BEFORE THE

•

LOUISIANA PUBLIC SERVICE COMMISSION

CENTERPOINT ENERGY ENTEX, EX PARTE

DOCKET NO. U- $\frac{36124}{}$

In Re: Application for Renewal of CenterPoint Energy Entex's Rate Stabilization Plan Rider RSP-R4 for a Three Year Term.

PRE-FILED DIRECT TESTIMONY

OF

ANN E. BULKLEY

ON BEHALF OF

CENTERPOINT ENERGY RESOURCES CORP. D/B/A CENTERPOINT ENERGY ENTEX

`

TABLE OF CONTENTS

1

I.	INTRODUCTION AND OVERVIEW1			
п.	SUMMARY OF ANALYSIS AND CONCLUSIONS			
m.	REGULATORY GUIDELINES10			
IV.	CA	PITAL MARKET CONDITIONS14		
	Α.	Economic Recovery and Performance of the Utility Sector16		
	в.	Effect of Tax Reform on the ROE and Capital Structure		
	C.	Conclusion		
v .	PRO	DXY GROUP SELECTION		
VI.	CO	ST OF EQUITY ESTIMATION		
	A.	Importance of Multiple Analytical Approaches40		
	B.	Constant Growth DCF Model		
	C.	Discounted Cash Flow Model Results		
~	D.	CAPM Analyses		
	E.	Bond Yield Plus Risk Premium Analysis60		
VII.	RE	GULATORY AND BUSINESS RISKS64		
	A.	Small Size Risk65		
	B.	Capital Expenditures71		
	C.	Severe Weather Risk		
	D.	Regulatory Risk		
	E.	Flotation Cost		
VIII.	CA	PITAL STRUCTURE, COST OF DEBT, OVERALL RATE OF RETURN		
	••••			
	Α.	Capital Structure		
	B.	Cost of Long-Term Debt94		
	C.	Cost of Short-Term Debt		
	D.	Overall Rate of Return		
IX.	CO	NCLUSIONS AND RECOMMENDATION		

-

.

LIST OF EXHIBITS

<u>Exhibit</u>	Description
AEB-1	Resume and Testimony Listing of Ann E. Bulkley
AEB-2	Summary of Results
AEB-3	Proxy Group Selection
AEB-4	Constant Growth DCF Model
AEB-5	Capital Asset Pricing Model
AEB-6	Risk Premium Approach
AEB-7	Small Size Risk Analysis
AEB-8	Capital Expenditures Analysis - CONFIDENTIAL
AEB-9	Regulatory Risk Analysis
AEB-10	Flotation Cost
AEB-11	Capital Structure Analysis
AEB-12	Cost of Debt Analysis
AEB-13	Business Segment Data for NiSource, Inc.

.

.

•

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

1 I. INTRODUCTION AND OVERVIEW

2 Q. What is your name, business address, and position?

A. My name is Ann E. Bulkley. I am employed by Concentric Energy Advisors, Inc.
("Concentric") as a Senior Vice President. My business address is 293 Boston Post
Road West, Suite 500, Marlborough, Massachusetts, 01752.

- 6 Q. Please describe your educational background, as well as your business and
 7 professional experience.
- 8 Α. I hold a Bachelor's degree in Economics and Finance from Simmons College and 9 a Master's degree in Economics from Boston University. With more than 20 years of experience consulting to the energy industry, I have advised numerous energy 10 11 and utility clients on a wide range of financial and economic issues with primary 12 concentrations in valuation and utility rate matters. Many of these assignments 13 have included the determination of the cost of capital for valuation and ratemaking purposes. I have included my resume and a summary of testimony I have filed in 14 15 other proceedings as Exhibit AEB-1 to this testimony.
- 16 Q. Please describe Concentric's activities in energy and utility engagements.

A. Concentric provides financial and economic advisory services to energy and utility
 clients across North America. Our regulatory, economic, and market analysis
 services include: utility ratemaking and regulatory advisory services; energy
 market assessments; market entry and exit analysis; corporate and business unit

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

strategy development; demand forecasting; resource planning; and energy contract
 negotiations. Our financial advisory activities include: buy and sell-side merger,
 acquisition and divestiture assignments; due diligence and valuation assignments;
 project and corporate finance services; and transaction support services. In
 addition, we provide litigation support services on a wide range of financial and
 economic issues on behalf of clients throughout North America.

7 Q. On whose behalf are you testifying?

8 A. I am submitting this Direct Testimony before the Louisiana Public Service
9 Commission ("Commission" or "LPSC") on behalf of CenterPoint Energy
10 Resources Corp. ("CERC") d/b/a CenterPoint Energy Entex in South Louisiana
11 ("CenterPoint Energy Entex" or the "Company").

12 **Q.** What is the purpose of your Direct Testimony?

A. The purpose of my Direct Testimony is to evaluate the appropriateness of the Company's proposal to maintain its current authorized Return on Equity ("ROE")¹ midpoint of 9.95 percent² and overall rate of return to be used for ratemaking purposes as part of its request to renew its Rate Stabilization Plan Rider RSP-R4 ("RSP"). In doing so, I present evidence regarding the range of ROEs required by equity investors to invest in CenterPoint Energy Entex in today's capital market

¹ Throughout my Direct Testimony, I interchangeably use the terms "ROE" and "cost of equity."

² The Company's current RSP includes an ROE bandwidth of 9.45 percent to 10.45 percent, with a midpoint of 9.95 percent.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

environment, and assess where the Company's current authorized midpoint ROE
 falls within that range. I also address the appropriateness of the Company's
 proposal to maintain its currently authorized hypothetical capital structure, and
 assess the reasonableness of continuing to use the most recent actual long-term and
 short-term debt.

6 Q. Was your testimony, including associated schedules and exhibits, prepared by you
7 or under your control and direction?

8 A. Yes. My analyses and recommendations are supported by the data presented in
9 Exhibits AEB-2 through 13, which were prepared by me or under my direction.

10 Q. Please provide a brief overview of the analyses that led to your ROE
11 recommendation.

As discussed in more detail in Section VI, I applied the Constant Growth form of 12 Α. 13 the Discounted Cash Flow ("DCF") model, the traditional and empirical forms of 14 the Capital Asset Pricing Model ("CAPM"), and the Bond Yield Plus Risk Premium 15 approach. My recommendation also takes into consideration: (1) CenterPoint 16 Energy Entex's small size relative to the proxy group; (2) the Company's capital expenditure requirements; (3) the increased risk associated with the prevalence of 17 18 severe weather in the Company's service territory; (4) the regulatory environment in which the Company operates, including its RSP; and (5) the costs associated with 19 20 issuing common stock (also referred to as "flotation costs"). Finally, I considered 21 the Company's proposed capital structure as compared to the capital structures of

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

the proxy companies.³ While I did not make any specific adjustments to my ROE
estimates for any of these factors, I did take them into consideration in aggregate
when determining where the Company's ROE falls within the range of analytical
results.

5 Q. How is the remainder of your Direct Testimony organized?

6 Α. Section II provides a summary of my analyses and conclusions. Section III reviews 7 the regulatory guidelines pertinent to the development of the cost of capital. 8 Section IV discusses current and projected capital market conditions and the effect 9 of those conditions on CenterPoint Energy Entex's cost of equity in Louisiana. 10 Section V explains my selection of a proxy group of natural gas utilities. Section 11 VI describes my analyses and the analytical basis for the recommendation of the 12 appropriate ROE for CenterPoint Energy Entex. Section VII discusses the specific 13 regulatory and business risks that have a direct bearing on the ROE to be authorized 14 for CenterPoint Energy Entex in this case. Section VIII assesses the proposed 15 capital structure, cost of debt and overall rate of return of CenterPoint Energy 16 Entex. Lastly, Section IX presents my conclusions and recommendations for the 17 market cost of equity and capital structure.

³

The selection and purpose of developing a group of comparable companies will be discussed in detail in Section V of my Direct Testimony.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

1 II. SUMMARY OF ANALYSIS AND CONCLUSIONS

2 Q. Please summarize the key factors considered in your analyses, upon which your

Ļ

- 3 recommendation is based.
- 4 A. In developing my recommended ROE for CenterPoint Energy Entex, I considered
 5 the following:
- The *Hope* and *Bluefield* decisions⁴ that established the standards for determining a fair and reasonable allowed ROE, including consistency of the allowed return with the returns of other businesses having similar risk, adequacy of the return to provide access to capital and support credit quality, and the requirement that the result lead to just and reasonable rates.
- The effect of current and projected capital market conditions on investors'
 return requirements.
- The results of several analytical approaches that provide estimates of the
 Company's cost of equity, including the Constant Growth DCF model, the
 traditional and empirical forms of the CAPM, and the Bond Yield Plus Risk
 Premium approach.
- The Company's regulatory, business, and financial risks relative to the proxy group of comparable companies, and the implications of those risks,
 including: (1) the Company's small size relative to the proxy group; (2) the Company's capital expenditure requirements; (3) incremental risk associated with severe weather; (4) the regulatory environment in which the

⁴ Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944, "Hope"); Bluefield Waterworks & Improvement Co., v. Public Service Commission of West Virginia, 262 U.S. 679 (1923, "Bluefield").

