–BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH–

IN THE MATTER OF APPLICATION OF DOMINION ENERGY UTAH TO INCREASE DISTRIBUTION RATES AND CHARGES AND MAKE TARIFF MODIFICATIONS	)))))))	**DOCKET NO. 22-057-03** **Exhibit No. DPU 2.0 SR** **Phase I Surrebuttal**

FOR THE DIVISION OF PUBLIC UTILITIES
DEPARTMENT OF COMMERCE
STATE OF UTAH

Surrebuttal Testimony of

Casey J. Coleman

October 13, 2022

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INTRODUCTION

Q. PLEASE STATE YOUR NAME, EMPLOYER AND TITLE, AND BUSINESS ADDRESS.

A. My name is Casey J. Coleman. I am employed as a Utility Technical Consultant by the Division of Public Utilities (DPU or Division) for the State of Utah. My business address is 160 East 300 South Salt Lake City, UT 84114.

Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

A. I am testifying on the Division's behalf.

Q. ARE YOU THE SAME CASEY J. COLEMAN WHO FILED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. I respond to the rebuttal testimony and calculations provided by Ms. Jennifer E. Nelson and Mr. Kelly B. Mendenhall for Dominion Energy Utah (DEU) regarding cost of equity and the fair rate of return.

Silence on any topic or criticism raised by DEU in its rebuttal testimony should not be construed to mean agreement with its comments or criticisms.

Q. DO YOU HAVE ANY GENERAL COMMENTS CONCERNING THE ANALYSIS YOU PERFORMED IN THIS PROCEEDING?

A. Yes. I stand by the analysis and recommendations that I made on behalf of the Division in my direct testimony. My analysis is consistent in the application of the discounted cash flow (DCF) model, Capital Asset Pricing Model (CAPM), and risk premium models. Furthermore, a reduction in the authorized rate of return from the current level of 9.50 percent to 9.30 percent is reasonable and provides a reasonable rate of return.

HOPE AND *BLUEFIELD* STANDARD OF UTILITY REGULATION

Q. WILL YOU DISCUSS THE *HOPE* AND *BLUEFIELD* STANDARD OF UTILITY REGULATION AND HOW IT IMPACTS THIS RATE CASE?

A. Yes. Much of Ms. Nelson's rebuttal testimony deals with standards set by the *Hope* and *Bluefield cases.*[1] A few references to her direct testimony are helpful to give context to her rebuttal testimony. Ms. Nelson discussed the *Hope* and *Bluefield* cases and summarizes them as follows:

> [T]he Supreme Court has recognized that the fair rate of return on equity should be: (1) comparable to returns investors expect to earn on other investments of similar risk (the "comparable risk" standard); (2) sufficient to assure confidence in the company's financial integrity (the "financial integrity" standard); and (3) adequate to maintain and support the company's credit and to attract capital (the "capital attraction" standard). Importantly, a fair and reasonable return satisfies all three of these standards.[2]

She continued to explain what the Public Service Commission of Utah (Commission) should include in its order. Her testimony, which is largely based on the *Hope* and *Bluefield* decisions, stated:

> The outcome of the Commission's order in this case, therefore, should provide DEU with the opportunity to earn an ROE that is: (1) adequate to attract capital at reasonable terms; (2) sufficient to ensure its financial integrity; and (3) commensurate with returns on investments in enterprises having corresponding risks.[3]

Another important outcome of the *Hope* case was the fact the case affirmed the three primary standards of the *Bluefield* case (i.e., comparable earnings, financial integrity, and capital attraction) as discussed by Ms. Nelson above, as well as the public interest standard of the *Natural Gas Pipeline* case. The *Hope* case also

[1] Dominion Energy Utah, Docket No. 22-057-03, September 21, 2022, Rebuttal Testimony of Ms. Jennifer E. Nelson lines 68—69.
[2] Dominion Energy Utah, Docket No. 22-057-03, May 2, 2022, Direct Testimony of Ms. Jennifer E. Nelson lines 191—197.
[3] *Ibid* 230—234.

established the "end result" doctrine—how the rate of return and rate base is determined are not as important as long as the end result is reasonable.[4]

The Society of Utility and Regulatory Financial Analysts (SURFA) has opined on the end result doctrine as established by the watershed *Hope* decision as follows:

> [T]he "end result" doctrine of the *Hope* case suggests that the regulatory methods utilized by a Commission are immaterial as long as the end result is reasonable to ratepayers and investors. The end result doctrine is reminiscent of the philosophy of economic positivism, which states that the value of a model or theory should not be assessed by the severity or realism of its assumptions, but rather by its ability to explain or predict economic phenomena.[5]

In the current regulatory environment, when discussing the cost of capital and specifically the fair rate of return for utility investors, a driving factor in decisions is whether the end result is reasonable to ratepayers and investors.

Q. IN HER REBUTTAL TESTIMONY MS. NELSON, STATES THAT THE ROE RECOMMENDATIONS FROM OPPOSING WITNESSES DO NOT SATISFY THE COMPARABLE RISK STANDARD IN THE *HOPE* AND *BLUEFIELD* CASES. WILL YOU DISCUSS THIS CLAIM?

A. Yes. Ms. Nelson argues that because the Opposing Witnesses recommended a rate reduction their recommendations do not meet the comparable risk, financial integrity, and capital attraction standard of utility regulation.[6] The basis of her argument is on indicators she suggests are raising the costs of capital and more specifically the cost of equity.

Ms. Nelson argues that the "Opposing Witnesses' ROE and capital structure recommendations are particularly unreasonable when viewed in the context of the

[4] Society of Utility and Regulatory Financial Analysts, David C. Parcell, *The Cost of Capital—A Practioners' Guide*, 2020 Edition, page 30.
[5] *Ibid.* page 35.
[6] Dominion Energy Utah, Docket No. 22-057-03, September 21, 2022, Rebuttal Testimony of Ms. Jennifer E. Nelson lines 66—71.

many market-based indicators of increasing capital costs and returns currently available to other natural gas utilities."[7]

Finally, Ms. Nelson claims that:

> [I]f adopted, the Opposing Witnesses' recommendations would be viewed as a departure from the Commission's practices, increasing the Company's regulatory and financial risk and diminishing DEU's ability to compete for capital. In the end, it would likely have the counterproductive effect of increasing the Company's overall cost of capital, ultimately to the detriment of customers.[8]

As I will illustrate throughout my testimony, these claims by Ms. Nelson are inaccurate. Supporting an authorized rate of return decrease for DEU does not deviate from the standards established by *Hope* and *Bluefield,* is not significantly different than returns recommended by other utility commissions, and does not depart from past Commission practices.

COMMISSION PRACTICES IN PAST RATE PROCEEDINGS

Q. LET'S START WITH YOUR STATEMENT THAT A RATE DECREASE IS NOT A DEPARTURE FROM PAST COMMISSION PRACTICES. PLEASE EXPLAIN YOUR ANALYSIS AND CONCLUSION.

A. DEU filed a rate case[9] in 2019 requesting an increase in rates and revenues. Many factors were considered by the Commission and ultimately a rate decrease of 30 basis points was ordered for DEU. This reduced the cost of equity to its current level of 9.5 percent.

In its Order, the Commission discussed its "starting point for this evaluation is our most recently approved ROE for DEU."[10] The Commission continued its evaluation by "considering the extent to which financial conditions have changed since that

[7] *Ibid* lines 70—72.
[8] *Ibid* lines 86—91.
[9] Utah Public Service Commission, Report and Order Docket No. 19-057-02, February 25, 2020, page 9.
[10] *Ibid* page 6.

decision, and the impacts those changed conditions should have on DEU's authorized ROE."[11]

In that Order the Commission recognized that some factors and conditions would positively impact the authorized ROE, and some would negatively impact the ROE. This point is illustrated by the following comment made by the Commission:

> Issues that can be viewed as 'credit negative' for DEU, potentially leading to an increase in its authorized ROE, include federal tax reform enacted in late 2017 and the Federal Reserve's cessation of injecting capital into the market. Conversely, declining U.S. Treasury rates since February 2014 could indicate a need to reduce DEU's authorized ROE. DEU's 191 account recovery mechanism, infrastructure rate adjustment mechanism, and Integrity Management Deferred Account all existed prior to 2014, and continue to reduce DEU's financial risk.[12]

From these statements, it is obvious that the Commission weighed current market conditions, analyzed whether these conditions would be either negative or positive for DEU's ROE, and ultimately decided to lower DEU's ROE. The Commission simply stated, "[a]s we consider the totality of these high-level issues, we find that a reduction in DEU's authorized ROE is appropriate"[13]

To suggest that a rate reduction is a departure from past Commission procedures is blatantly false. The Commission has shown that as market conditions warrant, it will decrease or an increase a utility's ROE.

The Commission is required to establish a fair rate of return for DEU according to market conditions and the risk DEU's investors face in comparison to other utilities with comparable risk. Both a fair rate of return and comparable risks to DEU will be discussed further in my testimony.

[11] *Ibid* page 6.
[12] *Ibid* page 6.
[13] *Ibid* page 7.

FAIR RATE OF RETURN

Q. WHAT FACTORS SHOULD THE COMMISSION CONSIDER IN SETTING A FAIR RATE OF RETURN?

A. Throughout Ms. Nelson's rebuttal testimony she discusses the factors of utility regulation. Specifically in rebuttal testimony she outlines when discussing risk and investor's expectations "the more important task for the Commission is to determine whether the 'end result' is just and reasonable and meets the *Hope* and *Bluefield* comparable risk, capital attraction, and financial integrity standard in the current market environment."[14] The end result of any ROE determination should be on fair and reasonable rats and whether those rates are setting a fair rate of return.

