–BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH–

IN THE MATTER OF DOMINION ENERGY UTAH TO INCREASE DISTRIBUTION RATES AND CHARGES AND MAKE TARIFF MODIFICATIONS.	))))))))	**DOCKET NO. 19-057-02** **Exhibit No. DPU 3.0 SR**

FOR THE DIVISION OF PUBLIC UTILITIES

DEPARTMENT OF COMMERCE

STATE OF UTAH

Surrebuttal Testimony of

Casey J. Coleman

December 5, 2019

Table of Contents

I. Introduction 1
II. Response to DEU's Rebuttal Testimony 2
III. Fair Rate of Return 3
IV. ROE Recommendation 7
V. DEU Risk and the Effect on ROE 10
VI. Trend in the Authorized Roe for Proxy Companies 13
VII. Capital Asset Pricing Model 15
VIII. Discounted Cash Flow Models 19
IX. Financial Models and Allowed ROE 20
X. Conclusion 21

I. INTRODUCTION

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

A. My name is Casey J. Coleman. I am employed by the Division of Public Utilities (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 THAT FILED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes I am.

Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?

A. I will respond to the rebuttal testimony and calculations provided by Mr. Robert B. Hevert for Dominion Energy Utah (DEU) regarding cost of equity and the fair rate of return.

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

Q. CAN YOU SUMMARIZE YOUR FINAL CONCLUSION AND RECOMMENDATION?

A. Although I have revised my analysis slightly, my final conclusion for return on equity (ROE) has not changed. I continue to maintain that the appropriate ROE for DEU is 9.25 percent. On lines 312 – 320 of Mr. Jordan K. Stephenson's rebuttal testimony he testifies the cost of debt for DEU to be 4.37 percent. The updated weighted average cost of capital (WACC) calculation is provided below in Table 1.

24 Table 1

	Rate	Capital Structure	Weighted Rate
Common Stock	9.25%	55.00%	5.09%
Long-term Debt	4.37%	45.00%	1.97%
WACC		100.0%	7.05%

25 II. RESPONSE TO DEU'S REBUTTAL TESTIMONY

26 **Q. WHAT GENERAL OBSERVATIONS DO YOU HAVE REGARDING MR.**
27 **HEVERT'S REBUTTAL TESTIMONY?**

28 A. From Mr. Hevert's rebuttal testimony it is clear that we see the financial situation of DEU
29 and the ROE the company should be allowed to earn differently. Even though the
30 processes Mr. Hevert and I followed were similar, using a variety of financial models to
31 calculate an ROE, the results are incongruent.

32 When looking at the incongruent nature of the results there are some general reasons why
33 Mr. Hevert and I see the situation of DEU so differently. I have come up with three
34 possible explanations: (1) The financial models (i.e. discounted cash flow (DCF), capital
35 asset pricing model (CAPM), Bond Yield Risk Premium, and Value Line financial
36 strengths ratings model) are inherently flawed and unable to provide reasonable
37 calculations for ROE; (2) the data and information being used in the models to calculate
38 the ROE are incorrect and inaccurate; or (3) the perception of the risks faced by DEU.

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

43 Over the course of my testimony I will show how there has been no evidence provided by
44 DEU and Mr. Hevert that supports the premise that DEU has a higher risk profile than
45 comparable regulated gas companies or the whole market, therefore requiring the Utah
46 Public Service Commission (Commission) to order an ROE of 10.5 percent. There is no
47 risk justification for Mr. Hevert's recommendation.

48 If the financial theories are not incapable of calculating a relatively accurate ROE and
49 DEU is not riskier than a comparable set of regulated utilities, then the reason for the
50 substantial differences between Mr. Hevert's recommendations and the recommended
51 ROE from the DPU and other parties in this rate case must be attributed to incorrect data
52 being used in the financial models, differing application of judgement, or something else.
53 Mr. Hevert uses 105 pages in his rebuttal testimony in an attempt to illustrate why in his
54 opinion each analysis done by the DPU and other parties is unacceptable. What follows
55 is my analysis, using many of the same arguments presented by Mr. Hevert, as to why his
56 recommendation is fundamentally flawed.

57 III. FAIR RATE OF RETURN

58 **Q. IN YOUR DIRECT TESTIMONY YOU DISCUSSED HOW COST OF EQUITY IS**
59 **A FLOOR FOR THE ROE AND THE AUTHORIZED RATE OF RETURN BY**
60 **OTHER COMMISSIONS WOULD BE THE CEILING FOR ROE. CAN YOU**
61 **EXPLAIN THIS IDEA AGAIN?**

62 A. Yes. In my direct testimony[1] I explain part of the reason why the DPU is recommending
63 the 9.25 percent ROE. The testimony illustrates the fact that when setting allowed rates
64 of return, utility commissions have an upper and lower threshold for rates. My direct
65 testimony follows the ideas suggested by Dr. Bonbright that calculated rates should act as
66 a minimum cost when determining the fair rate of return.[2] Dr. Bonbright is even more

[1] Direct testimony of Casey J. Coleman pages 44 - 45

[2] 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

67 direct in his conviction that when "calculating the cost of equity for any given company
68 the only such cost that can be determined with confidence is a *minimum cost.*"[3]

69 According to Dr. Bonbright the minimum cost or floor for a regulated utility would be the
70 cost of equity. Cost of equity is a starting point for regulatory commissions to set rates
71 and then adjustments are made according to other policy considerations. An allowed rate
72 of return by regulators may have some component of the cost of equity in addition to
73 some rate to compensate for other policy considerations. An allowed rate of return
74 should capture all elements necessary for just and reasonable rates for a regulated utility.