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

- 1 Company operates, including its RSP; and (5) the costs associated with 2 issuing common equity (also referred to as "flotation costs").
- 3 Q. Please explain how you considered those factors.
- 4 A. I first considered the range of results produced by the Constant Growth DCF model,
- 5 the CAPM, Empirical CAPM ("ECAPM"), and Bond Yield Plus Risk Premium 6 analyses. As shown in Figure 1, those ROE estimation models produce a wide 7 range of results. My conclusion as to where within that range of results CenterPoint 8 Energy Entex's cost of equity falls is based on current capital market conditions 9 and the Company's business and financial risk relative to the proxy group. 10 Although the companies in my proxy group are generally comparable to 11 CenterPoint Energy Entex, each company is unique and no two companies have the 12 exact same business and financial risk profiles. Accordingly, I considered the 13 Company's business and financial risk in the aggregate in comparison to that of the 14 Proxy Group companies when assessing the Company's currently authorized 15 midpoint ROE of 9.95 percent within the reasonable range of analytical results to 16 account for any residual differences in risk.
- 17 Q. Please summarize the results of the ROE estimation models that you considered to
 18 establish the range of ROEs for CenterPoint Energy Entex.
- A. Figure 1 summarizes the range of results produced by the DCF model and the
 CAPM, ECAPM, and Risk Premium analyses.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX



⁵ My DCF models generated a mean low, mean, and mean high result. The mean low result is the mean of the proxy group DCF results calculated using the lowest earnings growth rate for each company from Value Line, Yahoo! Finance, or Zacks.

⁶ Source: Regulatory Research Associates, Rate Case History, January 1, 1980 – June 30, 2021.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

risk premium to compensate equity investors for the residual risks of ownership,
 including the risk that they have the lowest claim on the assets and income of the
 Company.

As a result, my ROE recommendation considers the mean and mean high results of
the Constant Growth DCF model. As shown in Figure 1, relying on the range
between the mean and mean high results of the DCF models is supported by the
results of the CAPM, ECAPM, and Bond Yield Plus Risk Premium analyses.

8 Q. What is your recommended ROE for CenterPoint Energy Entex?

9 Considering the analytical results presented in Figure 1, as well as the level of Α. 10 regulatory, business, and financial risk faced by the Company's natural gas 11 operations in Louisiana relative to the proxy group, I believe a range from 9.90 percent to 10.50 percent is reasonable. This recommendation reflects the mean to 12 13 mean high range of the DCF models for the proxy group companies, the range of 14 other analytical approaches and the relative risk of the Company's natural gas 15 operations in Louisiana as compared to the proxy group, and the current capital 16 market conditions. Within that range, the Company's proposal to maintain its 17 midpoint ROE of 9.95 percent is reasonable.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

Q. Please summarize the analysis you conducted in determining that CenterPoint
 Energy Entex's requested capital structure is reasonable and appropriate.

3 Based on the analysis presented in Section VIII of my testimony, I conclude that Α. 4 CenterPoint Energy Entex's proposal to maintain its current hypothetical capital 5 structure consisting of 52 percent common equity and 48 percent total debt is 6 reasonable. To determine if the Company's requested capital structure was 7 reasonable, I reviewed the capital structures of the utility subsidiaries of the proxy 8 companies. As shown in Exhibit AEB-11, the results of that analysis demonstrate 9 that the average equity ratios for the utility operating companies of the proxy group 10 range from 41.92 percent to 60.07 percent, with an average of 52.94 percent. 11 Comparing the Company's proposed hypothetical equity ratio to the proxy group 12 demonstrates that the Company's requested equity ratio is slightly below the 13 average equity ratio for the utility operating subsidiaries of the proxy group 14 companies, and is therefore reasonable. Further, I conclude the Company's proposed equity ratio is reasonable considering that federal tax reform legislation 15 16 has had a negative effect on the cash flows and credit metrics of regulated utilities.

- 17 Q. Please summarize the analysis you conducted in determining that CenterPoint
 18 Energy Entex's requested short-term and long-term cost of debt rates are reasonable
 19 and appropriate.
- A. As will be discussed in more detail in Section VIII, I compared the cost of each
 long-term debt issuance for the Company to the market at the time of issuance. To

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

do so, I compared the current embedded cost of long-term debt to the Baa- and A rated utility bond index yields reported by Moody's Investors Service ("Moody's")
 as an estimate of the market. That analysis indicates that the Company's embedded
 cost of long-term debt is reasonable.

For the proposed cost of short-term debt, I compared the Company's most recent
actual short-term debt cost of 0.26 percent to the yields for 1-year A-rated and BBBrated utility debt as reported by Bloomberg Professional.⁷ Because the Company's
proposed short-term debt rate is below recent yields of A-rated and BBB-rated 1year utility debt, I conclude the Company's short-term debt rate is reasonable.

10III. REGULATORY GUIDELINES

11 Q. Please describe the guiding principles to be used in establishing the cost of capital 12 for a regulated utility.

A. The United States Supreme Court's precedent-setting *Hope* and *Bluefield* cases
established the standards for determining the fairness or reasonableness of a
utility's allowed ROE. Among the standards established by the Court in those cases
are: (1) consistency with other businesses having similar or comparable risks; (2)
adequacy of the return to support credit quality and access to capital; and (3) the

Short-term debt is generally defined as debt obligations with a term of one year or less.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

- principle that the result reached, as opposed to the methodology employed, is the
 controlling factor in arriving at just and reasonable rates.⁸
- Q. Has Louisiana provided similar guidance in establishing the appropriate return on
 common equity?
- 5 A. Yes, it has. In *Central Louisiana Electric Company v. Louisiana Public Service* 6 *Commission*, the Louisiana Supreme Court stated: "In utility rate-making, the 7 primary objective is to allow the company sufficient revenues to meet its operating 8 expenses, provide its shareholders with a reasonable rate of return, and attract new 9 capital"⁹
- 10This guidance is in accordance with the Hope and Bluefield decisions and the11principles I employed to estimate the ROE for the Company, including the principle
- 12 that an allowed rate of return must be sufficient to enable regulated companies like
- 13 CenterPoint Energy Entex to attract capital on reasonable terms.
- Q. Why is it important for a utility to be allowed the opportunity to earn an ROE thatis adequate to attract capital at reasonable terms?
- A. An ROE that is adequate to attract capital at reasonable terms enables the Company
 to continue to provide safe, reliable natural gas service while maintaining its
 financial integrity. To the extent the Company is provided the opportunity to earn

⁸ Hope, 320 U.S. 591 (1944); Bluefield, 262 U.S. 679 (1923).

⁹ Cleco v. Public Service Com'n, 508 So. 2d 1361, 1364 (La. 1987)

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

- its market-based cost of capital, neither customers nor shareholders are
 disadvantaged.
- 3 Q. Is a utility's ability to attract capital affected by the ROEs authorized for other 4 utilities?
- 5 Yes. Utilities compete directly for capital with other investments of similar risk, A. 6 which include other natural gas and electric utilities. Therefore, the ROE awarded 7 to a utility sends an important signal to investors regarding is the level of regulatory 8 support for financial integrity, dividends, growth, and fair compensation for 9 business and financial risk. Simply put, the cost of capital represents an opportunity If higher returns are available for other investments of 10 cost to investors. comparable risk, investors have an incentive to direct their capital to those 11 investments. Thus, an authorized ROE significantly below authorized ROEs for 12 other natural gas and electric utilities can inhibit the Company's ability to attract 13 14 capital for investment in Louisiana.
- Furthermore, because CenterPoint Energy Entex is an indirect subsidiary of CenterPoint Energy, Inc. ("CNP"),¹⁰ it competes with the other CNP entities for discretionary investment capital. In determining how to allocate its finite discretionary capital resources, it would be reasonable to expect CNP to consider the authorized ROE of each of its subsidiaries and operating divisions. As shown

¹⁰ CenterPoint Energy Entex is a division of CenterPoint Energy Resources Corp., which is an indirect wholly owned subsidiary of CNP.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

- in Figure 2 below, CenterPoint Energy Entex's current authorized midpoint ROE
 of 9.95 percent is in the middle of the range of authorized ROEs for CNP's
 regulated utilities, and is generally consistent with the mean and median of the
 current authorized ROEs for CNP affiliates.
- 5