In my direct testimony I explain why the DPU recommends the 9.30 percent ROE and why this rate is just and reasonable and meets the comparable risk, capital attraction, and financial integrity standards of *Hope* and *Bluefield*.[15] My testimony illustrates that when setting allowed rates of return, utility commissions have an upper and lower threshold for rates. My ROE recommendation follows Dr. James C. Bonbright in that calculated rates should act as a minimum cost when determining the fair rate of return.[16] Dr. Bonbright is even more direct in his conviction when he writes when "calculating the cost of equity for any given company the only such cost that can be determined with confidence is a *minimum cost.*"[17]

According to Dr. Bonbright, the minimum cost or floor for a regulated utility is the cost of equity. Cost of equity is a starting point for regulatory commissions to set rates and then adjustments are made according to policy considerations. An allowed

[14] Dominion Energy Utah, Docket No. 22-057-03, September 21, 2022, Rebuttal Testimony of Ms. Jennifer E. Nelson 679—681.
[15] Division of Public Utilities, Docket No. 22-057-03, August 26, 2022, Direct Testimony Mr. Casey J. Coleman pages 66—67.
[16] James C. Bonbright, *Principles of Public Utility Rates* (New York: Columbia University Press, 1961), republished on the web (July 2005) Page 255: http://www.terry.uga.edu/bonbright/publications
[17] James C. Bonbright, *Principles of Public Utility Rates* (New York: Columbia University Press, 1961), republished on the web (July 2005) Page 255: http://www.terry.uga.edu/bonbright/publications

rate of return may include some component of the cost of equity in addition to a rate to compensate for other policy considerations. An allowed rate of return should capture all elements necessary for just and reasonable rates for a regulated utility.

In DPU Exhibit 2.7 SR YTD ROE, the Division updated the calculated regulated natural gas utility average ROE for 2022 at 9.42 percent. Following Dr. Bonbright's theory, an average of 9.42 percent allowed ROE suggests the cost of equity was below 9.42 percent. When setting the just and reasonable rate for each utility, presumably, the commissions started with some calculated cost of equity. The cost of equity would be adjusted according to the appropriate risks and financial constraints specific to that company that each commission felt "best represented" the allowed rate of return.

ALLOWED RATE OF RETURN OF COMPARABLE COMPANIES

Q. CAN YOU ILLUSTRATE HOW MS. NELSON AND THE DPU DIFFER IN THE CURRENT EVALUATION OF ALLOWED RATE OF RETURN?

A. Yes. I reviewed the testimony filed by Ms. Nelson dealing with the allowed rate of return[18] and noticed that we have a significantly different opinion on the current market and the allowed rate of return environment of regulated utilities. Ms. Nelson uses authorized ROEs for natural gas utilities from 2017-2022 to illustrate that there has been no trend in authorized ROE.[19] The Commission should put little weight on this argument because Ms. Nelson is looking at each individual case over the past five years without showing what the average for each year has been. Additionally, the period used is short and obscures the real trend.

My direct testimony clearly illustrates that the average allowed rate of return, as reported by Regulatory Research Associates (RRA), has trended downward and there is a distinct trend. It is appropriate in this comparison to use an average because it will smooth out any anomalies that may only be specific to a utility. The

[18] Dominion Energy Utah, Docket No. 22-057-03, September 21, 2022, Rebuttal Testimony of Ms. Jennifer E. Nelson lines 150—275.
[19] *Ibid.* lines 149—177.

average period must be chosen with care. Ms. Nelson claims the New York Commission routinely sets rates lower than the average. [20] Ms. Nelson's argument illustrates exactly why using an average is best.

In rebuttal testimony Ms. Nelson' Figure 2 plots all the companies' allowed rates of return, to argue there has been no trend in the last five years.[21] For the sake of discussion,[22] let's assume that the data of Figure 2 is appropriate to use. As stated above, Ms. Nelson includes all the published results from state commissions over the last five years, but not an average.

Nothing in her presentation discusses the average or what it has been over the last five years. There is no discussion as to why five years is the appropriate measure of time to evaluate. As stated in my direct testimony, the trend in the **average** rate of return has been downward for years. As illustrated in my direct testimony and calculated by RRA the year-to-date average as of June 30, 2022 was 9.33 percent. This 9.33 percent average follows that downward trend.[23]

To argue otherwise misses the mark and obscures the simple fact that allowed rates of return have been trending down for a number of years. The DPU is not surprised that there is a dispersion of rates over the last five years as shown in Ms. Nelson's Figure 2. The dispersion fits the common belief that commissions throughout the country are evaluating each of its companies and setting allowed rates of return on the specific risks and economic factors of each regulated utility. And each point represents a snapshot in time of all the factors relevant to that utility.

Q. CAN YOU EXPAND ON MS. NELSON'S RATES OF RETURN ARGUMENTS AND WHY THEY ARE INCORRECT?

[20] *Ibid* lines 185—188.
[21] *Ibid.* line 167.
[22] The DPU critiques Ms. Nelson's Figure 2 later in this testimony.
[23] Division of Public Utilities, Docket No. 22-057-03, August 26, 2022, Direct Testimony Mr. Casey J. Coleman line 161.

A. Yes. In lines 181 to 185 of her rebuttal testimony, Ms. Nelson's argues how the sample size when calculating the average rates of return for 2022 is small. Ms. Nelson then points out how "between June 30, 2022, and August 31, 2022, there had been seven more ROE determinations"[24] which averaged 9.55 percent. This whole line of reasoning is faulty. First, Ms. Nelson criticized a small sample size for the first half of the year in 2022, yet she uses a "small" sample size of seven ROE determinations in just 60 days. Additionally, she discusses how the seven ROE determinations average 9.55 percent. Ms. Nelson does not calculate a year-to-date calculation, instead she uses two months of the year to suggest the average rate of return is going higher.

The DPU has calculated the current year-to-date average rate of return as of September 30, 2022, which is illustrated in DPU Exhibit 2.07 SR YTD ROE. The updated average rate of return over this period is 9.42 percent. Ms. Nelson's argument again is an attempt to distract the Commission and deflect the argument. Over several years, the average rate of return has had a downward trend.[25] As included in Ms. Nelson's testimony, seven results in one quarter have not negated that trend based on any evidence the DPU has reviewed.

Q. CAN YOU DISCUSS IN FURTHER DETAIL FIGURE 2 IN MS. NELSON'S REBUTTAL TESTIMONY AND THE CONFUSION ITS PRODUCED?

A. Yes. DEU and its witnesses' arguments are contradictory. While Mr. Mendenhall argues a settled ROE number should not be used, Ms. Nelson includes dozens of them in her analysis.

In Mr. Mendenhall's rebuttal testimony, lines 220–240, he discusses the Wyoming settlement and argues that the Settlement Stipulation "by its very express terms, makes clear that it *does not* constitute an admission contrary to Ms. Nelson's testimony, and that it *may not* be used to resolve any issue in any other proceeding

[24] Dominion Energy Utah, Docket No. 22-057-03, September 21, 2022, Rebuttal Testimony of Ms. Jennifer E. Nelson 185—188.
[25] Division of Public Utilities, Docket No. 22-057-03, August 26, 2022, Direct Testimony Mr. Casey J. Coleman line 161.

(including this one). Mr. Coleman's attempt to utilize it in a way contrary to express terms is inappropriate and should be disregarded."[26]

To the Contrary, Wyoming's ROE from that settlement is published in a variety of places, investors will use 9.35 percent to determine the opportunity cost of investing capital in Dominion Energy depending on the specific risks and other economic factors applicable to the utility. The agreed-upon ROE of 9.35 percent is one of many economic factors that investors will consider.

Second, that the settled ROE may be counteracted by a higher equity percentage, or some other metric is, of course, relevant and should be considered. All of the terms and conditions of a settlement are relevant at arriving at just and reasonable rates, regardless of whether there's any legal effect in Wyoming of them arising in a settlement stipulation. Surely DEU considered the effect of these public numbers on the investing public in agreeing to the settlement's terms. To not do so would be imprudent.

Third, the DPU does not argue a negotiated element of the Wyoming settlement should apply to DEU in this case because DEU agreed to the rate. Instead, the ROE of 9.35 will be used by the investing community and, therefore, is a relevant data point when analyzing DEU's ROE that the Commission should consider. The capital structure agreed to in Wyoming is another data point. The Commission is well-equipped to balance those factors.

Fourth, Ms. Nelson throughout her testimony, uses data that includes settled ROEs. Figure 2 is a great example. In the chart, Ms. Nelson uses 184 data points. What she does not show in her exhibit is how many of those are fully litigated or settled cases. DPU Exhibit 2.06 SR Settled ROE shows the same 184 data points used by Ms. Nelson but shows a major portion of the ROEs used by Ms. Nelson resulted from negotiated settlements.[27] Exhibit DPU SR 2.06 Settled ROE shows that 126 cases

[26] Dominion Energy Utah, Docket No. 22-057-03, September 21, 2022, Rebuttal Testimony Mr. Kelly B. Mendenhall, lines 220—240.
[27] Division of Public Utilities, Exhibit 2.06 SR Settled ROE.

out of 184 resulted from negotiated settlement stipulations. Would Mr. Mendenhall exclude what Ms. Nelson includes?