75 In DEU Exhibit 2.09R Mr. Hevert calculates an updated average ROE for 2019 of
76 regulated gas utilities at 9.70 percent. If Dr. Bonbright's principle that the cost of equity
77 is a minimum figure to which Commissions may add, an average of 9.70 percent allowed
78 ROE suggests the cost of equity for each of the listed companies was below 9.70 percent.
79 When looking at the just and reasonable rate for each utility, presumably the
80 commissions started with some calculated cost of equity. The cost of equity would be
81 adjusted according to the appropriate risks and financial constraints specific to that
82 company that each commission felt best represented the allowed rate of return.

83 **Q. WILL YOU EXPLAIN WHY A MINIMUM COST IS IMPORTANT TO MR.**
84 **HEVERT'S ROE RECOMMENDATION OF 10.5 PERCENT AND WHY THE**
85 **DIVISION IS UNCOMFORTABLE WITH HIS RECOMMENDATOIN?**

86 A. Yes. In Mr. Hevert's rebuttal testimony he argues the ROE range should be 9.90 percent
87 to 10.75 percent.[4] As discussed before, the average allowed ROE calculated by Mr.
88 Hevert is 9.70 percent. The range of Mr. Hevert's cost of equity calculations cannot be
89 reconciled with the allowed ROE for regulated natural gas utilities of 9.70 percent based
90 on the evidence presented. As Dr. Bonbright discussed, cost of equity calculations

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[3] 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
[4] Rebuttal testimony of Mr. Robert B. Hevert Table 1 Summary of ROE: Recommendation line 57

91 should be the minimum or floor for commissions when setting the appropriate ROE. The
92 lowest calculation in Mr. Hevert's recommendation starts 20-basis points higher than the
93 average allowed ROE by Commissions in other jurisdictions. Although not explicitly
94 stated in Mr. Hevert's testimony, it would appear the floor suggested by Mr. Hevert for
95 DEU's minimum cost of equity would be 9.90 percent. If not, Mr. Hevert must rely on
96 upward deviations from a lower cost of equity floor. Presumably, those would be based
97 on DEU's risk profile. Mr. Hevert provides no analysis to support a floor for DEU that
98 begins higher than the average allowed ROE for regulated natural gas distribution
99 companies in recent cases.

100 **Q. EARLIER YOU DESCRIBED HOW MR. HEVERT AND YOURSELF SEE THE**
101 **MARKET DIFFERENTLY, CAN YOU GIVE A PRACTICAL EXAMPLE AND**
102 **THE IMPLICATIONS OF THE DIFFERENCES?**

103 A. Yes. The theory by Dr. Bonbright as discussed above, demonstrates very well the stark
104 differences in the market as calculated and observed by Mr. Hevert and the Division. Mr.
105 Hevert's recommended range of 9.90 to 10.75 percent appears to flip the regulatory
106 principle elaborated by Dr. Bonbright. The constraining floor for Mr. Hevert has become
107 the average allowed ROE of regulated gas utilities. Ostensibly, this is related to the
108 principles outlined in *Hope* and *Bluefield* that suggest one factor is whether a utility
109 should be allowed to earn a return equal to other utilities of similar risk. Rather than
110 finding the minimum cost of equity and deviating upward because of risk and other
111 factors, Mr. Hevert appears to use other utilities' allowed ROE as a minimum floor.

112 In Mr. Hevert's rebuttal testimony he argues that the Division's Bond Yield Risk
113 Premium analysis does not "reflect the well-known principle that the ERP is inversely
114 related to the risk-free rate."[5] Because the Bond Yield Risk Premium does not reflect this
115 principle Mr. Hevert has some concerns with the analysis done by the Division. In a
116 similar fashion, because Mr. Hevert's ranges do not fit within the principle that cost of
117 equity represents a minimum cost, his ranges should cause serious concern to the

[5] See rebuttal testimony of Mr. Robert B. Hevert line 386.

118 Commission. His suggested range is significantly higher than warranted given traditional
119 regulatory and financial principles. Mr. Hevert does not provide any discussion to justify
120 why DEU's ROE should be significantly higher than most of the rate cases completed
121 this year in other jurisdictions.[6]

122 The Division calculated a range of 8.09 percent to 9.55 percent with a recommendation of
123 9.25 percent. Embedded in this recommendation is the belief that 8.09 is the minimum
124 cost.