Figure 2: Authorized ROE for CNP Utilities^{11,12}

Company	State	Service Type	Order Date	ROE
CenterPoint Energy Resources	Arkansas	Natural Gas	9/2/2016	9.50%
Indiana Gas Co.	Indiana	Natural Gas	2/13/2008	10.20%
Southern Indiana Gas & Elec Co	Indiana	Electric	4/27/2011	10.40%
Southern Indiana Gas & Elec Co	Indiana	Natural Gas	8/1/2007	10.15%
CenterPoint Energy Resources	Louisiana - Entex	Natural Gas	10/23/15	9.95%
CenterPoint Energy Resources	Louisiana - Entex	Natural Gas	10/23/15	9.95%
CenterPoint Energy Resources	Minnesota	Natural Gas	2/2/2021	N/A
CenterPoint Energy Resources	Mississippi	Natural Gas	9/22/2020	9.29%
Vectren Energy Delivery Ohio	Ohio	Natural Gas	8/28/2019	N/A
CenterPoint Energy Resources	Oklahoma	Natural Gas	7/14/2020	10.00%
CenterPoint Energy Houston	Texas	Electric	3/9/2020	9.40%
CenterPoint Energy Resources	Texas (Beaumont)	Natural Gas	6/16/2020	9.65%
CenterPoint Energy Resources	Texas (South)	Natural Gas	5/22/2018	9.80%
CenterPoint Energy Resources	Texas (Houston)	Natural Gas	5/23/2017	9. <u>60%</u>
CenterPoint Energy Resources	Texas (Coast)	Natural Gas	5/23/2017	9.60%
			Mean	9.81%
			Median	9.80%

6

7 Q. What are your conclusions regarding regulatory guidelines?

8 A. The ratemaking process is premised on the principle that, for investors and

companies to commit the capital needed to provide safe and reliable utility services,

9

10

a utility must have the opportunity to recover the return of, and the market-required

¹¹ Sources: S&P Global Market Intelligence, CenterPoint Energy Inc., 2020 10-K, pages 72-74; CenterPoint Energy, Inc. Regulatory Information, Natural Gas Distribution, March 2021; Company provided data.

¹² The figure represents the current authorized ROEs for CNP's subsidiaries.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

4

return on, its invested capital. Because utility operations are capital-intensive,
 regulatory decisions should enable the utility to attract capital at reasonable terms
 under a variety of economic and financial market conditions; doing so balances the
 long-term interests of the utility and its ratepayers.

5 The financial community carefully monitors the current and expected financial condition of utility companies, and the regulatory framework in which they operate. 6 7 In that respect, the regulatory framework is one of the most important factors in 8 both debt and equity investors' assessments of risk. The Commission's order in 9 this proceeding, therefore, should provide the Company with the opportunity to earn an ROE that is: (1) adequate to attract capital at reasonable terms under a 10 variety of economic and financial market conditions; (2) sufficient to ensure good 11 12 financial management and firm integrity; and (3) commensurate with returns on investments in enterprises with similar risk. To the extent CenterPoint Energy 13 14 Entex is authorized the opportunity to earn its market-based cost of capital, the proper balance between customers' and shareholders' interests is achieved. 15

16 IV. CAPITAL MARKET CONDITIONS

17 Q. Why is it important to analyze capital market conditions?

A. The ROE estimation models I apply rely on market data that are specific to the
 proxy group in the cases of the DCF model and the Beta coefficient in the CAPM,
 or the market risk premium and risk-free rate in the cases of the CAPM and Bond

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

1 Yield Plus Risk Premium analyses. The results of ROE estimation models can be 2 affected by prevailing market conditions at the time the analysis is performed. 3 Because the ROE that is established in a rate proceeding is intended to be forward-4 looking, the practitioner uses current and projected market data, specifically stock 5 prices, dividends, growth rates, and interest rates in the ROE models to estimate the 6 required return for the subject company.

Analysts and regulatory commissions recognize that current market conditions 7 8 affect the results of the ROE estimation models. Accordingly, it is important to 9 consider the effect of these conditions on the ROE estimation models when 10 determining the appropriate range and recommended ROE for a future period. If 11 investors do not expect current market conditions to be sustained in the future, it is possible that the ROE estimation may not provide an accurate estimate of investors' 12 13 required return during that rate period. Therefore, it is very important to consider projected market data to estimate the return for that forward-looking period. 14

Q. What factors affect the cost of equity for regulated utilities in the current and
prospective capital markets?

A. The cost of equity for regulated utility companies is being affected by several
factors in the current and prospective capital markets, including: (1) the dramatic
shifts in market conditions during 2020 and the expectations for 2021, and the effect
of these changes on the assumptions used in the ROE estimation models; and (2)
effects of federal tax reform on utility cash flows. In this section, I discuss each of

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

- these factors and how it affects the models used to estimate the cost of equity for
 regulated utilities.
- 3 A. Economic Recovery and Performance of the Utility Sector
- 4 Q. Do recent economic projections indicate the expectation for a strong economic
 5 recovery in 2021?
- A. Yes. The Federal Open Market Committee ("FOMC") issued its Summary of
 Economic Projections in June 2021, where the FOMC's median projection for GDP
 growth from Q4 2020 to Q4 2021 is 7.0 percent, up from 6.5 percent in the FOMC's
 March 2021 report.¹³ The Congressional Budget Office ("CBO") issued an update
 to its outlook on economic conditions on July 1, 2021. In that report, the CBO
 projected strong GDP growth for 2021 and significant strength in overall economic
 conditions:
- Real GDP growth of 7.4 percent, which is a significant change from the
 negative 2.4 percent growth rate in 2020.
- Inflation indicators at or above the 2.0 percent threshold in 2021 and continuing through 2031.
 - Labor force expected to be restored to pre-pandemic levels in 2022.
- 18

17

• Interest rates on federal borrowing increasing through 2031.¹⁴

¹³ Federal Open Market Committee, Summary of Economic Projections, June 16, 2021, at 2; Federal Open Market Committee, Summary of Economic Projections, March 17, 2021, at 2.

¹⁴ Congressional Budget Office, An Update to the Budget and Economic Outlook 2021 to 2031, July 2021.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

• Docket No. U-XXXXX

J.

1		Further, consumer confidence has been projected to be at a high level, exceeding
2		levels established prior to the pandemic. ¹⁵ Finally, Bloomberg recently forecasted
3		growth of 6.9 percent, which would largely reverse the contraction seen in 2020,
4		the definition of a "V" shaped recovery. Bloomberg also projects inflation to
5		increase in the months ahead. ¹⁶ High economic growth is expected to drive an
6		increase in U.S. bond yields and inflation in 2021, which may result in modest
7		monetary tightening. ¹⁷ U.S. bond yields have already rebounded considerably in
8 ′		the past year, with 30-year Treasury bond yields up 79 basis points between April
9		1, 2020 and June 30, 2021. These trends indicate strong economic recovery over
10		the next year, with robust consumer spending expected.
11	Q.	Please summarize the recent monetary policy of the Federal Reserve.
12	A.	In response to the COVID-19 pandemic, the Federal Reserve has:
13		• decreased the Federal Funds rate twice in March 2020, resulting in a target
14		range of 0.00 percent to 0.25 percent;
15		 increased its holdings of both Treasury and mortgaged-back securities;
16		• started expansive programs to support credit to large employers, in
17		particular the Primary Market Corporate Credit Facility to provide liquidity
18		for new issuances of corporate bonds, and the Secondary Market Corporate
19		Credit Facility to provide liquidity for outstanding corporate debt issuances;
20		and

¹⁵ IPSOS-Forbes Advisor U.S. Consumer Confidence Weekly Tracker, accessed July 1, 2021.

.

¹⁶ Bloomberg, "It's a 'V'- World Growth to Hit 60-Year High, April 13, 2021.

¹⁷ Van Roye, Bjorn and Tom Orlik. "Tantrums, Spillovers and the \$1.9T U.S. Stimulus." Bloomberg Briefs, accessed April 13, 2021.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

1		• supported the flow of credit to consumers and businesses through the Term
2		Asset-Backed Securities Loan Facility.
3		In addition, Congress passed the Coronavirus Aid, Relief, and Economic Security
4		("CARES") Act in March 2020; the Consolidated Appropriations Act, 2021 in
5		December 2020; and the American Rescue Plan Act in March 2021; these pieces
6		of legislation included \$2.2. trillion, \$900 billion and \$1.9 trillion, respectively, in
7		fiscal stimulus aimed at mitigating the economic effects of COVID-19. These
8		expansive monetary and fiscal programs helped to temper the economic effects of
9		the COVID-19 pandemic and continue to support the economy as it recovers from
10		the COVID-19 recession.
11	Q.	Has the Federal Reserve signaled a continuation of its accomodative monetary

- 12 policy?
- 13 A. Yes. On June 16, 2021, the Federal Reserve Chairman stated that:

The Committee seeks to achieve maximum employment and 14 inflation at the rate of 2 percent over the longer run. With 15 inflation having run persistently below this longer-run goal, 16 17 the Committee will aim to achieve inflation moderately above 2 percent for some time so that inflation averages 2 percent 18 19 over time and longer-term inflation expectations remain well 20 anchored at 2 percent. The Committee expects to maintain an accommodative stance of monetary policy until these 21 outcomes are achieved.¹⁸ 22

FOMC Press Release, June 16, 2021; https://www.federalreserve.gov/monetarypolicy/fomc.htm.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

1		The Federal Reserve also indicated that it has kept the federal funds rate near zero
2		and will continue to maintain its sizeable asset purchases of both treasuries and
3		mortgage-backed securities until substantial further progress has been made toward
4		its dual goals of maximum employment and price stability. ¹⁹
5	Q.	Are there indications the Federal Reserve will start to slowly end some of the
6		accommodative policy tools that were used to support the economy during COVID-
7		19?
8	A.	Yes. On June 2, 2021, the Federal Reserve announced that it plans to start selling
9		the corporate bonds and exchange-traded funds ("ETF") that it purchased to support
10		the corporate bond market during the COVID-19 pandemic. ²⁰ The process will be
11		gradual, but the Federal Reserve expects to complete the sale of its corporate bond
12		holdings by the end of 2021. This decision by the Federal Reserve is one of the
13		first steps in the Federal Reserve's process of normalizing monetary policy. It is
14		expected that if the economy continues to improve, the Federal Reserve will begin
15		to discuss reducing the asset purchases of both Treasuries and mortgage-backed
16		securities in either the summer or fall of 2021. ²¹

19

Id.