Finally, Mr. Mendenhall's line of reasoning, that settled cases should not be considered by the Commission, adds another level of complexity if generally accepted. The complexity surfaces when looking at any analysis done by other parties, (for example the trend of average rates of return as calculated by RRA, which was used by the DPU in its direct testimony). The data would be worthless if the Commission was unable to consider settled cases and the rates of return from those cases. If parties were to accept Mr. Mendenhall's argument, the Commission would need to determine if the calculation done by any outside party included any settled ROE cases. This would be practically impossible to determine and would render any outside information as meaningless.

Q. HAVE YOU ANY FURTHER COMMENTS ON DEU'S INCONSISTENCY?

A. Yes. As a final note on this topic, if the Commission were to adopt Mr. Mendenhall's observation about excluding settled ROEs and how the Commission should use that type of information, Ms. Nelson's calculated percentile ranking[28] is incorrect because her calculations include settled cases.

Q. MS. NELSON SUGGESTS THE DPU'S RECOMMENDATION OF 9.30 PERCENT IS LARGELY BASED ON THE AVERAGE RATE OF RETURN OF OTHER REGULATED UTILITIES. CAN YOU EXPLAIN WHY THIS STATEMENT IS FALSE?

A. Yes. Again, when discussing the average rate of return and the DPU's recommendation, Ms. Nelson tries to suggest the DPU's recommended ROE of 9.30 percent is primarily based on the average rate of return of other utilities.[29] It is apparent Ms. Nelson did not understand the DPU's recommendation, I will briefly discuss this point again. Generally, the average rate of return of other utilities is

[28] Dominion Energy Utah, Docket No. 22-057-03, September 21, 2022, Rebuttal Testimony Ms. Nelson lines 216—219.
[29] *Ibid.* lines 178—180 and lines 604—613.

another data point to consider when setting the ROE of DEU. It would be much simpler and easier if the ROE of the utility was the average of a sample of awarded rates of return, then parties could just look to the average rate of return to determine the appropriate ROE. Unfortunately, utility ratemaking does not support this simplicity.

Because the regulatory reality is complex and varied, the DPU uses several factors. Among these are the analysis suggested by Dr. Bonbright discussed earlier in my testimony. There is a framework of financial models used to determine the cost of capital for a utility. With that framework and seasoned judgment, the cost of capital will be adjusted for other factors, i.e., the average rate of return of other utilities along with several other considerations and inputs. The DPU's recommended ROE of 9.30 percent takes numerous financial models, the current market conditions, the specific risks of DEU, and recommends a fair and reasonable rate for the utility and ratepayers. To suggest the DPU did not use the results from its financial models when recommending the 9.30 percent cost of equity is incorrect.[30]

Finally, Ms. Nelson seems to misunderstand what the DPU is illustrating with its use of the average rate of return. When parties know the average rate of return for utilities, this number gives guidance to what the appropriate or reasonable range of ROE would be for regulated utilities. In my direct testimony,[31] the appropriate range of ROE for a natural gas utility was within 8.93 percent to 9.73 percent. The appropriate ROE for DEU depends on specific risk factors and the economic conditions of the company. While there is an element of circularity in these types of analyses of other companies' ROE, this exercise helps identify the costs of companies of roughly comparable risk by using known allowed returns on equity as a measure of the range of reasonableness. From there, regulators must address more specific risks.

[30] *Ibid.* lines 178—180.
[31] Division of Public Utilities, Docket No. 22-057-03, August 26, 2022, Direct Testimony Mr. Casey J. Coleman line 67.

RISK ANALYSIS

Q. WHAT ROLE DOES RISK PLAY IN AN ROE ANALYSIS?

A. When discussing risk and investor's expectations, as discussed before, Ms. Nelson stated "the more important task for the Commission is to determine whether the 'end result' is just and reasonable and meets the *Hope* and *Bluefield* comparable risk, capital attraction, and financial integrity standard in the current market environment."[32] Ms. Nelson also discusses investor expectations when looking at utility investments. She states "in exchange for the obligation to serve, equity investors expect utilities to have a reasonable opportunity to earn a fair return on prudent investments"[33]

When determining the cost of capital and the appropriate return on equity for a utility, parties and the Commission are attempting to quantify the risk investors are taking. The concept of setting the appropriate return on risk is addressed in the *Hope* and *Bluefield* decisions, specifically the importance of attracting and compensating investors according to the opportunity cost principle. In a cost of capital manual published by SURFA, the author, Mr. Parcell explained this concept as follows:

> The established legal standards are consistent with the opportunity cost principle. The two Supreme Court cases most frequently cited (*Bluefield* and *Hope)* hold that: the return to the equity owners be sufficient to maintain the credit of the enterprise and confidence in its financial integrity; to permit the enterprise to attract required capital on reasonable terms; and to provide the enterprise and its investors with an earnings opportunity commensurate with the returns available on investments in other enterprises having corresponding risks.
>
> These three interrelated criteria constitute a succinct statement of the opportunity cost principle. An expected return on equity to that which can be realized on alternative investments of corresponding risk will, in turn, be sufficient to assure confidence in the financial integrity of the enterprise, to

[32] Dominion Energy Utah, Docket No. 22-057-03, September 21, 2022, Rebuttal Testimony of Ms. Jennifer E. Nelson lines 679—681.
[33] *Ibid.* lines 452—454.

> maintain its credit, and to permit it to attract new capital on reasonable terms.[34]

Essentially, the investor is determining the specific opportunity cost of investing in any number of investment choices. As Dr. Roger A. Morin professor of finance and author of *New Regulatory Finance* explained,

> The concept of cost of capital is firmly anchored in the opportunity cost notion of economics. The cost of a specific source of capital is basically determined by the risk of that investment in light of alternate opportunities and equals the investor's current opportunity cost of investing in the securities of that utility. A rational investor is maximizing the performance of his or her portfolio only if returns expected on investments of comparable risks are the same. If not, the investor will switch out of those investments yielding low returns at a given risk level in favor of those investments offering higher returns for the same degree of risk. This implies that a utility will be able to attract capital unless it can offer returns to capital suppliers comparable to those achieved or alternate competing investments of similar risk.[35]

Investors are constantly evaluating the risks of each investment and the costs associated with those investments. If the risks are too high, a rational investor will transfer its capital to another less risky investment. The opportunity cost and capital attraction principles work together to explain the objectives of rational investors.

Q. THE DIVISION'S ROE OF 9.30 PERCENT IS SLIGHTLY LOWER THAN THE AVERAGE AUTHORIZED ROE FOR NATURAL GAS UTILITIES. CAN YOU EXPLAIN WHY THE ROE FOR DEU SHOULD BE LOWER THAN THE AVERAGE FOR NATURAL GAS UTILITIES?

A. Yes. Ms. Nelson argues that "even if DEU's relative business risk has not changed since its last rate case, market conditions have significantly changed, increasing the cost of capital. That point is not in dispute."[36] There is, in fact a dispute about which costs have increased and whether equity is one of those.

[34] Society of Utility and Regulatory Financial Analysts, The Cost of Capital—A Practitioner's Guide, David C. Parcell, 2020 Edition page 117.
[35] Morin, Roger A, *New Regulator Finance* (Public Utilities Reports, 2006) 21-22.
[36] Dominion Energy Utah, Docket No. 22-057-03, September 21, 2022, Rebuttal Testimony Ms. Nelson lines 1361 to 1363.

Ms. Nelson continues to argue that if the Opposing Witnesses' recommendations were adopted, it would increase the:

> Company's financial and regulatory risk and diminish[] DEU's ability to compete for capital. In the end, [adopting the Opposing Witnesses' recommendation] would likely have the counterproductive effect of increasing the Company's overall cost of capital ultimately to the detriment of customers.[37]

There is significant dispute as to the effect of business risk, financial risk, and regulatory risk in addition to how each of these risks will affect the cost of capital for DEU. To suggest there is no dispute glosses over the underlying information important to this specific docket.

When looking at business risk, financial risk, regulatory risk, and other risks to DEU, the simple answer is that DEU is less risky than other natural gas utilities. Dr. Morin, discusses various risks that are determinants of required return.[38] Dr. Morin explains that the Risk Premium is made up of a variety of risks, those risks include; (1) Interest rate risk, (2) Business Risk, (3) Regulatory Risk, (4) Financial Risk, and (5) Liquidity Risk. Required return is the sum of the risk-free rate and the risk premium.

Ms. Nelson bases much of her argument on the fact that market risks have increased since DEU's last rate case.[39] Ms. Nelson claims that the increased market risks, have increased DEU's capital costs and therefore it must be compensated with a higher ROE. However Modern Portfolio Theory (MPT) suggests Ms. Nelson is wrong.[40]

MPT assesses how risk-averse investors can build portfolios to maximize expected returns based on a given level of risk. Investors will select companies with characteristics that will diversify its portfolio according to market conditions to meet

[37] *Ibid.* lines 87—91.
[38] Morin, Roger A, *New Regulator Finance* (Public Utilities Reports, 2006) 35-45.
[39] Dominion Energy Utah, Docket No. 22-057-03, September 21, 2022, Rebuttal Testimony Ms. Nelson lines 1343—1363.
[40] Elton, E.J., Gruber, M.J., Brown, S.J. and Goetzmann (2007) Modern Portfolio Theory and Investment Analysis. 7th Edition, John Wiley and Sons, Inc., Hoboken, NJ.

their goals and offset many of the current market risks. Therefore as Dr. Morin suggests above, when calculating a risk premium for investors, the appropriate risks to consider are interest rate risk, business risk, regulatory risk, financial risk, and liquidity risk.