125 The *Hope* and *Bluefield* cases establish a few principles to be considered: (1) that the
126 utility be allowed an opportunity to earn a return on its utility property generally equal to
127 returns earned by other companies of similar risk; (2) this return should assure confidence
128 in the financial soundness of the utility; (3) this allowed return should maintain and
129 support the credit of the company and allow it to attract capital; (4) recognition that a
130 return that is "right" at one time may become high or low by changes in the economy
131 regarding alternative investments; and (5) particularly in *Hope,* what is important is that
132 the "end result" of the rate order be just and reasonable; it is less important how that
133 result is arrived at. While the above list reflects the rights of the utility as outlined in
134 *Hope* and *Bluefield* cases, the public interest requires rates to be "just and reasonable,"
135 introducing a measure of fairness toward the Company's captive customers.

136 The Division's recommendation fits nicely into the theory suggested by Dr. Bonbright
137 and the *Hope* and *Bluefield* standards. The ROE of 9.25 percent is above the floor
138 calculated in each of the financial calculations done while providing just and reasonable
139 rates to the company as well as the captive customers of DEU. As will be illustrated later
140 in my testimony, the Division's ROE is lower than the comparable group of companies
141 because DEU has lower risks than the comparable group of companies. This lower
142 recommendation still follows the *Hope* and *Bluefield* cases because utilities are generally
143 given the opportunity to earn equal returns earned by other companies of <u>similar risk</u>.

[6] See rebuttal testimony of Mr. Robert B. Hevert DEU Exhibit 2.09

144 Because there is way to reconcile Mr. Hevert's recommended range with long practice
145 and regulatory principles outlined by experts like Dr. Bonbright, and other relevant
146 principles, Mr. Hevert's analysis is not credible.

147 IV. ROE RECOMMENDATION

148 **Q. MR. HEVERT BELIEVES THE DIVISION'S 9.25 PERCENT ROE**
149 **RECOMMENDATION IS FUNDAMENTALLY UNSUPPORTED AND IS NOT**
150 **COMPARABLE TO THE AVERAGE AUTHORIZED ROE FOR NATURAL GAS**
151 **UTILITES.** [7] **DO YOU AGREE?**

152 A. No. Part of his reasoning for suggesting the ROE is fundamentally unsupported is the
153 large difference between the ROE recommended by the Division and the average
154 authorized ROE for natural gas utilities in 2019. Mr. Hevert seems to be extremely
155 uncomfortable with the 43-basis point[8] difference between the Division's median
156 analytical estimate and its ROE recommendation. Mr. Hevert does not seem to have the
157 same discomfort in recommending a 10.5 percent ROE, which is 80-basis points higher
158 than the 9.70 percent average authorized ROE for natural gas utilities in 2019. Mr.
159 Hevert's recommendaton is almost double the basis point difference of the Division, yet
160 he claims that his calculation is just and reasonable.

161 Mr. Hevert is accurate when he states the Division's recommendation is not comparable
162 to the average authorized ROE for natural gas utilities.[9] But it is consistent with those
163 authorized ROEs when considering relevant factors. Additionally, the Division's
164 analysis suggests the market data, financial theories, and average authorized ROE for
165 natural gas utilities are odds. Using the mean and median analytical estimates calculated
166 by the Division[10] the basis-point difference from the average authorized ROE for natural
167 gas utilities is 159 and 88 basis points respectively. Authorized ROEs appear too high

[7] See rebuttal testimony of Mr. Robert B. Hevert lines 125 – 126
[8] *Ibid.,* line 116
[9] *Ibid.,* line 126
[10] See direct testimony of Casey J. Coleman DPU Exhibit 3.02 ROE Summary

168 relative to longstanding measures. The gap grows even wider when looking at the
169 difference between DEU's current ROE and the calculated ROE's for 2019. The gap is
170 174 and 103 basis points. Mr. Hevert's analytical preferences and departures from them
171 show far greater attention to shareholders' concerns over a relatively modest drop in
172 returns than over ratepayers' ability to cover a much more significant increase in them.

173 Mr. Hevert also continues describing why he views the Division's ROE as fundamentally
174 unsupported because no discussion as to the specifics of gradualism is included. He
175 believes because it "is difficult to reconcile how investors would view a 60-basis point
176 decrease in the Company's authorized ROE as 'supportive', particularly in the context of
177 recently authorized ROEs for other natural gas utilities",[11] the ROE proposed by the
178 Division is fundamentally unsupported. He misunderstands gradualism, which is a post-
179 hoc pragmatic tool, not an underlying principle for determining a correct figure.

180 It appears Mr. Hevert is arguing that because investors will not see a rate decrease as
181 supportive, the Commission should not lower the ROE. However, the question is not the
182 relationship between past ROE and the new one, as much as the new ROE relative to
183 other options for capital investment. Additionally, the Commission is not charged with
184 setting an ROE for the benefit of investors alone. Rather, the Commission must set just
185 and reasonable rates in support of the public interest. Gradualism can be a practical
186 option, when the financial data and average authorized ROE for natural gas utilities are
187 different. This is the current market situation. However, shareholders have enjoyed an
188 authorized return set in a rate case concluded approximately six years ago, during which
189 time interest rates have remained historically low. Far from reasonable application of
190 gradualism, Mr. Hevert appears to simply suggest further delays in setting appropriate
191 rates.