.

²⁰ Scaggs, Alexandra. "The Federal Reserve Is Going to Sell Its Corporate Bond Portfolio. What It Means." Barrons, 3 June 2021, www.barrons.com/articles/federal-reserve-corporate-bondportfolio-51622679701. See also, Federal Reserve Board of Governors, Press Release, June 2, 2021. Id.

²¹

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

Q. What effect, if any, will the Federal Reserve's accommodative monetary policy
 have on long-term interest rates over the near-term?

3 A. The Federal Reserve has acknowledged that they will keep the federal funds rate near zero for the near-term. The goal of the accommodative monetary policy is to 4 5 achieve the Federal Reserve's dual mandate of maximum employment and stable prices. However, while the current accommodative monetary policy will keep 6 short-term interest rates low, it does not have a direct effect on long-term interest 7 8 rates. Long-term interest rates can increase even though monetary policy is 9 accommodative. In fact, one of the leading indicators used by investors to 10 determine what stage of the business cycle the economy is in is to review the yield 11 curve which shows the difference between long-term and short-term interest rates. 12 A flat or inverted yield curve is when long-term interest rates are equivalent to or 13 less than short-term interest rates and usually occurs prior to a recession. 14 Conversely, a steepening yield curve is when the difference between long-term 15 interest rates and short-term interest rates is increasing and indicates that the 16 economy is entering a period of economic expansion and inflation following a recession.²² 17

²² "What is a yield curve", Fidelity.com. <u>https://www.fidelity.com/learning-center/investment-products/fixed-income-bonds/bond-yield-curve</u>

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

- Q. Have you reviewed the yield curve to determine investors' expectations regarding
 the economy over the near term?
- 3 A. Yes, I have. I reviewed the yield curve, calculated as the difference between the 4 yield on the 10-year Treasury Bond and the yield on the 2-year Treasury Bond from 5 January 2015 through June 2021. I selected the 10-year Treasury Bond yield to 6 represent long-term interest rates and the yield on the 2-year Treasury Bond to 7 represent short-term interest rates. As shown in Figure 3 below, the yield curve has 8 been steepening, with the spread increasing to approximately 120 basis points as of 9 June 30, 2021, which is a level not seen since early 2017. The steepening of the 10 yield curve indicates that investors expect economic growth and inflation to 11 increase in the near-term, and as a result they are rotating out of long-term 12 government bonds to avoid being locked into low interest rates for the long-term. The steep yield curve signals that higher yields are required by investors to invest 13 14 in long-term government bonds.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX



4 Q. What have equity analysts said about the steepening of the yield curve?

5 A. Several equity analysts have noted that the yield curve is steepening and is expected 6 to continue to steepen into 2021, which is an indicator that the economy is entering 7 the early expansion phase of the business cycle. For example, in a recent 8 Bloomberg article, Morgan Stanley indicated that they expected a "V-shaped" 9 economic recovery and therefore advised investors to underweight government

Federal Reserve Bank of St. Louis, 10-Year Treasury Constant Maturity Minus 2-Year Treasury Constant Maturity [T10Y2Y], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/T10Y2Y, June 30, 2021.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

- 1 bonds and overweight equities.²⁴ Similarly, in a Bloomberg article, Goldman Sachs
- 2 noted the following:

As the economic recovery consolidates next year, we expect to see more differentiation across the curve, with policymakers committing to keeping front-end rates low, but higher expectations for real growth and inflation driving long-end rates higher," Goldman strategists including Zach Pandl wrote in the report, released Tuesday.

9 This should be especially true in the U.S. due to the Federal 10 Reserve's new average inflation targeting framework, which 11 commits the central bank to holding off on rate hikes until 12 inflation has reached its target and is on track to overshoot it.²⁵

- 13 More recently, BTG Pactual Asset Management noted the following regarding
- 14 increasing interest rates:

15We're talking about a fair amount of stimulus -- both fiscal16and monetary -- going forward," BTG Pactual Asset17Management's John Fath said, referring to the \$1.9 trillion18pandemic-relief bill and prospects for more, along with the19Federal Reserve's pledge to stay accommodative. "We20potentially could grow a lot faster and inflation could come21into the horizon a lot quicker," which begets higher rates.²⁶

Ossinger, Joanna. "Morgan Stanley Says Go Risk-On and 'Trust the Recovery' in 2021."
 Bloomberg.com, 15 Nov. 2020, www.bloomberg.com/news/articles/2020-11-16/morgan-stanley-says-go-risk-on-and-trust-the-recovery-in-2021.

²⁵ McCormick, Liz. "Goldman Goes All-In for Steeper U.S. Yield Curves as 2021 Theme." Bloomberg.com, 10 Nov. 2020, www.bloomberg.com/news/articles/2020-11-10/goldman-goesall-in-for-steeper-u-s-yield-curves-as-2021-theme.

²⁶ Spratt, Stephen, et al. "Treasury Yields Leap Past Key Level to 1.64%, Highest in a Year." Bloomberg.com, Bloomberg, 12 Mar. 2021, www.bloomberg.com/news/articles/2021-03-12/treasury-yields-surge-to-test-key-level-in-sudden-selling-bout.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

1 Finally, Barron's noted that Citigroup also projected that the yield on the 10-year 2 Treasury Bond is expected to increase in 2021, which prompted Citigroup's 3 recommendation to overweight equities and favor cyclical sectors over defensive 4 sectors, such as utilities.²⁷

- 5 Q. Have equity analysts specifically commented on the performance of the utility 6 sector over the near-term?
- 7 Yes. In a recent article, Barron's conducted its Big Money poll of 152 professional Α. 8 investors regarding the outlook for the next twelve months. The majority of 9 respondents projected the yield on the 10-year Treasury Bond to be between 2.00 percent and 2.50 percent at the end of the next twelve months,²⁸ which is an increase 10 11 from the current 30-day average 10-year Treasury Bond yield as of June 30, 2021 of 1.54 percent.²⁹ Furthermore, the utility sector was selected as the sector that will 12 perform the worst over the next twelve months.³⁰ Therefore, the professional 13 14 investors surveyed by Barron's are projecting that utilities will underperform the 15 broader market in 2021.

²⁷ Keown, Callum. "10-Year Treasury Yields Will Rise Into 2021, Citi Says. This 'Aggressive' Equity Strategy Can Outperform." Barrons.com, 16 Nov. 2020, www.barrons.com/articles/10year-treasury-yields-will-rise-into-2021-citi-says-this-aggressive-equity-strategy-can-outperform-51605543920.

²⁸ Jasinski, Nicholas. This Bull Market Is Far From Over, Pros Say. Where They're Investing Now. Barron's, 26 Apr. 2021, www.barrons.com/articles/stocks-have-more-room-to-rise-says-barronsbig-money-poll-51619222301?mod=past editions.

²⁹ Source Federal Reserve Bank of St. Louis, 10-Year Treasury Constant Maturity [DGS10], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/DGS10, June 30, 2021 Id.

³⁰

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

- Similarly, Fidelity recently recommended underweighting the utility sector and 1 ranked the utility sector last in its relative strength rankings which measures each 2 sectors performance relative to the broader market.³¹ 3 4 Finally, Charles Schwab has classified the utilities sector overall as 5 "Underperform," noting that: The Utilities sector has tended to perform relatively better 6 7 when concerns about slowing economic growth resurface, and 8 to underperform when those worries fade. That's partly because of the sector's traditional defensive nature and steady 9
- 10revenues—people need water, gas and electric services during11all phases of the business cycle. Meanwhile, the low interest12rates that typically come with a weak economy provide cheap13funding for the large capital expenditures required in this14industry.
- 15

16

17

18 19

20

21 22

23

However, while interest rates are low from a historical perspective, they have ramped higher as the economy continues to expand and stimulus is raising inflation expectations. On the flip side, there is the potential for a renewed decline in the economy to push rates even lower, or there could be significant government funding to Utilities as part of clean-energy initiatives that would benefit the sector's profit outlook.³²

³¹ Fidelity, "Q2 2021 sector scorecard: The financials and energy sectors may be areas to watch as inflation returns," May 5, 2021.