As stated in my direct testimony, DEU's business risk and financial risk is extremely low.[41] The credit markets also perceive that the business risk, regulatory risk, and financial risk of DEU are favorable.[42] The Commission previously indicated DEU has lower financial risk when it stated, "DEU's 191 account recovery mechanism, infrastructure rate adjustment mechanism, and Integrity Management Deferred Account all existed prior to 2014, and continue to reduce DEU's financial risk."[43] Even Ms. Nelson agrees DEU's regulatory risk is at least comparable to other similar companies.[44] There seems to be a broad consensus that DEU does not face significantly higher risks than other regulated natural gas utilities and the broad market as a whole.

Of the risks listed above, business risk is the area where DEU differs extensively from the market as a whole and is noticeably different from a comparable list of regulated natural gas utilities. To begin the discussion, let's refer to Dr. Morin's statement, "Business risk encompasses all the operating factors that collectively increase the probability that expected future income flows accruing to investors may not be realized."[45]

He continues, stating that:

> Business risk is due to sales volatility and operating leverage. Sales volatility is the uncertainty in the demand for the company's products due in part to external non-controllable factors, such as the basic cyclicality of the demand for the company's products, the products' income and price elasticity, the

[41] Division of Public Utilities, Docket No. 22-057-03, August 26, 2022, Direct Testimony Mr. Casey J. Coleman line 454.
[42] *Ibid.* lines 1142—1170.
[43] Utah Public Service Commission Report and Order Docket No.19-057-02, February 25, 2020, page 9.
[44] Dominion Energy Utah, Docket No. 22-057-03, May 2, 2022, Direct Testimony of Ms. Jennifer E. Nelson line 827.
[45] Morin, Roger A, *New Regulator Finance* (Public Utilities Reports, 2006) page 38.

> degree of competition, the availability of product substitutes, the risk of technological obsolescence, the degree and quality of regulation, weather variations, and the conditions of the labor and raw materials market.
>
> Sales volatility is also related to internal or controllable factors. The reactions of a company's management to the business environment, such as adoption of a particular cost structure, are important dimensions of business risk.[46]

Dr. Morin also outlines how business risk is assessed:

> [B]y examining the strength of the long-term demand for utility products and services. Many factors have an impact on business risk, including the size and growth rate of the market, the diversity of the customer base and its economic solidity, the availability of substitutes and degree of competition, and the utility's relative competitive standing in its major markets, including residential, industrial, and commercial markets.[47]

Finally, Dr. Morin makes this important observation, "The regional economics of a utility's service territory exert a strong influence on the company's risk."[48]

The economic conditions of Utah have been strong for several years, lowering DEU's business risk. The American Legislative Exchange Council (AMLEC) publishes a report, *Rich States, Poor States* that details states' individual performances over several years based on State Gross Domestic Product, Absolute Domestic Migration, and Non-Farm Payroll Employment. [49] In its most recent report Utah is ranked number one, and has been number one for at least three consecutive years. Contrary to Ms. Nelson's argument, Dominion has benefited from the strong economy in Utah and has averaged over 26,500 new customers each year for the past five years.[50] In this case, as part of the calculation for the Conservation Enabling Tariff (CET), DEU estimates that it will add approximately 25,000 additional new customers in the test period.[51] Consistent with Dr. Morin's explanation, DEU's

[46] *Ibid* page 38.
[47] *Ibid* page 39.
[48] *Ibid* page 39.
[49] The entire report from ALEC is included as DPU Exhibit 2.05 SR.
[50] Dominion Energy Utah, Conservation Enabling Tariff Report (CET), August 2022.
[51] Dominion Energy Utah, Exhibit 4.20 Model, CET Calculation Tab.

own forecast supports a healthy and growing market and a strong economy and is an indication of its lower business risk.

As part of my research, I reviewed multiple reports when evaluating the risks of DEU. With Utah ranking number one and none of the proxy group companies located in the State of Utah, the economic climate for DEU is likely better than the proxy group companies. As it does with any rate case, the DPU completed an analysis to confirm that the economic environment in Utah was superior to the economies of the companies in the proxy group, and thus results in lower risk than the comparable group of companies.

In all the pages of testimony and rebuttal testimony filed by Ms. Nelson, there is no compelling evidence to support an ROE higher than the average allowed rate of return for comparable natural gas utilities of similar risk. When comparing DEU to the entire market, it is difficult to conclude that DEU faces more competition, has a greater risk of technological obsolescence, and its amount of business risk as a regulated utility is higher than a software developer or myriad other businesses seeking capital in the market. Rather, DEU is lower risk because it is a regulated utility with a strong and vibrant regional economy for its customer base, a growing population in the State of Utah that increases demand for its products, the majority of the population using natural gas as the primary source to heat their homes during the winter season, and legislation preventing cities from forbidding the use of natural gas for new construction.[52]

In summary, the claim by Ms. Nelson that DEU is required to have a higher ROE because of higher risks is simply unsupported. If anything, the information supports a lower ROE for DEU because the financial, business, regulatory, and liquidity risks are lower than a comparable group of regulated utilities.

[52] Utah Code § 10-9a-531. Utility service connections.

CAPITAL ATTRACTION

Q. A MAJOR FACTOR THE APPROPRIATE ROE FOR DEU IS THE ABILITY TO ATTRACT CAPITAL FOR ITS FINANCING NEEDS. HAS DEU HAD TROUBLE ATTRACTING CAPITAL?

A. No. Throughout Ms. Nelson's rebuttal testimony she discusses the capital attraction standard and how the recommendations by the Opposing Witnesses violate the capital attraction standard.[53] Ms. Nelson states repeats in her rebuttal testimony, "The most important task for the Commission is to determine whether the 'end result' is just and reasonable and meets the *Hope* and *Bluefield* comparable risk, capital attraction, and financial integrity standards in the current environment."[54] In the current environment DEU has not had difficulty attracting capital and finding willing investors.

DEU detailed how its total capital structure has increased over the years. [55] Table 1 shows the changes.

Table 1

Year	Total Long Term Debt	Total Common Equity	Total Capital
2017	$727,743,789	$725,010,810	$1,452,754,599
2021	$994,735,014	$1,245648,229	$2,240,433,242
Percent Change	36.69 %	71.82 %	54.22 %

As illustrated, in 2017 DEU had $1.45 billion in total capital. Total Capital increases to $2.24 billion in 2021. That is an increase of $787.6 million in five years or 54.22

[53] Dominion Energy Utah, Docket No. 22-057-03, September 21, 2022, Rebuttal Testimony Ms. Nelson lines 681—683, 1141—1142, and 66—70.
[54] *Ibid.* lines 679—682.
[55] Dominion Energy Utah Docket No. 22-057-03 Data Request Response #11 to the Division of Public Utilities.

percent. The five-year time period included in my analysis covers rate decreases by the Commission as well as the lower ROE in Wyoming. The years from 2017 to 2021 also cover some of the most unsettling times in the financial markets because of a world-wide pandemic and all its implications. Despite rate decreases, difficult financial markets and other factors, DEU was able to increase its equity and debt portions and attract the necessary capital over those five years. There is no evidence that the higher market risks as suggested by Ms. Nelson or a decrease in the ROE will cause investors to pivot to other investments. The reality is that DEU has been able to attract capital and increase both its debt and equity.

The financial community has displayed a willingness to invest in DEU because of its lower business, financial, and regulatory risk. As the data shows, capital attraction has not been an issue with DEU. Because it appears DEU will continue to have low business risk, financial risk, and regulatory risk, the company should be able to continue to attract capital for its business needs.

WEIGHTED AVERAGE COST OF CAPITAL

Q. CAN YOU DISCUSSS HOW A CHANGING BOND MARKET CAN IMPACT THE CAPITAL COSTS OF A UTILITY AND HOW THAT WOULD IMPACT THE WEIGHTED AVERAGE COST OF CAPITAL (WACC)?

A. Yes. The concept of a WACC is developed from the idea that there is a cost to the company for both the bond and equity portions of its capital structure. In most financing decisions made by an organization, a balance between how much debt and equity to use to finance its operations is always a significant choice. Ms. Nelson uses an increase in Treasury bond and utility bond yields and widening credit spreads as justification for increasing the ROE for DEU.[56] In her rebuttal testimony, Ms. Nelson's states, "Despite increases in government and utility bond yields of approximately 150 to 200 basis points since the Commission's order in the Company's last rate case, the Opposing Witnesses disregard current market data

[56] Dominion Energy Utah, Docket No. 22-057-03, September 21, 2022, Rebuttal Testimony Ms. Nelson pages lines 96—97.

that indicate higher costs of capital and recommend the Commission reduce the authorized ROE [of DEU]."[57]

Ms. Nelson again misstates DPU's position and how it has dealt with current market conditions. There has been little disagreement about the changing bond market, and how those changes will impact the cost of capital for DEU. The biggest impact of increasing bond yields will likely come on the debt portion of the capital structure of DEU. DEU calculated what its appropriate cost of debt should be, the DPU has accepted those calculations as fairly compensating investors for all the debt obligations of DEU. As the bond markets continue to change, the DPU would expect the cost of debt to DEU to continue to increase. This increased cost of debt would impact the overall cost of capital to DEU, which would be reflected in the WACC calculation. While there will be a need for additional debt in the future, the existing debt obligations have fixed interest rates and long maturities with some extending as far as 2051.[58]

It would be premature for the Commission and parties to simply accept that because of a changing bond market the ROE calculations of DEU should also automatically increase. As the DPU indicated, the Commission should carefully evaluate all of the data, information from the financial models, and other applicable risks that DEU may face to determine the appropriate ROE. Because both the cost of debt and the cost of equity comprise the WACC, the impacts of the changing bond market are likely to have the greatest impact on the cost of debt. The increasing cost of debt should be factored into the cost of capital on the debt portion of the WACC calculation, not a significant adjustment to the ROE.