[11] See rebuttal testimony of Robert B. Hevert lines 137 – 139

192 The Division's recommended ROE of 9.25 percent balances out the competing forces of
193 customers and investors while recognizing the need for gradualism in the current market
194 and the Utah specific regulatory climate. It allows just and reasonable rates.

195 In today's financial market, applying gradualism is probably the area that requires the
196 most seasoned judgment and analysis to arrive at the correct ROE. In recommending the
197 9.25 percent ROE, the Division looked at the past Commission order that lowered the
198 ROE in that proceeding by 50 basis points.[12] This provided a general framework for an
199 amount that the Commission was comfortable with and seemed reasonable. Applying the
200 financial models and theories the Division calculated the cost of equity for DEU roughly
201 around 8.09 to 8.82 percent. From a ratepayer's perspective, a rate higher than this
202 represents a premium on the actual cost of equity. From an investor's perspective, an
203 ROE below the average authorized ROE for natural gas utilities, which was calculated at
204 9.60 percent by the Division in its direct testimony, represents something of a discount
205 against other options. Something between the ratepayer- and shareholder-centric numbers
206 represents the number the public interest requires for just and reasonable rates.

207 Total market returns are also relevant. Duff and Phelps' published market cost of equity
208 is 9.0 percent.[13] Because DEU is a regulated natural gas company with increased
209 stability and certainty over most market participants, its ROE should be below that of the
210 total market. Following this well understood financial theory, the ROE for Dominion
211 should be below 9.0 percent or the total market return if there were no competing
212 principles.

213 Dr. Bonbright discussed investor expectations as well as consumer expectations when he
214 stated:

> 215 "[U]nder systems of private or public ownership that depend entirely on
> 216 revenues rather than on taxes for financial support, there is an important
> 217 degree of harmony between the interests of consumers and of
> 218 investors. This partial harmony justifies a public service commission in

[12] See Commission Report and Order in Docket 13-057-05 Questar Gas Company 2013 General Rate Case
[13] Duff and Phelps 2019 Valuation Handbook U.S. Industry Cost of Capital page 20

219 going far toward the acceptance of the long-run interests of consumers as
220 its sole responsibility. With an important qualification, the ***legitimate***
221 interests of investors may be regarded as amply protected by the allowance
222 of rates sufficiently high to maintain corporate credit and hence to assure
223 that maintenance of adequate service." [14]

224 An ROE for DEU of 8.85 percent or lower – a 100 basis point decrease – would likely
225 not be just and reasonable when weighing investor expectations. Therefore, a rate
226 reflecting a gradual reduction to ROE is necessary. Based on its analysis and experience,
227 the Division chose a 9.25 percent ROE as the just and reasonable point. The conclusion is
228 firmly supported for the following reasons.

229 When analyzing the total market return as calculated by Duff and Phelps, a 9.25 percent
230 ROE is not significantly higher than the total market return with only a 25-basis point
231 difference. From a ratepayer's perspective, a 9.25 ROE is an increase of 43-basis points
232 from the analytical median calculated by the Division. Finally from an investor's
233 standpoint, the ROE would be decreasing 35-basis points from the calculated average
234 authorized ROE for natural gas utilities.[15] Changes of 25, 43, or 35-basis points would
235 fall within the range of the 50-point basis drop from the Commission's previous rate case.

236 V. DEU RISK AND THE EFFECT ON ROE

237 **Q. THE DIVISION'S ROE OF 9.25 PERCENT IS LOWER THAN THE AVERAGE**
238 **AUTHORIZED ROE FOR NATURAL GAS UTILITIES. CAN YOU EXPLAIN**
239 **WHY THE ROE FOR DEU SHOULD BE LOWER THAN THE AVERAGE FOR**
240 **NATURAL GAS UTILITIES?**

[14] James C. Bonbright, *Principles of Public Utility Rates* (New York: Columbia University Press, 1961), republished on the web (July 2005) Page 39 emphasis added: http://www.terry.uga.edu/bonbright/publications

[15] Mr. Hevert calculates in his rebuttal testimony an average allowed ROE for natural gas utilities at 9.7 percent. The direct testimony of the Division calculates the average allowed ROE for natural gas utilities at 9.6 percent. For consistency the Division has continued to use the 9.6 percent and will allow the Commission to determine the appropriate average allowed ROE for natural gas utilities.

241 A. Yes. The simple answer is DEU is less risky than other natural gas utilities. Dr. Roger A
242 Morin, discusses various risks that are determinants of required return. [16] Dr. Morin
243 explains that the Risk Premium is made up of a variety of risks, those risks include; (1)
244 Interest rate risk, (2) Business Risk, (3) Regulatory Risk, (4) Financial Risk, and (5)
245 Liquidity Risk. Required return is the sum of the risk-free rate and the risk premium.

246 Of the risks listed above, business risk is the area where DEU would be extensively
247 different than the whole market and noticeably different from a comparable list of
248 regulated natural gas utilities. To begin the discussion, Dr. Morin explains that
249 "[b]usiness risk encompasses all the operating factors that collectively increase the
250 probability that expected future income flows accruing to investors may not be
251 realized." [17]

252 He continues that "[b]usiness risk is due to sales volatility and operating leverage. Sales
253 volatility is the uncertainty in the demand for the company's products due in part to
254 external non-controllable factors, such as the basic cyclicality of the demand for the
255 company's products, the products' income and price elasticity, the degree of competition,
256 the availability of product substitutes, the risk of technological obsolescence, the degree
257 and quality of regulation, weather variations, and the conditions of the labor and raw
258 materials market.