³² Charles Schwab, "Schwab Sector Insights: A view on 11 Equity Sectors," May 13, 2021.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

1 **Q**. How has the utility sector performed historically during periods where the yield 2 curve is steepening, and the economy is in the early stage of the business cycle? 3 A. In a recent report, Fidelity noted that the utility sector has historically been one of 4 the worst performing sectors during the early phase of the business cycle with a geometric average return of -10.5 percent.³³ This conclusion is further supported 5 6 by studies conducted by both Goldman Sachs and Deutsche Bank that examined 7 the sensitivity of share prices of different industries to changes in interest rates over 8 the past five years. Both Goldman Sachs and Deutsche Bank found that utilities 9 had one of the strongest negative relationships with bond yields (i.e., increases in bond yields resulted in the decline of utility share prices).³⁴ This is important 10 11 because if the utility sector underperforms over the near term, and prices of utility stocks decline, then the DCF model, which relies on historical averages of share 12 13 prices, is likely to understate the cost of equity for the Company over the near term, or the period that the Company's renewed RSP and resulting rates will be in effect. 14 15 Q. Why do utilities historically underperform in the early stage of the business cycle? 16 Utilities are considered a defensive sector and are therefore less affected by changes Α.

18

17

in the business cycle than other market sectors since consumers need energy during

all phases of the business cycle. Therefore, utilities tend to perform well during

³³ Fidelity Investments, "The Business Cycle Approach to Equity Sector Investing," 2020.

Lee, Justina. "Wall Street Is Rethinking the Treasury Threat to Big Tech Stocks."
 Bloomberg.com, 11 Mar. 2021, www.bloomberg.com/news/articles/2021-03-11/wall-street-isrethinking-the-treasury-threat-to-big-tech-stocks.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

periods of uncertainty where the prospect of slowing economic growth increases.
As Fidelity noted, historically utilities outperform the market in latter and recession
phases of the business cycle.³⁵ This relationship mostly held during the past few
years as the share prices of utilities were bid up to unsustainable levels as investors
responded to economic uncertainty due to the trade war between the U.S. and China
and ultimately the COVID-19 pandemic.

7 Q. What is the effect of high valuations of utility stocks on the DCF model?

8 Α. High valuations have the effect of depressing dividend yields, which results in 9 overall lower estimates of the cost of equity resulting from the DCF model. The 10 relatively low dividend yields demonstrated over the longer historical period imply 11 that the ROE calculated using historical market data in the DCF model may understate the forward-looking cost of equity. Therefore, the DCF model results 12 13 must be interpreted with extreme caution so as not to understate the cost of equity during the period that CenterPoint Energy Entex's renewed RSP and resulting rates 14 15 will be in effect.

16

Fidelity Investments, "The Business Cycle Approach to Equity Sector Investing," 2020.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

- 1 B. Effect of Tax Reform on the ROE and Capital Structure
- Q. Should the effect of tax reform be considered in determining the cost of equity for
 CenterPoint Energy Entex?
- Yes. The credit rating agencies have commented on the adverse effect of the Tax 4 Α. Cuts and Jobs Act ("TCJA") on the cash flows of regulated utilities.³⁶ Specifically. 5 the TCJA has reduced utility revenues due to lower federal income taxes in the 6 revenue requirement, the elimination of bonus depreciation, and required the return 7 of "unprotected" excess accumulated deferred income taxes ("EDIT").³⁷ This 8 9 change in revenue reduced funds from operations metrics across the sector, and 10 absent regulatory mitigation strategies, has led to weaker credit metrics and negative ratings actions for some utilities.³⁸ 11
- 12 Q. What has been the effect of the TCJA on utility financial risk?
- A. The TCJA reduced utilities' financial flexibility through the loss of bonus
 depreciation and the return of EDIT. In 2018 when the TCJA was passed, credit
 rating agencies initially reduced the credit outlook for utilities. Moody's has since
 followed up on that action by downgrading the credit ratings of more than 30

³⁶ Standard & Poor's Ratings, "Industry Top Trends 2019, North America Regulated Utilities", November 8, 2018; FitchRatings, Special Report, What Investors Want to Know, "Tax Reform Impact on the U.S. Utilities, Power & Gas Sector", January 24, 2018.

³⁷ I understand that the amount of EDIT returned to customers by the Company has been significant and reduced rate increases. See Section XIV of LPSC General Order No. 2-7-2019 (R-34754), and letter dated June 14, 2019 from CenterPoint Energy Entex to LPSC Secretary showing the amount of EDIT returned to customers by the Company.

Standard & Poor's Ratings, "Industry Top Trends 2019, North America Regulated Utilities", November 8, 2018; FitchRatings, Special Report, What Investors Want to Know, "Tax Reform Impact on the U.S. Utilities, Power & Gas Sector", January 24, 2018.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

- 1 utilities related in part to the TCJA beginning in June 2018 and continuing into 2 2021.
- 3 Q. Does tax reform continue to present challenges for utilities?
- 4 A. Yes. While the TCJA was passed in 2018, the reforms resulted in a permanent
 5 change in the cash flow metrics of utilities. Credit rating agencies have recognized
 6 this change in metrics and have proposed that increasing the ROE and equity
 7 component of utility capital structures can improve credit metrics.
- 8 Q. Have state regulatory commissions recognized that the TCJA has had an adverse
 9 impact on utility cash flows?
- 10 A. Yes. The Oregon Public Utilities Commission ("Oregon PUC"),³⁹ the Wyoming
- 11 Public Service Commission ("Wyoming PSC"),⁴⁰ and the Utah Public Service
- 12 Commission ("Utah PSC")⁴¹ have acknowledged the negative effect of the TCJA
- 13 on the cash flow of utilities.

³⁹ See In the Matter of Avista Corporation, dba Avista Utilities, Application for Authorization to Issue 3,500,000 Shares of Common Stock, Docket UF 4308, Order No. 19-067 (Feb. 23, 2019); In the Matter of Avista Corporation, dba Avista Utilities, Application for Authorization to Issue and Sell \$600,000,000 of Debt Securities, UF 4313, Order No. 19-249 (July 30, 2019); In the Matter of Portland General Electric Company, Request for Authority to Extend the Maturity of an Existing \$500 Million Revolving Credit Agreement, Docket UF 4272(3), Order No. 19-025 (Jan. 23, 2019).

⁴⁰ In the Matter of Questar Gas Company dba Dominion Energy Wyoming's Application for Approval of Amended Stipulation Previously Approved in Docket No. 30010-150-GA-16, Docket No. 30010-180-GA-18 (Record No. 15138) (Aug. 20, 2019).

⁴¹ Report and Order, Docket No. 19-057-02, Dominion Energy Utah, February 25, 2020, at 6.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

2

Docket No. U-XXXXX

- 1 Further, in a December 2019 order for Georgia Power Company, the Georgia Public
 - Service Commission found it appropriate to authorize a higher equity ratio as a
- 3 means to address the negative impacts of the TCJA:

4 As pointed out by the Company, in April 2018, this 5 Commission adjusted the Company's equity ratio upward 6 from the 51%, which was previously approved in the 2013 7 Rate Case, to 55% as part of the Tax Cuts and Jobs Act 8 settlement between the Company and Commission PIA Staff 9 in Docket No. 36989 ("Tax Reform Settlement"). The equity 10 adjustment approved in the Tax Reform Settlement was 11 implemented to address the negative implications of tax reform, provide support for maintaining the Company's credit 12 13 profile, and allow the Company timely access to capital 14 markets and the ability to borrow at reasonable interest rates. 15 Based on the evidence presented, the Commission finds and concludes that the Settlement Agreement's proposed capital 16 17 structure of 56% common equity level is just and reasonable 18 considering all the evidence presented and is necessary to avoid a credit rating downgrade.⁴² 19

- 20 Q. Have state regulatory commissions considered market events and the utility's
- 21 ability to attract capital in determining the equity return?
- 22 A. Yes. In a recent rate case for Consumers Energy Company, the Michigan Public
- 23 Service Commission ("Michigan PSC") noted that it is important to consider how
- 24 a utility's access to capital could be affected in the near-term as a result of market
- 25 reactions to global events like those that have occurred in the recent past.⁴³
- 26 Specifically, the Michigan PSC noted:

⁴² Georgia Public Service Commission Docket No. 42516, Short Order Adopting Settlement Agreement as Modified, December 17, 2019, at 7-8.

⁴³ Michigan Public Service Commission Order, Cause No. U-20697, Consumers Energy Company, December 17, 2020, at 165.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

1		[i]n setting the ROE at 9.90%, the Commission believes there
2		is an opportunity for the company to earn a fair return during
3		this period of atypical market conditions. This decision also
4		reinforces the belief, as stated in the Commission's March 29
5		order, "that customers do not benefit from a lower ROE if it
6		means the utility has difficulty accessing capital at attractive
7		terms and in a timely manner." These conditions still hold true
8		based on the evidence in the instant case. The fact that other
9		utilities have been able to access capital despite lower ROEs,
10		as argued by many intervenors, is also a relevant
11		consideration. It is also important to consider how extreme
12		market reactions to global events, as have occurred in the
13		recent past, may impact how easily capital will be able to be
14		accessed during the future test period should an unforeseen
15		market shock occur. The Commission will continue to monitor
16		a variety of market factors in future rate cases to gauge
17		whether volatility and uncertainty continue to be prevalent
18		issues that merit more consideration in setting the ROE . ⁴⁴
19		The Michigan PSC references "global events" and the overall effect the events
17		
20		could have on the ability of a utility to access capital. Consistent with the Michigan
21		PSC's views, it is important to consider current market conditions and the impact
22		of those conditions on the access to and cost of capital, and to position utilities to
~~		
23		be able to maintain access in rapidly changing market conditions.
24	Q.	How would potential increases in Federal taxes affect the Company?
25	A.	If Federal taxes are increased, it will be important for those increases to be
26		recognized and addressed with expediency and efficiency so that the utilities have
27		the opportunity to recover those costs on a timely basis, similar to the way the LPSC
28		required utilities, including CenterPoint Energy Entex, to recognize the effects of

44

,

Id., at 43 (emphasis added).