Q. MS. NELSON SUGGESTS DEU SHOULD HAVE A HIGHER ROE BECAUSE OF ELEVATED MARKET RISKS, ARE THERE CURRENT RATE CASES THAT SUPPORT A HIGHER ROE FOR DEU, AS A RESULT OF MARKET CONDITIONS?

[57] *Ibid.* lines 72—76.
[58] Dominion Energy Utah Exhibit 4.20 Model, Capital Structure Tab.

A. No. An RRA Regulatory Focus report titled *Rate case totals take a tumble, hit 5-year low in September*, published October 10, 2022, discusses current decisions regarding ROE. The report states "regarding returns on equity, regulators authorized four new returns during the month, ranging from 9.30 percent to 9.50 percent."[59] In that same report, RRA Regulatory Focus specifically mentions Piedmont Natural Gas Company which had a rate case settled September 15, 2022. The South Carolina Commission ordered an ROE of 9.30 percent and a capital structure of 52.20 percent equity and 47.8 percent debt. If we assume a cost of debt of 4.25 percent for Piedmont Natural Gas Company, the WACC for Piedmont is 6.89 percent very close to the 6.82 percent WACC being suggested by the DPU for DEU in this proceeding.

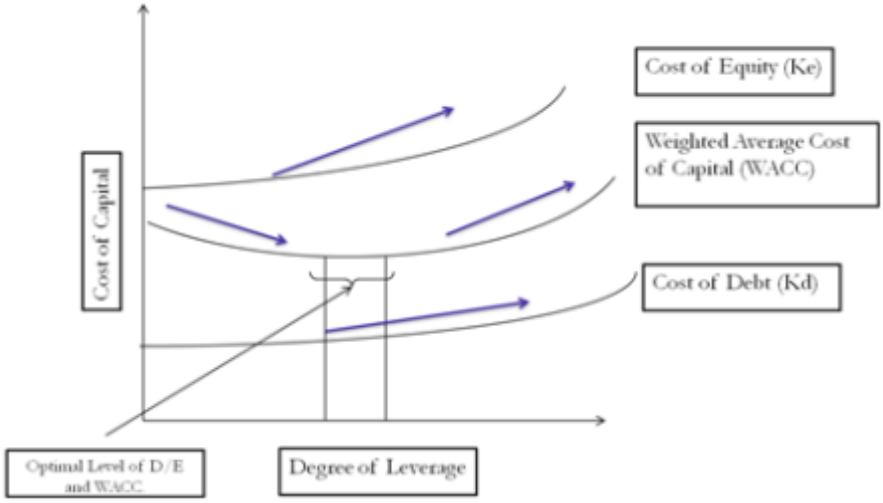
Q. CAN YOU DISCUSS THE OPTIMAL CAPITAL STRUCTURE AND HOW IT IMPACTS THE FINANCIAL RISK OF A COMPANY?

A. Yes. Ms. Nelson discusses the capital structure of a company and how that capital structure impacts the cost of capital for a utility.[60] Specifically, she states, "The increase in debt increases the Company's financial risk, and if anything, would indicate an increase in the cost of equity, not a decrease (all else equal)."[61]

However, the Commission should recognize that this point is only true **if a company is at or beyond its optimal capital structure.** A company adding debt to its capital structure is not always going to increase the financial risk of the company, as Figure 1 illustrates:[62]

[59] DPU Exhibit SR 2.08.
[60] *Ibid.* lines 395—404.
[61] *Ibid.* lines 400—402.
[62] National Association of Regulatory Utility Commissioners, *A Cost of Capital and Capital Markets Primer for Utility Regulators,* April 2020, page 11.

Figure 1 WACC curve



If the capital structure is less than optimal, the WACC will decrease as a company finances more of its capital costs using debt. This lower overall cost of capital is the result of the cost of debt being lower than the cost of equity. Eventually, there is a point, the optimal level of debt, where continuing to finance any capital costs with debt will cause the WACC to increase because of more leverage. Any prudent company and especially any prudent regulated utility will continue to finance its capital costs with debt until the optimal cost of capital is achieved.

Ms. Nelson argues that the financial risk of DEU will increase because she believes it is more leveraged than other utilities. This risk will only increase if DEU is at its optimal capital structure. Because no party in this proceeding has presented evidence suggesting what the optimal capital structure would be for DEU, it is impossible to determine the veracity of Ms. Nelson's claim. Thus, a higher leverage position does not always mean higher financial risk.

KROLL'S RISK-FREE RATE AND EQUITY RISK PREMIUM.

Q. WHAT GENERAL OBSERVATIONS DO YOU HAVE REGARDING MS. NELSON'S REBUTTAL TESTIMONY AND DISCUSSION OF KROLL'S RISK-FREE RATE AND EQUITY PREMIUM?

A. From the criticisms presented in Ms. Nelson's rebuttal testimony, it is clear that she does not understand the process Kroll[63] uses to calculate its risk-free rate (RFR) as well as its equity risk premium (ERP).

Ms. Nelson criticizes the Division and other parties' analysis because government and bond yields have increased and volatility in the market is higher since DEU filed its last rate case.[64] Ms. Nelson continues to argue that the Opposing Witnesses have not considered "many market based indicators of increasing capital costs and returns currently available to other natural gas utilities."[65] She finally concludes that the Commission should not adopt the lower ROE recommendations because the Opposing Witnesses disregard this information.

Each of these criticisms is unfounded and without merit. When one begins an analysis of the inputs involved and considered by Kroll in calculating its RFR and ERP, it is obvious that careful consideration is given to several topics. A couple of years ago, to gain greater insight on how Kroll calculates its risk-free rate and ERP, I attended a virtual conference by Kroll discussing its calculations. Because this webinar was offered during the Covid-19 pandemic a major focus was explaining cost of capital considerations in the coronavirus environment.[66] A general summary of the information considered by Kroll in this webinar includes:

- COVID-19 Brief Timeline, Real GDP Growth—Sources of Estimates
- U.S. Real GDP (Annualized) Growth Estimates for 2020 Before and After Enactment of the U.S. Fiscal Stimulus Package (CARES) Act
- S & P 500 Earnings Consensus Estimates—Before and After Coronavirus
- S & P 500 Index October 1, 2019—April 15, 2020
- U.S. Market Crashes
- Using S & P 500 Price Index as Benchmark
- 10-year Yields for U.S., Germany, U.K., Japan
- Federal Reserve (Fed) A Selection of Monetary Policy Measures
- Federal Reserve Balance Sheet

[63] In this testimony Kroll is used exclusively. The DPU realizes that at times the entity discussed is Duff and Phelps which is the predecessor to Kroll. For clarity Kroll is always used.
[64] Dominion Energy Utah, Docket No. 22-057-03, September 21, 2022, Rebuttal Testimony Ms. Nelson lines 73—74.
[65] *Ibid* lines 70—71.
[66] For the complete slides in the presentation see DPU Exhibit 2.02 SR.

- Chicago Board Options Exchange (CBOE) VIX Index
- Other Cost of Capital Inputs.

Even though the above list seems exhaustive, it does not list all the factors Kroll uses to calculate its RFR and ERP. As the list above shows, each of the specific areas discussed by Ms. Nelson was analyzed and carefully considered in the recommendations provided by Kroll. To further reflect the impact to markets Kroll publishes an infographic Cost of Capital in the Current Environment.[67] This infographic shows the Kroll recommended U.S. ERP, normalized U.S. RFR, Real GDP Growth, VIX Index, and U.S. Corporate Credit Spreads. This shows the current market impacts as a result of higher inflation, changing monetary policy and how the volatility in the market impacts the various metrics used to measure the cost of capital.

To further illustrate how Kroll adjusts its RFR and ERP according to market conditions, a webinar was held by Carla Nunes, Managing Director at Kroll, and James P. Harrington, Director, at Kroll. This webinar was offered on September 28, 2022. Many of the same topics listed above were discussed with additional emphasis on the RFR and ERP and how the changing economic conditions and evolving monetary policy would impact the recommendations of Kroll.[68]

One point the webinar illustrated was the two-step process Kroll uses to determine its recommend ERP. The first step is to determine "what is the reasonable range of unconditional ERP that can be expected over an entire business cycle?"[69] Step two evaluates what the research shows, (which is that the ERP is cyclical during the business cycle) and asks, "Where is the ERP in the range".[70] In essence Kroll uses the term conditional ERP to reflect current market conditions and the appropriate ERP given those conditions.

[67] For the most recent version of the infographic from Kroll see DPU Exhibit 2.03 SR.
[68] For the complete slides in the presentation see DPU Exhibit 2.01 SR.
[69] Kroll Cost of Capital in the Current Environment, September 28, 2022, slide 46.
[70] *Ibid.* slide 46.