259 Sales volatility is also related to internal or controllable factors. The reactions of a
260 company's management to the business environment, such as adoption of a particular
261 cost structure, are important dimensions of business risk."[18]

262 Dr. Morin outlines how business risk is assessed "by examining the strength of the long-
263 term demand for utility products and services. Many factors have an impact on business
264 risk, including the size and growth rate of the market, the diversity of the customer base
265 and its economic solidity, the availability of substitutes and degree of competition, and

[16] Morin, Roger A, *New Regulator Finance* (Public Utilities Reports, 2006) 35-45
[17] *Ibid* page 38
[18] *Ibid* page 38

266 the utility's relative competitive standing in its major markets, including residential,
267 industrial, and commercial markets."[19]

268 Finally, Dr. Morin makes this important observation, "[t]he regional economics of a
269 utility's service territory exert a strong influence on the company's risk."[20]

270 Mr. Hevert's acknowledges company specific risk differences and their effects on ROE
271 in his direct and rebuttal testimony when he claims his ROE recommendation considers a
272 variety of factors, including capital market conditions in general and <u>certain risks faced</u>
273 <u>by DEU</u>. [21] What is puzzling is that Mr. Hevert's assertion that his recommendation
274 includes certain risks faced by DEU, but there is almost no discussion in his testimony of
275 what those "certain risks faced by DEU" would be. The specific risks discussed by Mr.
276 Hevert include; (1) electrification on the natural gas utility sector, (2) factors associated
277 with the DEU's planned capital expenditures, and the effect, if any, on certain regulatory
278 mechanisms, and (3) flotation costs.

279 Electrification is an issue that is starting to affect regulated natural gas companies in
280 states like California, Washington, Hawaii, New Mexico, New York, Maine, Nevada, and
281 Colorado. Although electrification is becoming an issue faced by the entire natural gas
282 industry, this issue is not applicable to DEU for this rate case. The State of Utah has not
283 enacted any laws eliminating the use of natural gas for residential or industrial customers.
284 There is no evidence that significant fuel switching is occurring. In fact, DEU has
285 recently applied to expand its service territory.[22] Therefore there is no evidence
286 indicating electrification poses a company-specific risk during the test year or likely rate
287 effective period for this case.

288 As previously discussed[23], the Commission should not adjust the ROE because of
289 flotation costs. Those are the only specific company risks that Mr. Hevert discusses in his

[19] *Ibid* page 39
[20] *Ibid* page 39
[21] See e.g. rebuttal testimony of Robert B. Hevert line 33
[22] Docket No. 19-057-31 Request of Dominion Energy Utah to Extend Natural Gas Service to Eureka, Utah
[23] See direct testimony of Casey J. Coleman lines 227 – 234

290 testimony supporting an ROE for DEU. No evidence has been provided to demonstrate
291 or show that DEU has high flotation costs.

292 In all the pages of testimony filed by Mr. Hevert there is no other discussion on what
293 "specific company risks" DEU faces that would justify an ROE of 10.5 percent. When
294 comparing DEU to the entire market, it is difficult to accept that DEU is more
295 competitive, has a greater risk of technological obsolescence, and the amount of business
296 risk as a regulated utility is higher than a software developer or myriad other businesses
297 seeking capital in the market. Rather, DEU is lower risk because it is a regulated utility
298 with a strong and vibrant regional economy for its customer base, a growing population
299 in the State of Utah increasing demand for its products, and a majority of the population
300 using natural gas as the primary heating source in the winter season.

301 VI. TREND IN THE AUTHORIZED ROE FOR PROXY COMPANIES

302 **Q. WILL YOU DISCUSS THE VALIDITY OF MR. HEVERT'S OBSERVATIONS**
303 **REGARDING THE TREND IN AUTHORIZED ROE FOR NATURAL GAS**
304 **UTILITIES?**

305 A. Yes. Mr. Hevert in his rebuttal testimony discusses how there has not been an observable
306 trend in the allowed ROE by other Commissions. He was critical that the Division's
307 recommendation of 9.25 percent is "lower than all but one return authorized in 2019" [24].
308 Once again, as has been a consistent theme in Mr. Hevert's testimony, he does not seem
309 to have the same issue that his 10.5 percent ROE has not been authorized by <u>any</u>
310 Commission in 2019. His position is the true outlier. He has not provided any
311 explanation why the Commission should accept his 10.5 percent ROE as just and
312 reasonable when comparing those rates to companies of comparable risk. His only
313 justification is that his financial calculations show that the ROE must be in the ranges he
314 recommends.