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

÷

Docket No. U-XXXXX

•

the TCJ	A pursuant to Commission General Order No. 11-30-2018 (R-34754) and
General	Order No. 2-7-2019 (R-34754). Failure to timely implement a change in
tax reco	overy would result in greater stress on the Company's financial metrics,
potentia	ally reducing the earned ROE, which could have negative credit
implica	tions.
C. Conclu	sion
Q. What an	e your conclusions regarding the effect of current market conditions on the
cost of	equity for CenterPoint Energy Entex?
A. The imp	portant conclusions regarding capital market conditions are:
•	As markets continue to rebound from the uncertainty and volatility that
	characterized capital markets in 2020 and interest rates continue to
	increase from the market lows in August 2020, it is reasonable that equity
	investors would require a higher return on equity to compensate for the
	additional risk associated with owning common stock. Likewise, if natural
	gas utilities continue to underperform the broader market, as expected by
	analysts, this will indicate additional risk associated with these
	investments.
•	Investors' current expectations regarding the economy highlights the
	importance of using forward-looking inputs in the models used to estimate
	the cost of equity.
•	Credit rating agencies have demonstrated concern about the cash flow
	metrics of utilities, related to the negative effects of both current market
	conditions and the TCJA, which increases investor risk expectations for
	the TCJ General tax reco potentia implica C. Conclu Q. What an cost of A. The imp

	Ms. A	Ann E. Bulkley Direct Testimony
	Cost	of Capital Docket No. U-XXXXX
1 2 3		and capital structure that support the Company's cash flow metrics to enable its ability to attract capital on reasonable terms during the period the Company's renewed RSP and resulting rates will be in effect.
4	V. P	ROXY GROUP SELECTION
-	_	
6	Q.	Why have you used a group of proxy companies to estimate the cost of equity for
7		CenterPoint Energy Entex?
8	А.	In this proceeding, we are focused on estimating the cost of equity for a natural gas
9		utility company that is not itself publicly traded. Because the cost of equity is a
10		market-based concept and because CenterPoint Energy Entex's operations do not
11		make up the entirety of a publicly traded entity, it is necessary to establish a group
12		of companies that is both publicly traded and comparable to the Company in certain
13		fundamental business and financial respects to serve as its "proxy" in the ROE
14		estimation process.
15		Even if CenterPoint Energy Entex was a publicly-traded entity, it is possible that
16		transitory events could bias its market value over a given period. A significant
17		benefit of using a proxy group is that it moderates the effects of unusual events that
18		may be associated with any one company. The proxy companies used in my

analyses all possess a set of operating and risk characteristics that are substantially
comparable (but not identical) to the Company, and thus provide a reasonable basis
to derive and estimate the appropriate ROE for CenterPoint Energy Akrla.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

- 1 **Q.** Please provide a brief profile of CenterPoint Energy Entex.
- 2 CenterPoint Energy Entex is a natural gas distribution company that is an operating A. 3 division of CERC, which is an indirect, wholly owned subsidiary of CNP. 4 CenterPoint Energy Entex distributes natural gas to approximately 117,000 5 residential, commercial, industrial, and transportation customers in twenty parishes 6 in Louisiana, with total retail sales and transportation revenue in 2020 of 7 approximately \$58.2 million made up of 69.3 percent residential, 24.8 percent commercial, 0.01 percent industrial, and 5.8 percent transportation.⁴⁵ 8 As of 9 December 31, 2020, CenterPoint Energy Entex's net utility natural gas plant in Louisiana was approximately \$118.69 million.⁴⁶ CERC's and CNP's long-term 10 11 corporate or issuer ratings are shown in Figure 4 below:
- 12

Figure 4: Long-Term Corporate/Issuer Credit Ratings⁴⁷

Company	S&P Rating (Outlook)	Moody's Rating (Outlook)
CenterPoint Energy Inc ("CNP")	BBB+ (Stable)	Baa2 (Stable)
CenterPoint Energy Resources Corp. ("CERC")	BBB+ (Stable)	A3 (Negative)

⁴⁵ Company provided data.

⁴⁶ Company provided data.

⁴⁷ S&P Global Ratings and Moody's Investor's Service, as of June 30, 2021.

	Ms. A	Ann E. Bulkley Direct Testimony
	Cost	of Capital Docket No. U-XXXXX
1	Q.	How did you select the companies included in your proxy group?
2	A.	I began with the group of 10 companies that Value Line classifies as Natural Gas
3		Distribution Utilities and applied the following screening criteria to select
4		companies that:
5 6		• pay consistent quarterly cash dividends, because companies that do not cannot be analyzed using the Constant Growth DCF model;
7 8		 have investment grade long-term issuer ratings from Standard & Poor's ("S&P") and/or Moody's;
9		• are covered by at least two utility industry analysts;
10 11		• have positive long-term earnings growth forecasts from at least two utility industry equity analysts;
12 13		• derive more than 60.00 percent of their total operating income from regulated operations;
14 15		• derive more than 60.00 percent of regulated operating income from gas distribution operations; and
16 17		• were not parties to a merger or transformative transaction during the analytical periods relied on.
18	Q.	What is the composition of your proxy group?
19	A.	The screening criteria discussed above are shown in Exhibit AEB-3 and resulted in
20		a proxy group consisting of the companies shown in Figure 5 below.

.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

1

Figure	5.	Drown	Crown
rigure	3:	ггоху	Group

Company	Ticker
Atmos Energy Corporation	ATO
New Jersey Resources Corporation	NJR
NiSource Inc.	NI
Northwest Natural Gas Company	NWN
ONE Gas, Inc.	OGS
South Jersey Industries, Inc.	SJI
Southwest Gas Corporation	SWX
Spire, Inc.	SR

Q. Did you adjust the operating income data for any of the companies included in your
proxy group to remove the effects of a one-time financial event?

4 A. Yes, I did. As shown in Exhibit AEB-3, I relied on the three-year average of operating income from 2018 to 2020 for two of my proxy group screening criteria: 5 6 (a) the total operating income from regulated operations; and (b) regulated 7 operating income from gas distribution operations. The operating income data from 8 2018 through 2020 for NiSource Inc. ("NiSource") was affected by a one-time 9 financial event. The event was related to the company's former operating subsidiary, Columbia Gas of Massachusetts. On September 13, 2018, Columbia 10 11 Gas of Massachusetts, experienced a significant event as a result of over pressured lines on its system. The incident resulted in immediate financial ramifications for 12 13 NiSource in 2018 with NiSource reporting operating income for its natural gas

Ms. Ann E. Bulkley

Direct Testimony '

Cost of Capital

Docket No. U-XXXXX

distribution operations segment in 2018 of approximately -\$254.1 million.⁴⁸ In 1 addition, NiSource incurred impairment charges associated with the Massachusetts 2 3 assets in 2019 and 2020. The 2019 impairment charges were incurred because the fair value of the Massachusetts assets was determined to be less than the book 4 value⁴⁹ while NiSource incurred an impairment charge in 2020 due to a loss on the 5 6 sale of the Massachusetts assets to Eversource Energy which closed on October 9, 2020.⁵⁰ The inclusion of the impairment charges and the financial effect of the 7 8 incident in 2018 would have resulted in NiSource deriving less than 60 percent of 9 its regulated operating income from the natural gas distribution operations segment. 10 Q. Why is it appropriate to adjust the operating income data for NiSource to remove 11 the financial effects of the incident associated with its Massachusetts assets? 12 A. The incident in 2018 and the impairment charges in 2019 and 2020 will likely only 13 affect NiSource's financials in 2018, 2019 and 2020 because it sold the 14 Massachusetts assets to Eversource Energy in October of 2020. Therefore, reported 15 operating income from 2018 to 2020 for the company's natural gas distribution 16 operations segment is not indicative of the segment's contributions to earnings in 17 the future. As a result, the company will still derive a majority of its operating 18 income from natural gas distributions operation and thus, investors would view the 19 company as comparable to CenterPoint Energy Entex.

⁴⁸ NiSource, Inc. 2020 10-K, at 114.

⁴⁹ *Id..*, at 71.

