in the past, and therefore the adjustment must continue for the entire time that these initial funds are retained in the firm. Appendix B to my testimony discusses flotation costs in detail, and shows: (1) why it is necessary to apply an allowance of 5% to the dividend yield component of equity cost by dividing that yield by 0.95 (100% - 5%) to obtain the fair return on equity capital; (2) why the flotation adjustment is permanently required to avoid confiscation even if no further stock issues are contemplated; and (3) that flotation costs are only recovered if the rate of return is applied to total equity, including retained earnings, in all future years.

By analogy, in the case of a bond issue, flotation costs are not expensed but are amortized over the life of the bond, and the annual amortization charge is embedded in the cost of service. The flotation adjustment is also analogous to the process of depreciation, which allows for the recovery of funds invested in utility plant. The recovery of bond flotation expense continues year after year, irrespective of whether a company issues new debt capital in the future, until recovery is complete, in the same way that the recovery of past investments in plant and equipment through depreciation allowances continues in the future even if no new construction is contemplated. In the case of common stock that has no

finite life, flotation costs are not amortized. Thus, the recovery of flotation costs requires an upward adjustment to the allowed ROE.

A simple example will illustrate the concept. A stock is sold for $100, and investors require a 10% return, that is, $10 of earnings. But if flotation costs are 5%, the Company nets $95 from the issue, and its common equity account is credited by $95. In order to generate the same $10 of earnings to the shareholders, from a reduced equity base, it is clear that a return in excess of 10% must be allowed on this reduced equity base, here 10.53%.

According to the empirical finance literature discussed in Appendix B, total flotation costs amount to 4% for the direct component and 1% for the market pressure component, for a total of 5% of gross proceeds. This in turn amounts to approximately 20 basis points, depending on the magnitude of the dividend yield component. To illustrate, dividing the average expected dividend yield of around 4.0% for utility stocks by 0.95 yields 4.2%, which is 20 basis points higher.

Sometimes, the argument is made that flotation costs are real and should be recognized in calculating the fair ROE, but only at the time when the expenses are incurred. In other words, as the argument goes, the flotation cost allowance should not continue indefinitely, but should be made in the year in which the sale of securities occurs, with no need for continuing compensation in future years. This argument is valid only if the Company has already been compensated for these costs. If not, the argument is without merit. My own recommendation is that investors be compensated for flotation costs on an on-going basis rather than through expensing, and that the flotation cost adjustment continue for the entire time that these initial funds are retained in the firm.

In theory, flotation costs could be expensed and recovered through rates as they are incurred. This procedure, although simple in implementation, is not considered appropriate, however, because the equity capital raised in a given stock issue remains on the utility's common equity account and continues to provide benefits to ratepayers indefinitely. In the absence of valid reasons to do so, burdening the current generation of ratepayers with the full costs of raising capital is not preferable when the benefits of that capital extend indefinitely. The common practice of capitalizing rather than expensing eliminates the intergenerational transfers that would prevail if today's ratepayers were asked to bear the full burden of flotation costs of bond/stock issues in order to finance capital projects designed to serve future as well as current generations. Moreover, expensing flotation costs requires an estimate of the market pressure effect for each individual issue, which is likely to prove unreliable. A more reliable approach is to estimate market pressure for a large sample of stock offerings rather than for one individual issue.

There are several sources of equity capital available to a firm including: common equity issues, conversions of convertible preferred stock, dividend reinvestment plans, employees' savings plans, warrants, and stock dividend programs. Each carries its own set of administrative costs and flotation cost components, including discounts, commissions, corporate expenses, offering spread, and market pressure. The flotation cost allowance is a composite factor that reflects the historical mix of sources of equity. The allowance factor is a build-up of historical flotation cost adjustments associated with and traceable to each component of equity at its source. It is impractical and prohibitively costly to start from the inception of a company and determine the source of all present equity. A practical

solution is to identify general categories and assign one factor to each category. My recommended flotation cost allowance is a weighted average cost factor designed to capture the average cost of various equity vintages and types of equity capital raised by the Company.

Q: DR. MORIN, CAN YOU PLEASE ELABORATE ON THE MARKET PRESSURE COMPONENT OF FLOTATION COST?

A: The indirect component, or market pressure component, of flotation costs represents the downward pressure on the stock price as a result of the increased supply of stock from the new issue, reflecting the basic economic fact that when the supply of securities is increased following a stock or bond issue, the price falls. The market pressure effect is real, tangible, measurable, and negative. According to the empirical finance literature cited in Appendix B, the market pressure component of the flotation cost adjustment is approximately 1% of the gross proceeds of an issuance. The announcement of the sale of large blocks of stock produces a decline in a company's stock price, as one would expect given the increased supply of common stock.

IV. SUMMARY OF RESULTS AND RECOMMENDATION

Q: PLEASE SUMMARIZE YOUR RESULTS AND RECOMMENDATION.