[24] See rebuttal testimony of Robert B. Hevert lines 184 – 199

315 A second point to consider when looking at the authorized ROEs for natural gas utilities
316 is the number of rate cases Mr. Hevert uses to base his premise that there has been no
317 trend in authorized ROEs.[25] Mr. Hevert states that for YTD 2019 there have been nine
318 rate cases that have been completed. Generally speaking, a sample of 30 or more is
319 required for statistical significance; nine is not a very big sample. Of the nine selected
320 cases, six are settlements, which means the ROE for those companies could have
321 embedded a variety of factors unknown to the outside observer. With such a small
322 sample size it is difficult to draw any conclusions about the trend of rates in 2019
323 compared to other years. The past rate case information provided by Mr. Hevert in
324 Exhibit 2.09R is also different than the past rate case information provided in the
325 Division's direct testimony as DPU Exhibit 3.10. S&P Global, formerly Regulatory
326 Research Associates (RRA) reports that there have been 48 rate case decisions for YTD
327 2019, which is much different than the 9 reported by Mr. Hevert. The list of YTD 2019
328 rate case decisions has been included as DPU Exhibit 3.02SR.

329 A final point on authorized ROEs that can be analyzed from the information provided by
330 Mr. Hevert is that from 2015 – 2019 there have been only two occasions when the
331 authorized rate of return was 10.5 percent or higher.[26] The first case was Atlanta Gas and
332 Light Co. authorized ROE of 10.55 percent approved in February 2017. An authorized
333 ROE of 11.88 percent was approved in September 2017 for ENSTAR Natural Gas Co.
334 which is located in Alaska.

335 Mr. Hevert does not explain how DEU is comparable in risk today to what risks were
336 faced by ENSTAR Natural Gas Co. and Atlanta Gas and Light Co. in 2017. Some
337 analysis of relative risks would be needed to credit these two outlier rates to the DEU
338 ledger of comparable companies in this case. Unfortunately, no such analysis was done
339 and parties are left trying to determine how an ROE of 10.5 percent provides just and

[25] See rebuttal testimony of Robert B. Hevert DEU Exhibit 2.09R
[26] See rebuttal testimony of Robert B. Hevert Chart 1: Natural Gas Distribution Authorized Returns (2015 – 2019)

340 reasonable rates for DEU, despite nearly every other gas utility being compensated
341 significantly less for equity capital.

342 VII. CAPITAL ASSET PRICING MODEL

343 **Q. WILL YOU DISCUSS THE VALIDITY OF MR. HEVERT'S OBSERVATIONS**
344 **REGARDING THE DIVISION'S METHODS FOR DETERMINING ROE USING**
345 **THE CAPITAL ASSET PRICING MODEL?**

346 A. Yes. Mr. Hevert tries to argue that the Market Risk Premia used by the Division is not
347 reasonable because the 8.70 and 9.00 percent calculated by the Division is below the
348 recommended ROE of 9.25 percent. The Division appreciates that Mr. Hevert recognizes
349 the paradox that exists when the market premium calculated by a respected financial
350 company like Duff and Phelps or Dr. Damodaran is different than the allowed ROE
351 authorized by state utility commissions.

352 Mr. Hevert is also accurate in implying that the Division's ROE should not exceed the
353 8.70 percent or 9.00 percent respectively. If the Division were recommending an ROE
354 for DEU entirely on the financial models, then the appropriate ROE would be below 9.00
355 percent. However, the Division has employed gradualism in recognition of the large
356 deviation from existing rates, just as Mr. Hevert suggests we should. However, the
357 Division is of the view that Commissions are widely overcompensating shareholders on
358 equity returns given current market conditions relative to historical market conditions.
359 One reason for this is the relative reluctance of Commissions to deviate too far from other
360 utilities' already authorized returns. Thus, the process becomes circular and resistant to
361 changing as the market does, allowing entire business cycles to pass with minimal change
362 to ROEs. This is, of course, its own form of stability and protection from market risk.

363 Because the Division's recommendation of 9.25 percent ROE includes adjustments for
364 gradualism, other policy considerations, and its objective of finding just and reasonable
365 rates for both customers and investors, there is no difficulty in reconciling the market risk

366 premia used with the final recommendation. The Commission should accept the market
367 risk premia used by the Division and the recommended ROE of 9.25 percent.

368 When critiquing the Division's Capital Asset Pricing Model (CAPM) results and
369 suggesting the calculation should be rejected by the Commission, Mr. Hevert raises
370 questions about the Beta coefficients applied in the Division's analysis. [27]

371 Mr. Hevert believes that only levered Betas should be used instead of raw or unadjusted
372 Betas because Beta coefficients tend to regress to 1.00 over time, and the use of "raw"
373 Beta coefficients will understate the Beta coefficient for companies with Beta coefficients
374 less than 1.00. In Mr. Hevert's opinion the "use of raw Beta coefficients biases [the
375 Division's] CAPM results downward". [28]

376 Mr. Hevert is correct that the Division's analysis included raw and adjusted Betas. This
377 choice was made in an effort to provide the most complete data for the Commission. No
378 adjustment is needed to the CAPM to correct for the perceived "bias" for companies who
379 have a Beta below 1.0. The Division's CAPM analysis shows the results of using both
380 raw Betas as well as adjusted Betas. This allows the Commission and other parties the
381 opportunity to decide for themselves which is the correct approach and then see the
382 results of that analysis.