⁵⁰ *Id..*, at 60.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

1 Q. How did you adjust the operating income data for NiSource?

2 A. As shown in Exhibit AEB-13, I obtained the total cost of the incident in 2018 and 3 the total value of the impairment charges in 2019 and 2020 and added those values 4 to the total operating income reported for the natural gas distribution operations 5 segment for 2018 through 2020. Additionally, I also adjusted the corporate and 6 other business segment for another impairment charge that NiSource realized in 7 2019 related to the Massachusetts assets. The adjustments resulted in NiSource 8 deriving 63.49 percent to 68.83 percent of its operating income from the natural gas 9 operations segment for the period of 2018 through 2020.

10 Q. Did you calculate NiSource's operating income by business segment prior to 2018? 11 A. Yes, I did. I calculated the percentage of operating income derived from regulated 12 natural gas operations for NiSource from 2010 through 2017. As shown in Exhibit 13 AEB-13, the only year where NiSource's percentage of operating income from 14 natural gas operations was below 60 percent was 2017; however, the percentage in 15 2017 was 59.72 percent, only slightly less than 60 percent. In fact, the average for 16 2010 through 2017 for NiSource is 64.67 percent. Therefore, it is evident from my 17 analysis of 2010 through 2017, and my adjustment to remove the one-time financial 18 event from 2018 through 2020, that NiSource derives a majority its operating 19 income from natural gas operations and is comparable to CenterPoint Energy 20 Entex. Thus, I have included NiSource in my proxy group

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

1 VI. COST OF EQUITY ESTIMATION

2 Q. Please briefly discuss the ROE in the context of the regulated rate of return.

A. The ROE is the cost rate applied to the equity capital in the overall rate of return
("ROR"). The ROR for a regulated utility is the weighted average cost of capital,
in which the cost rates of the individual sources of capital are weighted by their
respective book values. While the costs of debt and preferred stock can be directly
observed, the cost of equity is market-based and, therefore, must be estimated based
on observable market data.

9 **Q.** How is the required ROE determined?

10 The required ROE is estimated by using one or more analytical techniques that rely A. 11 on market-based data to quantify investor expectations regarding required equity 12 returns, adjusted for certain incremental costs and risks. Informed judgment is then 13 applied to determine where the company's cost of equity falls within the range of 14 results. The key consideration in determining the cost of equity is to ensure that the methodologies employed reasonably reflect investors' views of the financial 15 markets in general, as well as the subject company (in the context of the proxy 16 17 group), in particular.

18 Q. What methods did you use to determine CenterPoint Energy Entex's ROE?

A. I considered the results of the Constant Growth DCF model, the CAPM, the
 ECAPM, and the Bond Yield Plus Risk Premium methodology. As discussed in

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

ł

more detail below, a reasonable ROE estimate appropriately considers alternative
 methodologies and the reasonableness of their individual and collective results.

3 A. Importance of Multiple Analytical Approaches

- 4 Q. Why is it important to use more than one analytical approach?
- 5 A. Because the cost of equity is not directly observable, it must be estimated based on 6 both quantitative and qualitative information. When faced with the task of 7 estimating the cost of equity, analysts and investors are inclined to gather and 8 evaluate as much relevant data as reasonably can be analyzed. Several models have 9 been developed to estimate the cost of equity, and I use multiple approaches to 10 estimate the cost of equity. As a practical matter, however, all of the models 11 available for estimating the cost of equity are subject to limiting assumptions or 12 other methodological constraints. Consequently, many well-regarded finance texts 13 recommend using multiple approaches when estimating the cost of equity. For example, Copeland, Koller, and Murrin⁵¹ suggest using the CAPM and Arbitrage 14 Pricing Theory model, while Brigham and Gapenski⁵² recommend the CAPM, 15 16 DCF, and Bond Yield Plus Risk Premium approaches.

⁵¹ Tom Copeland, Tim Koller and Jack Murrin, <u>Valuation: Measuring and Managing the Value of</u> <u>Companies</u>, 3rd Ed. (New York: McKinsey & Company, Inc., 2000), at 214.

⁵² Eugene Brigham, Louis Gapenski, <u>Financial Management: Theory and Practice</u>, 7th Ed. (Orlando: Dryden Press, 1994), at 341.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

- Q. Is it important, based the current market conditions, to use more than one analytical
 approach?
- 3 Yes. Low interest rates and the effects of the investor "flight to quality" can be Α. 4 seen in high utility share valuations, relative to historical levels and relative to the broader market. Higher utility stock valuations produce lower dividend yields and 5 6 result in lower cost of equity estimates from a DCF analysis. Low interest rates 7 also affect the CAPM in two ways: (1) the risk-free rate is lower, and (2) because 8 the market risk premium is a function of interest rates, (i.e., it is the return on the 9 broad stock market less the risk-free interest rate), the risk premium should move 10 higher when interest rates are lower. Therefore, it is important to use multiple 11 analytical approaches to moderate the impact that the current low interest rate 12 environment is having on the ROE estimates for the proxy group and, where 13 possible, consider using projected market data in the models to estimate the return 14 for the forward-looking period.
- Q. Are you aware of any regulatory commissions that have recognized that recent
 conditions in capital markets are causing ROE recommendations based on DCF
 models to be unreasonable?^{*}
- 18 A. Yes, several regulatory commissions have addressed the effect of capital market
 19 conditions on the DCF model, including the Federal Energy Regulatory
 20 Commissions ("FERC"), the Illinois Commerce Commission ("ICC"), and the
 21 Pennsylvania PUC ("PPUC").

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

- 1 Q. Please summarize how the FERC has responded to the effect of market conditions
- 2 on the DCF model.
- A. FERC's review of its ROE estimation methodology began with understanding the
 important role that dividend yields play in the DCF model and how market
 conditions had affected this assumption in the models. In Opinion No. 531, the
- 6 FERC noted:

7 There is 'model risk' associated with the excessive reliance or 8 mechanical application of a model when the surrounding 9 conditions are outside of the normal range. 'Model risk' is the 10 risk that a theoretical model that is used to value real world 11 transactions fails to predict or represent the real phenomenon 12 that is being modeled.⁵³

13 In Opinion No. 531, the FERC also noted that the low interest rates and bond yields 14 that persisted throughout the analytical period that was relied on (study period) had 15 affected the results of the DCF model, and therefore the FERC recognized the need 16 to move away from the midpoint of the DCF analysis. This order began the FERC's 17 review of multiple ROE estimation methodologies that have been discussed in 18 several subsequent opinions. FERC explained its reasons for moving away from 19 sole reliance on the DCF model, recognizing that the DCF model may not 20 singularly reflect how investors make decisions. Further, the FERC recognized, 21 after reviewing the DCF, CAPM, Risk Premium and Expected Earnings 22 methodologies that the DCF results do not capture the results of the other models.

FERC Docket No. EL11-66-001, Opinion No. 531 (June 19, 2014), fn 286.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

K,

Docket No. U-XXXXX

1 Therefore, it was important to review more than one methodology in setting the 2 ROE.⁵⁴

The FERC has considered the use of several combinations of models since its initial determination in Opinion 531 that the DCF could not be used in isolation.⁵⁵ Most recently, in a May 21, 2020 Order on Rehearing of its November 2019 order (Opinion No. 569-A), the FERC reconsidered its reliance on the two-model approach FERC adopted in Opinion No. 569 by reviving the Risk Premium model.⁵⁶ In reiterating the importance of relying on multiple methods, the FERC cited Dr. Morin:

In the absence of any hard evidence as to which method 10 outdoes the other, all relevant evidence should be used and 11 weighted equally, in order to minimize judgmental error, 12 13 measurement error, and conceptual infirmities. A regulator 14 should rely on the results of a variety of methods applied to a 15 variety of comparable groups, and not on one particular 16 method. There is no guarantee that a single DCF result is 17 necessarily the ideal predictor of the stock price and of the cost of equity reflected in that price, just as there is no guarantee 18 19 that a single CAPM or Risk Premium result constitutes the perfect explanation of that stock price.⁵⁷ 20

⁵⁴ Federal Energy Regulatory Commission, Docket No. EL 11-66-001, et al., Order Directing Briefs, issued October 16, 2018, at P 40. [Figure 2 was omitted]

See, e.g., Federal Energy Regulatory Commission, Docket No. EL 11-66-001, et al., Order Directing Briefs, issued October 16, 2018; Federal Energy Regulatory Commission, Docket Nos. EL14-12-003 and EL15-45-000, Order on Briefs, Rehearing, and Initial Decision, 169 FERC ¶ 61,129, issued November 21, 2019; Federal Energy Regulatory Commission, Docket Nos. EL14-12-004 and EL15-45-013, Order on Rehearing, 171 FERC ¶ 61,154, issued May 21, 2020.

⁵⁶ Federal Energy Regulatory Commission, Docket Nos. EL14-12-004 and EL15-45-013, Order on Rehearing, 171 FERC ¶ 61,154, issued May 21, 2020, PP 2, 45.