Kroll considers over 30 different models to estimate the range of U.S. ERP. The models Kroll uses considers both historical and forward-looking ERP estimates. The analysis done by Kroll develops a range of unconditional ERP, which given the current market is 3.5 percent to 6.0 percent.[71] Finally Kroll recommends an ERP that falls within the range of all the various ERP models, which currently is 5.5 percent, almost the top of the range. When establishing its ERP recommendation Kroll considers a list of factors which include:[72]

- U.S. Equity Markets
- Implied Equity Market Volatility
- Corporate Credit Spreads
- Damodaran Implied ERP Model
- Default Spread Model
- U.S. Equity Market Uncertainty Index
- Historic and Projected Real GDP Growth
- Unemployment
- Consumer Sentiment
- Business Confidence
- Sovereign Credit Ratings
- Economic Policy Uncertainty (EPU) Index

Kroll uses each of these factors to determine if the change is positive or negative and how the specific change affects the ERP.

As the above discussion shows, Kroll is very meticulous in reviewing a large swath of the financial and economic indicators impacting the financial markets. The data Kroll considers is the same data investors use to determine where to invest its capital. To suggest the DPU has disregarded the economic and financial data is false. Later in my testimony, I will discuss further how the DPU uses the information from Kroll to guide its analysis of the financial models and the accuracy of the information calculated.

Q. MS. NELSON PERFORMED A REGRESSION ANALYSIS ON THE ERP AND RFR RECOMMENDED BY KROLL. WILL YOU COMMENT ON THIS

[71] *Ibid.* slide 47.
[72] *Ibid.* slide 49.

ANALYSIS AND HOW THE COMMISSION SHOULD USE THE INFORMATION?

A. Yes. Ms. Nelson showed in her Figure 16, Kroll Recommended Equity Risk Premium and Risk Free Rate,[73] that there is little to no correlation between the RFR and ERP recommended by Kroll. Ms. Nelson uses this to try to discount the validity of Kroll and its ERP. This line of reasoning is incorrect.

Because the RFR is determined by the Federal Reserve when using a spot rate or a normalized rate when interest rates are abnormally low, one would suspect there to be little to no correlation between the RFR and the ERP. Additionally, because Kroll uses a two-step process to evaluate the ERP and follows this pattern to determine the ERP, it is even less likely there would be a high-level of correlation between those two data points. Because there is almost no correlation does not undermine the validity of the recommendation of Kroll.

Q. CAN YOU DEMONSTRATE A PRACTICAL EXAMPLE OF THE STRENGTH OF THE KROLL RECOMMENDED ERP?

A. Yes. Before I get to that specific point, it is helpful to review some basic regulatory principles. Earlier in my testimony, I illustrate how Ms. Nelson argues the "end result" is a guiding principle with the *Hope* and *Bluefield* decisions at the Supreme Court. The Commission has affirmed this concept when it said "[t]he quality of any financial model results depends primarily on the quality of inputs. Subsequent adjustments to correct for problematic inputs simply reduce the overall quality of the modeling results."[74] While a commission must make a qualitative assessment of underlying data results to assess whether an end result is reasonable, that is best done overtly as an application of qualitative judgment, not an adjustment of modeling inputs. That qualitative assessment could, of course, extend to a decision about which model or models to use.

[73] Dominion Energy Utah, Docket No. 22-057-03, September 21, 2022, Rebuttal Testimony Ms. Nelson, lines 1015—1018.
[74] Utah Public Service Commission Report and Order Docket No.19-057-02, February 25, 2020, page 7.

Both concepts suggest the same point: the exact process is not as important as a model that accurately explains what is happening in the financial markets. Whether a regulatory body decides to use a specific modeling exercise is not as important as the end result the financial models lead to.

The ERP discussion illustrates the question of which model to use quite well. In the same webinar identified above, Kroll discussed the historical ERP and the recommended ERP. Kroll illustrated that when using a historical ERP there could be some anomalies that surface. For example, when using a historical ERP, the total market return from 2007 to 2008 would have decreased. This decrease in the total market return would make no sense because 2008 was during the credit crisis in the financial markets and investors would require a higher return to adequately compensate for the increased risk. Additionally, if analysts were using only the historical ERP of Kroll for their evaluation, this same situation would occur during the Covid-19 pandemic. The combined equity risk premium and risk-free rate would have decreased, suggesting a lower risk environment. This "end result" makes no sense and calls into validity the strict use of a historical ERP, as suggested by Ms. Nelson.[75]

On the other hand, when using Kroll's recommended ERP, the scenario is switched. The total market returns calculated by Kroll go from 9.5 percent to 10.5 percent in 2008 and from 8.0 percent to 9.0 percent at the end of 2019 and early 2020. The model is better equipped to capture changing economic and financial factors and reflects the current situations evident in the market.[76] The end result and the ability to encapsulate differing market conditions makes the recommended ERP a better choice for financial analysts.

Q. KROLL CONSIDERED MANY DIFFERENT IMPACTS TO THE MARKET. HOW DOES THAT CORRELATE WITH THE DIVISION AND ITS ANALYSIS?

[75] Kroll Cost of Capital in the Current Environment, September 28, 2022, slide 52.
[76] *Ibid.* slide 53.

A. The Division analyzed Kroll's RFR and ERP when choosing key metrics to determine if the various financial models produced reasonable results. A 9.0 percent market return can be calculated from the U.S. ERP of 5.5 percent and a normalized U.S. RFR of 3.5. These data points are the inputs recommended by Kroll for current market conditions.[77] With the general understanding of a total market return of 9.0 percent the Division can quickly determine if the financial models are producing reasonable return on equity calculations. ROE rates close to 9.00 percent or below would produce results that would qualify as reasonable.

The Division reviewed the work done by Kroll to determine if the calculated results adequately considered the current market conditions. Using a 9.0 percent total market return as a guidepost (this matches Kroll's total market return data and assessment) as a gauge of reasonableness for the appropriate financial models, the Division considered the Federal Reserve's monetary policy, the impact of quantitative easing on the market, the impact of interest rates on the cost of capital, how the U.S. GDP rate will impact the rate of return for investors, how volatility and uncertainty impacts investors, and dozens of other market considerations.

The criticisms in Ms. Nelson's rebuttal testimony regarding the Division's analysis and her claim that the Division ignores the current market conditions are faulty. The Division has carefully considered the current market situation when making its recommendations.

Q. HOW WOULD YOU EXPLAIN SUCH A DISPARITY IN THE RESULTS CALCULATED BY OTHER PARTIES AND MS. NELSON'S FINANCIAL MODELS?

A. From Ms. Nelson's rebuttal testimony, it is clear that DEU and the DPU see the financial situation of DEU and the ROE the company should be allowed to earn differently. Even though the processes and models Ms. Nelson and I followed were

[77] For the most recent version of the infographic from Kroll see DPU Exhibit 2.03 SR.

similar, using a variety of financial models to calculate an ROE, the results are incongruous.

There may be some general reasons why Ms. Nelson and I see DEU's situation so differently. Three possible explanations are: (1) The financial models (i.e., discounted cash flow (DCF), capital asset pricing model (CAPM), and Bond Yield Risk Premium are inherently flawed and unable to provide reasonable calculations for the ROE; (2) the data and information being used in the models to calculate the ROE are incorrect and inaccurate; or (3) the perception of the risks faced by DEU is different. I address and analyze these reasons below.

Given the history and wide use of the financial models used in cost of capital proceedings before this Commission and others, it seems unlikely that those models' shortcomings sufficiently explain the wide difference in recommendations. Thus, we must look to the other two explanations to weigh the differences between Ms. Nelson's testimony and mine.

The risk profile of DEU does not support a higher ROE given the current situation of the company. There has been no evidence provided by DEU and Ms. Nelson that supports the premise that DEU has a higher risk profile than comparable regulated natural gas utilities or the whole market, therefore requiring the Commission to order an ROE of 10.30 percent. There is no risk justification for Ms. Nelson's recommendation.

In fact, Ms. Nelson in her rebuttal testimony gives evidence that the risk profile of DEU is lower than most of the utility companies. Ms. Nelson disagrees with the characterization that "utility credit ratings have improved."[78] She specifically states, "A utility with a strong financial profile has a higher likelihood of withstanding adverse events and accessing capital at reasonable terms during constrained markets to the benefit of customers. Financial strength is especially critical during periods of market

[78] Dominion Energy Utah, Docket No. 22-057-03, September 21, 2022, Rebuttal Testimony of Ms. Jennifer E. Nelson lines 273—274.

dislocation as experienced during the Great Recession of 2008-2009."[79] Ms. Nelson continued to argue, "that the utility sector's credit rating weakened sharply in 2020…evidenced by the negative outlooks or CreditWatch negative listings doubled and downgrades outpaced upgrades for the first time in a decade by about 7 to 1"[80] Ms. Nelson's rebuttal testimony continues to argue that the trend "in rating downgrades outpaced upgrades for the investor-owned North American regulated utility industry, causing the median rating on the industry to fall to the 'BBB' category."[81]

Ms. Nelson believes that the overall utility industry has become riskier because of the credit downgrades and the continuing trend. While the DPU is not saying the trend has been positive or negative as suggested by other witnesses, the reality is the downgrades that have occurred in the market reflect a reality for those companies that DEU has not experienced. As noted above, DEU is less risky than other utilities in the market.