383 Finally, Mr. Hevert states "Mr. Coleman has not provided any explanation as to how the
384 sources calculate their Beta coefficients, the period over which they are calculated (two
385 years, five years, etc.), the assumed holding period (daily, weekly, monthly, etc.), or the
386 market index applied (S&P 500, New York Stock Exchange Index, etc.). Without
387 knowing those important parameters, there is no way to know whether they will produce
388 reasonable and meaningful results."[29]

[27] See rebuttal testimony of Robert B. Hevert lines 346 – 352
[28] *Ibid* line 352
[29] *Ibid* lines 353 - 358

389 Although Mr. Hevert is not explicit in his testimony I believe the conclusion he wants the
390 Commission to draw is that because the above information was not provided in the
391 Division's testimony, that the Beta coefficients should be rejected. If the Commission is
392 inclined to reject the Division's Beta coefficients for the above stated lack of explanation,
393 then the Commission must also reject the Mr. Hevert's Beta coefficients in his CAPM
394 analysis. The Division's CAPM analysis is valid and useful; the maladies Mr. Hevert
395 suggests that limit it are non-existent.

396 **Q. CAN YOU DISCUSS THE IMPLICATIONS OF THE DUFF AND PHELPS OR**
397 **DR. DAMODARAN MARKET RISK PREMIA AND MR. HEVERT'S**
398 **RECOMMENDED ROE OF 10.5 PERCENT?**

399 A. Yes. First I note that Duff and Phelps and Dr. Damodaran are highly respected and
400 recognized sources for market risk premia to be used when calculating ROE for
401 companies. The Division is comfortable that the results calculated by these sources
402 present a reasonably accurate picture of the overall market. A total market return in the
403 range of 8.70 percent to 9.00 percent is acceptable and reasonable. What this means is a
404 company with risk comparable to the entire market would have a total return of 8.70
405 percent to 9.00 percent.

406 If respected sources calculate an overall market return of 9.00 percent, a conclusion that
407 DEU is anything other than uniquely risky suggests a 10.5 percent ROE for DEU is far
408 too high. According to basic financial theory, allowing a 10.5 percent return on equity as
409 just and reasonable for DEU, would require concluding that either the Duff and Phelps
410 numbers are totally wrong, that DEU is far riskier than the average non-regulated
411 company, or some other fact that does not appear in the record in this case. Another way
412 to illustrate the point is to calculate the "appropriate" Beta coefficient for DEU that
413 would be required to derive an ROE of 10.5 percent. The formula for the CAPM is as
414 follows:

415 $$k_e = RFR_0 + \beta * (MR-RFR)$$
416 Where: k_e is the cost of common equity

417 RFR_0 is the current risk free rate
418 β is beta, the risk adjustment factor

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

423 The calculation would be as follows:

424 10.5 percent = 3.5 percent + 1.2727(5.5 percent)

425 The risk profile of DEU would have to be significantly higher than a comparable set of
426 regulated natural gas utilities in order to justify an ROE of 10.5 percent. Any Beta
427 number above 1.0 means a stock is riskier than the total stock market. If a total market
428 return of 9.0 percent exists, as calculated by Duff and Phelps, the Beta coefficient for
429 DEU would need to be 1.2727 to justify a 10.5 percent ROE. There is no evidence that
430 DEU should have a Beta coefficient higher than 1.0, Mr. Hevert's recommendation of
431 10.5 percent is incorrect and should be rejected.

432 **Q. IN YOUR DIRECT TESTIMONY AND SURREBUTTAL TESTIMONY YOU**
433 **HAVE DISCUSSED THE TOTAL MARKET RETURN CALCULATED BY DUFF**
434 **AND PHELPS TO BE 9 PERCENT, DO YOU HAVE ANY UPDATES TO THIS**
435 **CALCULATION?**

436 A. Yes. In the 2019 Valuation Handbook U.S. Industry Cost of Capital Market Results
437 Through September 2019, Duff and Phelps changed their calculation for the normalized
438 risk-free rate to 3.0 percent while keeping the Equity Risk Premium to 5.5 percent. This
439 implies a base U.S. cost of equity as of the end of September of 8.5 percent.

440 **Q. IF DUFF AND PHELPS HAS UPDATED ITS BASE U.S. COST OF EQUITY DID**
441 **YOU ADJUST YOUR CALCULATIONS TO REFLECT THIS CHANGE?**

442 A. No. For the sake of clarity when presenting the above analysis about Market Risk Premia
443 I wanted to keep the numbers from my direct testimony and surrebuttal testimony the

444 same. Ultimately, whether 10.5 percent ROE is just and reasonable relies on the financial
445 theories discussed. With the risk-free rate dropping by 50 basis points, that does not
446 change the analysis provided. In reality a lower risk-free rates further strengthens the
447 Division's recommendation of 9.25 while stretching even more the reasonableness of
448 DEU's ROE of 10.5 percent. The change Duff and Phelps catalogs is further evidence of
449 the trend in costs away from higher returns.