⁵⁷ *Id.*, at P 43.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

_

- 1 In May 2021, in Opinion No. 575, the FERC upheld its reliance on three model approaches (i.e., DCF, CAPM, and Risk Premium model).58 2 How have the PPUC and the ICC addressed the effect of market conditions on the 3 **Q**. 4 DCF? 5 In a 2012 decision for PPL Electric Utilities, the PPUC noted that it had Α. 6 traditionally relied primarily on the DCF method to estimate the cost of equity for 7 regulated utilities, but the PPUC recognized that market conditions were causing 8 the DCF model to produce results that were much lower than other models such as 9 the CAPM and Bond Yield Plus Risk Premium. The PPUC's Order supported the consideration of multiple ROE estimation methodologies.⁵⁹ 10 11 The PPUC ultimately concluded: As such, where evidence based on the CAPM and Risk 12 Premium] methods suggest that the DCF-only results may 13 understate the utility's current cost of equity capital, we will 14 give consideration to those other methods, to some degree, in 15 determining the appropriate range of reasonableness for our 16 equity return determination.⁶⁰ 17 In a recent ICC case, Docket No. 16-0093, Staff relied on a DCF analysis that 18
- 19 resulted in average returns for their proxy groups of 7.24 percent to 7.51 percent.

Federal Energy Regulatory Commission, Docket No. ER13-1508-001, et al., Order on Briefs and Initial Decision, 175 FERC ¶ 61,136, issued May 20, 2021, P 55.

⁵⁹ Pennsylvania Public Utility Commission, PPL Electric Utilities, R-2012-2290597, meeting held December 5, 2012, at 80 [Clarification added].

⁶⁰ *Id.*, at 81.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

1 The company demonstrated that these results were uncharacteristically low, by 2 comparing the results of Staff's models to recently authorized ROEs for regulated utilities and the return on the S&P 500.⁶¹ In Order No. 16-0093, the ICC agreed 3 4 with the company that Staff's proposed ROE of 8.04 percent was anomalous and 5 recognized that a return that is not competitive will deter investment in Illinois.⁶² 6 In setting the return in that proceeding, the ICC recognized that it was necessary to 7 consider other factors beyond the outputs of the financial models, particularly 8 whether or not the return is sufficient to attract capital, to maintain financial 9 integrity, and to produce returns commensurate with returns for companies of comparable risk, while balancing the interests of customers and shareholders.⁶³ 10

11 Q. What are your conclusions about the results of the DCF and CAPM models?

A. Recent market data that is used as the basis for the assumptions for both models have been affected by market conditions. As a result, relying exclusively on historical assumptions in these models, without considering whether these assumptions are consistent with investors' future expectations, will underestimate the cost of equity that investors would require over the period that the Company's renewed RSP and resulting rates will be in effect. To the extent the proxy companies underperform in the near-term as noted above, dividend yields may

⁶¹ State of Illinois Commerce Commission, Docket No. 16-0093, Illinois-American Water Company Initial Brief, August 31, 2016, at 10.

⁶² Illinois Staff's analysis and recommendation in that proceeding were based on its application of the multi-stage DCF model and the CAPM to a proxy group of water utilities.

⁶³ State of Illinois Commerce Commission Decision, Docket No. 16-0093, Illinois-American Water Company, 2016 WL 7325212 (2016), at 55.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

increase and the current DCF results will underestimate the ROE for CenterPoint
 Energy Entex.

3 The use of recent historical Treasury bond yields in the CAPM also tends to 4 underestimate the projected cost of equity. Recent experience indicates that interest 5 rates will increase over the near-term. The expectation that bond yields will not 6 remain at currently low levels means that the expected cost of equity would be 7 higher than is suggested by the CAPM using historical average yields. The use of 8 projected yields on Treasury bonds results in CAPM estimates that are more 9 reflective of the market conditions that investors expect during the period that the 10 Company's renewed RSP and resulting rates will be in effect.

11

16

B. Constant Growth DCF Model

12 **Q.** Please describe the DCF approach.

A. The DCF approach is based on the theory that a stock's current price represents the
present value of all expected future cash flows. In its most general form, the DCF
model is expressed as follows:

$$P_{0} = \frac{D_{1}}{(1+k)} + \frac{D_{2}}{(1+k)^{2}} + \dots + \frac{D_{\infty}}{(1+k)^{\infty}}$$
[1]

17 Where P_0 represents the current stock price, $D1...D\infty$ are all expected future 18 dividends, and k is the discount rate, or required ROE. Equation [1] is a standard

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

3

Docket No. U-XXXXX

present value calculation that can be simplified and rearranged into the following
 form:

$k = \frac{D_0(1+g)}{1+g} + \sigma$	
$R = \frac{P_0}{P_0}$	[2]

Equation [2] is often referred to as the Constant Growth DCF model in which the first term is the expected dividend yield and the second term is the expected longterm growth rate.

7 Q. What assumptions are required for the Constant Growth DCF model?

A. The Constant Growth DCF model requires the following four assumptions: (1) a
constant growth rate for earnings and dividends; (2) a stable dividend payout ratio;
(3) a constant price-to-earnings ratio; and (4) a discount rate greater than the
expected growth rate. To the extent that any of these assumptions are violated,
considered judgment and/or specific adjustments should be applied to the results.

- Q. What market data did you use to calculate the dividend yield in your ConstantGrowth DCF model?
- A. The dividend yield in my Constant Growth DCF model is based on the proxy
 companies' current annualized dividend and average closing stock prices over the
 30-, 90-, and 180-trading days ended June 30, 2021.

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

1 Q. Why did you use 30-, 90-, and 180-day averaging periods?

2 Α. In my Constant Growth DCF model, I use an average of recent trading days to 3 calculate the term P_{θ} in the DCF model to ensure that the ROE is not skewed by 4 anomalous events that may affect stock prices on any given trading day. The 5 averaging period should also be reasonably representative of expected capital 6 market conditions over the long-term. However, the averaging periods that I use 7 rely on historical data that may not be consistent with the forward-looking market 8 expectations. Therefore, the results of my Constant Growth DCF model using 9 historical data may underestimate the forward-looking cost of equity. As a result, 10 I place more weight on the mean to mean high results produced by my Constant 11 Growth DCF model.

12 Q. Did you make any adjustments to the dividend yield to account for periodic growth13 in dividends?

14 Yes, I did. Because utility companies tend to increase their quarterly dividends at A. different times throughout the year, it is reasonable to assume that dividend 15 16 increases will be evenly distributed over calendar quarters. Given that assumption, 17 it is reasonable to apply one-half of the expected annual dividend growth rate for 18 purposes of calculating the expected dividend yield component of the DCF model. 19 This adjustment ensures that the expected first-year dividend yield is, on average, 20 representative of the coming twelve-month period, and does not overstate the 21 aggregated dividends to be paid during that time.

ł

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

- Q. Why is it important to select appropriate measures of long-term growth in applying
 the DCF model?
- 3 Α. In its Constant Growth form, the DCF model (*i.e.*, Equation [2]) assumes a single 4 growth estimate in perpetuity. To reduce the long-term growth rate to a single measure, one must assume that the payout ratio remains constant and that earnings 5 6 per share, dividends per share and book value per share all grow at the same 7 constant rate. Over the long run, however, dividend growth can only be sustained 8 by earnings growth. Therefore, it is important to incorporate a variety of sources 9 of long-term earnings growth rate projections into the Constant Growth DCF 10 model.
- 11 Q. Which sources of long-term earnings growth rates did you use?

A. My Constant Growth DCF model incorporates three sources of long-term earnings
 growth rate projections: (1) Zacks Investment Research; (2) Thomson First Call
 (provided by Yahoo!Finance); and (3) Value Line Investment Survey.

15

C. Discounted Cash Flow Model Results

16 Q. How did you calculate the range of results for the Constant Growth DCF model?

A. I calculated the low result for my DCF models using the minimum growth rate (*i.e.*,
the lowest of the First Call, Zacks, and Value Line earnings growth rates) for each
of the proxy group companies. Thus, the low result reflects the minimum DCF
result for the proxy group. I used a similar approach to calculate the high results,

Ms. Ann E. Bulkley

Direct Testimony

Cost of Capital

Docket No. U-XXXXX

- using the highest growth rate for each proxy group company. The mean results
 were calculated using the average growth rates from all sources.
- 3 Q. Have you excluded any of the DCF results for individual companies in your proxy
 4 group?
- 5 A. Yes, I have. It is appropriate to exclude Constant Growth DCF results below a 6 specified threshold at which equity investors would consider such returns to provide 7 an insufficient return increment above long-term debt costs. The average credit 8 rating for the companies in my proxy group is BBB+/A3. The average yield on 9 Moody's A-rated utility bonds for the 30 trading days ending June 30, 2021, was 3.20 percent.⁶⁴ As shown in Exhibit AEB-4, I have eliminated Constant Growth 10 11 DCF results lower than 7.00 percent because such returns would provide equity 12 investors a risk premium only 380 basis points above A-rated utility bonds. While 13 I believe it is appropropriate to consider outliers, as a practical matter, only the low 14 DCF result for New Jersey Resources, Inc. was excluded from my analysis. There 15 were no observations that were excluded from the mean and mean high DCF 16 results.
- 17 **Q.** What were the results of your DCF analyses?
- A. Figure summarizes the results of my DCF analyses. As shown in Figure , the mean
 DCF results range from 9.73 percent to 9.96 percent, and the mean high results are

Source: Bloomberg Professional.