The fact that DEU is less risky than other utility companies is evidenced in the S&P Global ratings of Questar Gas Co. (QGC) dated April 13, 2022.[82] In the Ratings Score Snapshot included in S&P Global report, the information shows the anchor score of QGC is a-, even when considering potential modifiers QGC remains at a rating of a-. Finally, S&P Global lowers the rating of QGC because it is owned by Dominion Energy Inc. to bbb+. What this anchor score illustrates is that S&P Global would rate QGC higher if it was not owned by Dominion Energy. Later in the report S&P Global indicates the funds from operations (FFO) to be 19.5 percent to 20.5 percent and forecasted to improve over the next couple of years. These metrics are higher than the parent company's FFO of 15-16 percent.

[79] *Ibid.* lines 244—247.
[80] *Ibid.* lines 250—253.
[81] *Ibid.* lines 254—257.
[82] Dominion Energy Utah Docket No. 22-057-03 Data Request Response to FEA number 1.15 Attachment 2.

These numbers show that DEU is rated higher by the credit ratings community despite the difficult times utilities have been facing the last few years. Even though other utilities' credit ratings have dropped as suggested by Ms. Nelson, DEU has been able to maintain a higher credit score than the mean score of BBB argued by Ms. Nelson.

If DEU has been able to maintain its above average credit rating over the last few years when the market conditions have been some of the most challenging then it is logical to conclude, as Ms. Nelson pointed out, DEU as a "utility with a strong financial profile, has a higher likelihood of withstanding adverse events and accessing capital at reasonable terms during constrained markets to the benefit of customers."

If the financial theories are can calculate a relatively accurate ROE and DEU is not riskier than a comparable set of regulated utilities, then the remaining reason for the substantial differences in ROE between parties could be attributed to incorrect data being used in the financial models, differing application of judgment, or something else. Ms. Nelson uses 141 pages in her rebuttal testimony, plus hundreds of additional pages in her attachments and work papers, in an attempt to illustrate why in her opinion each analysis done by the DPU and other parties is unacceptable. What follows is my analysis as to why her recommendation is fundamentally flawed.

DISCOUNTED CASH FLOW MODELS

Q. IN MS. NELSON'S REBUTTAL TESTIMONY, SHE TAKES ISSUE WITH THE DIVISION'S USE OF DIVIDEND GROWTH RATES AND EARNINGS GROWTH RATES. CAN YOU COMMENT ON WHY THE USE OF BOTH GROWTH RATES IS APPROPRIATE?

A. Yes. Ms. Nelson makes the same arguments regarding earnings and dividends that have been made before the Commission for years. The Commission was explicit in

its desire to have a weighting between dividend growth and earnings growth.[83] In its analysis for this Docket, the Division has followed the same DCF method applied in numerous other rate cases.

The appropriate method for calculating the ROE using a DCF model must include a weighting between dividend growth and earnings growth. Ms. Nelson does not do this calculation and the Commission should consider this point when evaluating DEU's analysis in setting its ROE recommendation.

CAPITAL ASSET PRICING MODEL

Q. MS. NELSON SPENDS MULTIPLE PAGES TRYING TO DEFEND HER CAPM AND ERP USED IN HER ANALYSIS. WILL YOU RESPOND TO HER CLAIMS ABOUT HER FINANCIAL MODELS' ACCURACY?

A. Yes. Ms. Nelson takes 22 pages to argue the validity of her CAPM analysis and ERP used in her financial models.[84] Despite the 22 pages and all the information shared, Ms. Nelson is fundamentally wrong, and her recommendations based on her calculations should be rejected. First, Ms. Nelson's exclusion of raw betas cause her results to be incorrect or biased upward. Second, later in my testimony, I will show that Ms. Nelson's analysis incorrectly uses a DCF model to calculate the Market Risk Premium or ERP

When critiquing the Division's CAPM results and suggesting the calculation should be rejected by the Commission, Ms. Nelson raises questions about the Beta coefficients applied in the Division's analysis.[85]

Ms. Nelson believes that only adjusted Betas should be used instead of raw or unadjusted Betas because unadjusted Beta coefficients tend to regress to 1.00 over time, and the use of "raw" Beta coefficients will understate the Beta coefficient for

[83] Utah Public Service Commission, Docket No. 02-057-02, Report and Order, December 30, 2002, page 34.
[84] Dominion Energy Utah, Docket No. 22-057-03, September 21, 2022, Rebuttal Testimony Ms. Nelson pages 56—78.
[85] *Ibid.* lines 937—964.

companies with Beta coefficients less than 1.00. In Ms. Nelson's opinion, the use of raw Beta coefficients biases the Division's CAPM results downward.[86]

Ms. Nelson is correct that the Division's analysis included raw and adjusted Betas. This choice was made to provide the most complete data for the Commission. No adjustment is needed to the CAPM to correct for the perceived "bias" for companies who have a Beta below 1.0. The Division's CAPM analysis shows the results of using both raw Betas as well as adjusted Betas. This allows the Commission and other parties the opportunity to decide for themselves, which is the correct approach, and then see the result of that analysis.

Ms. Nelson is concerned that the Division's analysis and its choice of Betas will skew the results downward. However, she is not concerned about the use of only adjusted Betas and how using only adjusted Betas will skew the results upward. When doing the CAPM analysis, the Division included calculations using raw Betas, adjusted Betas, and an analysis that blended both raw Betas and adjusted Betas. This provides the Commission with the most complete information to base its final analysis. Because Ms. Nelson does not provide CAPM calculations using raw Betas, her ROE results have an upward bias. This is one of the reasons Ms. Nelson's financial models return rates above the 9.0 percent reasonable threshold.

The Commission should not place much value on the rebuttal comments of Ms. Nelson because of her lack of raw Betas. Ms. Nelson's CAPM or ECAPM analysis will calculate biased results when excluding raw Betas.

Q. MS. NELSON HAS AN ALTERNATE METHOD TO CALCULATE THE ERP SHE USES IN HER CAPM MODEL, WILL YOU EXPLAIN IN FURTHER DETAIL WHY THIS METHOD IS INACCURATE IN DEVELOPING AN ERP?

A. Yes. Ms. Nelson suggests that because she uses a DCF analysis to determine the ERP in her alternate method this makes the ERP method accurate.[87] That premise is

[86] *Ibid.* lines 950—951.
[87] *Ibid.* line 1059.

entirely false. Attempting to calculate an ERP using the DCF model as Ms. Nelson suggests contradicts underlying assumptions of the DCF model. Dr. Morin detailed these assumptions as illustrated below:

1. The discount rate, K, must exceed the growth rate, *g*. In other words, the standard DCF model does not apply to growth stocks. It is clear that as *g* approaches K, the denominator gets progressively smaller, and the price of the stock infinitely large. If *g* exceeds K, the price becomes negative, an implausible situation.
2. The dividend growth rate is constant every year to infinity.
3. Investors require the same return K every year…A firm's cost of capital, K, varies directly with the risk of the firm. By assuming the constancy of K, the model abstracts from the effects of a change in risk on the value of the firm. If K is to remain constant, the firm's capital structure and dividend payout policy must be assumed to remain stable so as to neutralize an effect of capital structure changes or dividend policy changes on K.
4. The standard DCF model assumes no external financing. All equity financing is assumed to be conducted by the retention of earnings. No new equity issues are used, or if they are, they are neutral in effect with respect to existing shareholders.[88]

Ms. Nelson's use of the DCF model to calculate the ERP undermines many of the specific assumptions shown above. Some of these points will be discussed further below. I will also discuss how using the DCF model in this manner leads to incorrect results.

Ms. Nelson's use of the DCF model to calculate the ERP is inappropriate because it ignores that one of the DCF model's bedrock principles the premise that growth rates are expected to remain constant indefinitely. To begin her analysis, Ms. Nelson uses long-term growth rates from Bloomberg and Value Line. Those growth rates are listed in DEU 2.04 Mkt Return Bloomberg and DEU 2.04 Market Return VL as column five in each spreadsheet. Because the DCF model assumes the rates continue indefinitely, the growth rates used by Ms. Nelson would be assumed to exist forever. It is unlikely analysts recommending the rates used by Ms. Nelson

[88] Morin, Roger A, *New Regulator Finance* (Public Utilities Reports, 2006) 257—258.

would agree the suggested rates would actually continue indefinitely. The growth rates in her analysis will not continue indefinitely.

Ms. Nelson's analysis includes companies that have negative growth rates, while it is possible for a company to experience short-term negative growth, no company can survive indefinitely with a negative growth rate. Another example is the growth rate of Boeing Company. The Bloomberg long-term growth rate is 80.64 percent. There is zero chance that Boeing or any company could maintain an 80 percent growth rate indefinitely. Even though Ms. Nelson is using an accepted financial model in her calculation of an ERP, it is being used in a way that makes the results of the calculation suspect. Ms. Nelson's calculations do not properly account for the underlying assumptions of the DCF model, and the inevitability that the assumption will be incorrect.

The calculation of the DCF model includes the assumption that the company is paying dividends. Because of this assumption, Ms. Nelson's analysis must exclude any company that is not paying a dividend. The inclusion of only dividend paying companies, means Ms. Nelson is not calculating a "total market return" as contemplated in the CAPM formula, but instead calculating a return for a subset of companies within the market. The DPU is not certain how this subset of companies provides any meaningful comparison and is not aware of any research that supports using this subset of companies to determine a total market return. The DPU has concerns with this type of analysis and is unaware of any studies or peer reviews that assess the validity of this model.