A: To arrive at my final recommendation, I performed

(i) a DCF analysis on a group of investment-grade dividend-paying electric utilities using Value Line's growth forecasts;

(ii) a DCF analysis on a group of investment-grade dividend-paying electric utilities using analysts' growth forecasts;

(iii) a traditional CAPM using current market data;

(iv) an empirical approximation of the CAPM using current market data;

(v) historical risk premium data from electric utility industry aggregate data, using the yield on long-term US Treasury bonds; and

(vi) allowed risk premium data from electric utility industry aggregate data, using the yield on long-term US Treasury bonds.

Table 5 below summarizes the ROE estimates for Cleco Power.

Table 5 Summary of ROE Estimates

STUDY	ROE
DCF Electric Utilities Value Line Growth	9.4%
DCF Electric Utilities Analysts Growth	9.3%
CAPM Electric Utilities	11.0%
Empirical CAPM Electric Utilities	11.2%
Historical Risk Premium Electric Utilities	10.8%
Allowed Risk Premium	10.5%

The average ROE estimate and the truncated mean[14] are both 10.4%.

I stress that no one individual method provides an exclusive foolproof formula for determining a fair return, but each method provides useful evidence so as to facilitate the exercise of an informed judgment. Reliance on any single method or preset formula is hazardous when dealing with investor expectations. Moreover, the advantage of using several different approaches is that the results of each one can be used to check the others.

[14] The truncated mean is obtained by removing the high and low results and computing the average of the remaining observations.

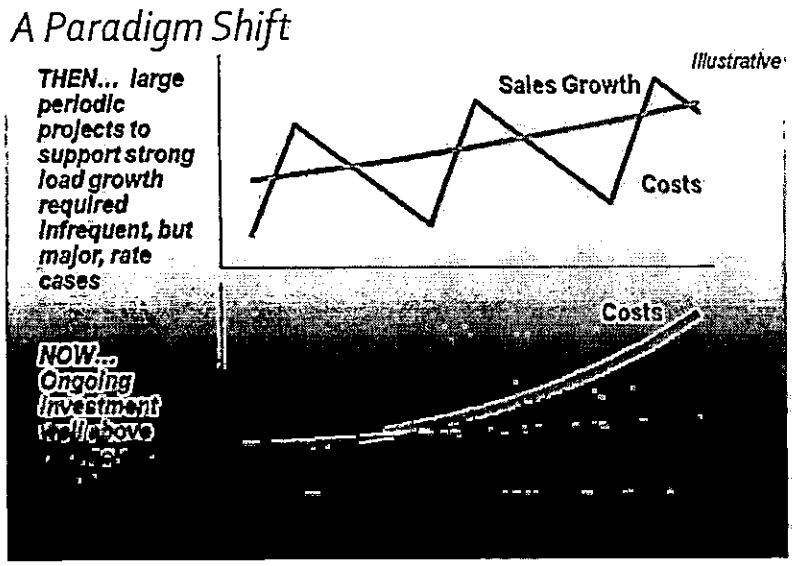
Q: DR. MORIN, WHAT IS YOUR FINAL CONCLUSION REGARDING CLECO POWER'S RETURN ON COMMON EQUITY CAPITAL?

A: Based on the results of all my analyses, the application of my professional judgment, and the risk circumstances of Cleco Power, it is my opinion that a just and reasonable ROE for Cleco Power's electric utility operations in the State of Louisiana is 10.4%. My recommended return on common equity for Cleco Power is predicated on the adoption of a pro forma capital structure consisting of 52% common equity capital.

Q: DR. MORIN, PLEASE DESCRIBE THE CURRENT RISK ENVIRONMENT IN WHICH ELECTRIC UTILITY COMPANIES, INCLUDING CLECO POWER, OPERATE.

A: The graph below[15] illustrates schematically the paradigm shift in the electric utility industry's risk profile. The upper half displays the traditional business model and the lower half displays the new business environment. In a nutshell, the industry is experiencing declining demand growth, rising operating costs, rising capital costs, while at the same time the industry is beset by lower allowed returns. It is not surprising that investor risk perceptions have escalated in such a "perfect storm" environment.

[15] Dr. R. A. Morin S&P Global Intelligence Seminar "*Essentials of Regulatory Finance*", 2019.



Q: HAVE THE RISK PERCEPTIONS OF THE ELECTRIC UTILITY INDUSTRY INCREASED IN RECENT YEARS?

A: Yes, they have intensified dramatically, and that is the reason why cost of equity estimates for the industry are escalating. The graph below illustrates my point. The second graph shows a dramatic increase in the average beta risk measure for electric utility stocks over the 2014-2022 period, rising from the 0.65 level to the unprecedented level of close to 1.0. A beta figure approaching 1.0 is an indication that electric utility stocks are becoming as risky as the average stock.