450 VIII. DISCOUNTED CASH FLOW MODELS

451 **Q. IN MR. HEVERT'S REBUTTAL TESTIMONY HE CLARIFIES THE METHOD**
452 **HE USED FOR HIS PROXY COMPANIES. DO YOU STILL HAVE ISSUES**
453 **WITH HIS PROXY GROUP?**

454 A. Yes. Mr. Hevert, in responding to the Division's criticism for including New Jersey
455 Resources in the proxy list explained that he had calculated the average operating income
456 over the three most recent years. If at least 60.00 percent of operating income was
457 derived from regulated natural gas utility operations, the company would be included in
458 the proxy group.

459 The Division has issues with this for two reasons. First in his original testimony Mr.
460 Hevert does not mention any three year average. The Division originally rejected New
461 Jersey Resources because the Division's analysis showed it did not meet the 60.00
462 percent threshold for either **income or revenues in 2018**. The Division is concerned that
463 now in rebuttal testimony Mr. Hevert "clarifies" his calculations and how that proxy
464 group was developed. For the Commission and any other party determining the accuracy
465 of Mr. Hevert's work, it is important to know what criteria is being used. Changing the
466 method, or "clarifying" the method later, calls into question the validity of the proxy list
467 from the beginning.

468 The second reason the Division is uncomfortable with Mr. Hevert's proxy group is that it
469 does not appear New Jersey Resources meets the "updated" income threshold described
470 by Mr. Hevert. As DPU Exhibit 3.01SR illustrates, in 2019 and 2018 the net income for

471 natural gas distribution for New Jersey Resources is below 60.00 percent for the entire
472 company. Natural Gas Distribution is higher than 60.00 percent for 2017. The Division
473 is unable to reconcile how New Jersey Resources' three year average for income would
474 be over 60.00 percent as Mr. Hevert is implying. Because of this discrepancy, the
475 Commission should be cautious in placing much weight on the DCF analysis done by Mr.
476 Hevert because his proxy group at the very beginning was incorrect according to his own
477 criteria.

478 IX. FINANCIAL MODELS AND ALLOWED ROE

479 **Q. IN MR. HEVERT'S REBUTTAL TESTIMONY HE ATTEMPTS TO UPDATE**
480 **THE DIVISION'S ANALYSIS, ADJUSTING FOR PERCEIVED FLAWS? DO**
481 **YOU BELIEVE THE UPDATES SUGGESTED BY MR. HEVERT ARE**
482 **NECESSARY?**

483 A. No. Because the financial markets are always changing, it is possible to continually
484 tweak any analysis done. When an outside party begins to tweak and adjust the analysis
485 done by another, there is a real risk that the conclusions supplied are incorrect and
486 inaccurate. In Table 4 of Mr. Hevert's rebuttal testimony he provides a list of "corrected
487 analytical results" for the Division's ROE calculations. [30] He uses this table as a basis to
488 confirm his recommended ROE for DEU at 10.5 percent. Calculating a mean of 10.17
489 percent and a median of 9.95 percent. These adjustments are just as flawed and incorrect
490 as the calculations Mr. Hevert proposes in his rebuttal testimony.

491 As stated previously, Mr. Hevert sees the financial marketplace differently than I do.
492 Each of his "corrected analytical results" would be above the base total market return of
493 9.0 percent calculated by Duff and Phelps. While Mr. Hevert is comfortable with those
494 "calculated" results, I would be leery of those calculations and how they seem to
495 contradict the well know financial principle that regulated utilities are less risky than the
496 entire market. The ROE for utility companies should generally be lower than the entire

[30] See rebuttal testimony of Robert B. Hevert line 422

497 market. Because the "corrected" analytical results by Mr. Hevert cannot be reconciled
498 with this basic financial principle, they should be rejected and the Commission should put
499 no weight on the analysis.

500 The Division's direct testimony included calculations of ROE using a variety of financial
501 models. Those different calculations were provided to illustrate the appropriate range or
502 "ballpark" for DEU's ROE. Mr. Hevert showed some discrepancies in the analysis done
503 by the Division, which could lead to some adjustments in the calculated ROE for DEU.
504 None of the discrepancies shown by Mr. Hevert are of a material nature that would
505 substantially adjust the calculated ROE. Even with some minor adjustments to the
506 calculated ROE, this does not change the Division's original recommendation. The
507 calculated ROE would be below 9.0 percent, an uncomfortable drop for regulatory
508 commissions and investors. Because of gradualism and other policy considerations, the
509 recommended ROE for DEU is 9.25 percent, which softens the drop in the calculated
510 ROE from existing rates.

511 Additionally, because the original ROE calculation by the Division provided information
512 to the Commission that was "in the ballpark" for an acceptable ROE, no updating or
513 adjusting of the Division's original analysis is necessary at this time.

514 X. CONCLUSION

515 **Q. WHAT IS YOUR CONCLUSION REGARDING THE COMPANY'S COST OF**
516 **EQUITY?**

517 A. Based on the reasons presented in my direct and surrebuttal testimony the reasonable
518 range of ROE estimates is 8.09 percent to 9.55 percent. The Division's recommended
519 ROE of 9.25 percent is a just and reasonable outcome for investors, customers, and other
520 interested parties. The Commission should adopt the 9.25 recommended ROE for DEU.

521 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

522 A. Yes.