Finally, the DCF model does not work well with growth stocks. As explained above by Dr. Morin, using a DCF model on these growth stocks is an "implausible situation."[89] Any comparison or reference to the S&P 500 Index that includes growth stocks is worth little.

[89] *Ibid.* page 257.

The DPU has no issues with a DCF calculation when the model is used correctly and the correct data is used. However, the use of a DCF calculation to determine an equity risk premium is not appropriate. The ERP calculated by Ms. Nelson in DEU 2.04 Mkt Return Bloomberg and DEU 2.04 Market Return VL should not be used, because the method is fundamentally flawed.

EQUITY RISK PREMIUM AND TOTAL MARKET RETURNS

Q. WILL YOU DISCUSS THE IMPLICATIONS OF THE KROLL RISK PREMIUM AND MS. NELSON'S RECOMMENDED ROE OF 10.3 PERCENT?

A. Yes. First, I note that Kroll is highly respected and a nationally recognized source for a market risk premium used when calculating ROE for companies. The Division is comfortable that the results calculated by Kroll present a reasonably accurate picture of the overall market. A total market return of 9.00 percent is acceptable and reasonable. This means is a company with risk comparable to the entire market should have a total return of 9.00 percent.

If respected sources calculate an overall market return of 9.00 percent, a conclusion that DEU is anything other than uniquely risky, suggests a 10.30 percent ROE for DEU is far too high. According to basic financial theory, allowing a 10.30 percent return on equity as just and reasonable for DEU, would require concluding that either Kroll's numbers are totally wrong, that DEU is far riskier than the average non-regulated company, or some other fact that does not appear in the record in this case. Another way to illustrate the point is to calculate the "appropriate" Beta coefficient for DEU that would be required to derive an ROE of 10.3 percent. The formula for the CAPM is as follows:

$$k_e = RFR_0 + \beta * (MR\text{-}RFR)$$

Where: k_e is the cost of common equity
RFR_0 is the current risk-free rate
β is beta, the risk adjustment factor

(MR-RFR) is the market risk premium which can be separated into two factors: The overall market return, MR, and the RFR that is compatible with the way the MR was estimated.

The calculation would be as follows:

10.3 percent = 3.5 percent + 1.236(5.5 percent)

If a total market return of 9.0 percent exists, as calculated by Kroll, the Beta coefficient for DEU would need to be 1.236 to justify a 10.3 percent ROE. Any Beta number above 1.0 means a stock is riskier than the total stock market. In other words, with Beta of 1.236, the risk profile of DEU would have to be significantly higher than a comparable set of regulated natural gas utilities to justify an ROE of 10.3 percent. There is no evidence that DEU should have a Beta coefficient higher than 1.0, and definitely not at 1.236. As parties[90] have illustrated in this Docket, none of the utilities in the proxy group has a Beta coefficient higher than 1.0. Therefore for Ms. Nelson's recommendation of 10.3 percent to be correct, DEU would have to be significantly riskier than any of the companies in the proxy group to justify her recommendation. DEU is not significantly riskier than the proxy group of companies and the recommended ROE of 10.30 percent should be rejected. Later the DPU will illustrate how DEU is less risky than the proxy group of companies.

FINANCIAL MODELS AND ALLOWED ROE

Q. IN MS. NELSON'S REBUTTAL TESTIMONY, SHE ATTEMPTS TO UPDATE THE DIVISION'S ANALYSIS, ADJUSTING FOR PERCEIVED FLAWS. DO YOU BELIEVE THE UPDATES SUGGESTED BY MS. NELSON ARE NECESSARY?

A. No. As indicated above, the Commission discussed this point: "The quality of any financial model results depends primarily on the quality of inputs. Subsequent

[90] Dominion Energy Utah, Docket No. 22-057-03, May 2, 2022, Direct Testimony of Ms. Jennifer E. Nelson DEU Exhibit 2.05 CAPM Hist Rm. and
Division of Public Utilities, Direct Testimony of Mr. Casey J. Coleman Docket No. 22-057-03, DPU Exhibit 2.05 CAPM.

adjustments to correct for problematic inputs simply reduce the overall quality of the modeling results."[91]

Even without the Commission's clear direction on updating of models, the Division does not feel it is necessary to update its calculations from those filed in direct testimony. Because the financial markets are always changing, it is possible to continually adjust any completed analysis. However, the Division sees no changes that warrant updating its calculations at this time.

In Figure 21 of Ms. Nelson's rebuttal testimony, she provides a list of "corrected analytical results" for the Division's ROE calculations.[92] She uses this table as a basis to confirm her recommended ROE for DEU at 10.3 percent. As explained below, these adjustments are just as flawed and incorrect as the calculations Ms. Nelson proposes in her direct testimony.

As stated previously, Ms. Nelson sees the financial marketplace differently than I do. All of her "corrected analytical results" would be above the base total market return of 9.0 percent calculated by Kroll. While Ms. Nelson is comfortable with those "calculated" results, they contradict a well-known financial principle that regulated utilities are less risky than the entire market. The ROE for utility companies should generally be lower than the entire market. Because the "corrected" analytical results by Ms. Nelson cannot be reconciled with this basic financial principle, they should be rejected, and the Commission should put no weight on this revised analysis.

Ms. Nelson identified discrepancies in the Division's analysis, which could lead to minor adjustments in the calculated ROE for DEU. None of the discrepancies shown by Ms. Nelson are of a material nature that would substantially adjust the calculated ROE. Even if some minor adjustments to the calculated ROE were accepted, the Division's original recommendation does not change. The calculated ROE would remain close to the average rates of return for similar regulated utilities. The DPU's

[91] Utah Public Service Commission Report and Order Docket No.19-057-02, February 25, 2020, page 7.
[92] Dominion Energy Utah, Docket No. 22-057-03, September 21, 2022, Rebuttal Testimony Ms. Nelson pages line 1340.

direct testimony included calculations of ROE using a variety of financial models. Those different calculations were provided to illustrate the appropriate range for DEU's authorized ROE. The Division's recommendation of 9.30 percent is just and reasonable.

The DPU's original ROE calculation provided the Commission with a range for an acceptable ROE; no updating or adjusting of the Division's original analysis is necessary at this time. The Division calculated an ROE range of 8.93 percent to 9.73 percent with a recommendation of 9.30 percent.

Q. EARLIER YOU DESCRIBED HOW YOU AND MS. NELSON SEE THE MARKET DIFFERENTLY. WILL YOU GIVE A PRACTICAL EXAMPLE AND THE IMPLICATIONS OF THE DIFFERENCES?

A. Yes. Analysis following the theory by Dr. Bonbright as discussed above, demonstrates the stark differences in the market as calculated and observed by Ms. Nelson and the Division. Ms. Nelson's recommended range of 9.60 to 10.75 percent appears to flip the regulatory principle elaborated by Dr. Bonbright. The constraining floor for Ms. Nelson has become the average allowed ROE of regulated natural gas utilities. Ostensibly, this is related to the principles outlined in *Hope* and *Bluefield* that suggest one factor is whether a utility should be allowed to earn a return equal to other utilities of similar risk. Rather than finding the minimum cost of equity and deviating upward because of risk and other factors, Ms. Nelson appears to use other utilities' allowed ROE as a minimum.

In Ms. Nelson's rebuttal testimony, she argues that the Division's analysis does not reflect the well-known principle that the ERP is inversely related to the risk-free rate.[93] Her ROE recommendation is significantly higher than warranted given traditional regulatory and financial principles. Ms. Nelson does not provide sufficient discussion and analysis to justify why DEU's ROE should be significantly higher than other rate cases completed this year in other jurisdictions.

[93] *Ibid.* lines 1003—1010.

As mentioned before, the *Hope* and *Bluefield* cases establish a few principles to be considered: (1) that the utility be allowed an opportunity to earn a return on its utility property generally equal to returns earned by other companies of similar risk; (2) this return should assure confidence in the financial soundness of the utility; (3) this allowed return should maintain and support the credit of the company and allow it to attract capital; (4) recognition that a return that is "right" at one time may become high or low by changes in the economy regarding alternative investments; and (5) particularly in *Hope,* what is important is that the "end result" of the rate order be just and reasonable; it is less important how that result is arrived at. While the above list reflects the rights of the utility as outlined in the *Hope* and *Bluefield* cases, the public interest requires rates to be "just and reasonable," which accounts for the interests of shareholders and ratepayers alike.

The Division's recommendation is consistent with the theory suggested by Dr. Bonbright and the *Hope* and *Bluefield* standards. The ROE of 9.30 percent is above the floor calculated in each of the financial calculations performed while providing just and reasonable rates to the company as well as the captive customers of DEU. As illustrated throughout my testimony, the Division's ROE is lower than the comparable group of companies because DEU has lower risks than the comparable group of companies. This lower recommendation follows the *Hope* and *Bluefield* cases because utilities are generally given the opportunity to earn returns similar to those earned by other companies of <u>similar risk</u>.

Because there is no way to reconcile Ms. Nelson's recommendations with long practice and regulatory principles outlined by experts like Dr. Bonbright, and other authorities, Ms. Nelson's analysis is not credible.

CONCLUSION

Q. CAN YOU SUMMARIZE YOUR FINAL CONCLUSIONS AND RECOMMENDATIONS?

A. Based on my analysis, the appropriate cost of equity for DEU is 9.30 percent with an overall weighted average cost of capital of 6.82 percent. The DPU's recommended

ROE and its cost of capital estimate are just and reasonable and in the public interest and, will result in just and reasonable rates.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.