BEFORE THE

PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of Rocky Mountain Power for Authority To Increase its Retail Electric Utility Service Rates in Utah and for Approval of Its Proposed Electric Service Schedules and Electric Service Regulations.	))))))))))	**Docket No. 13-035-184**

Surrebuttal Testimony and Exhibits of

Michael P. Gorman

On behalf of

The Federal Executive Agencies

May 22, 2014

Project 9908

BEFORE THE

PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of Rocky Mountain Power for Authority To Increase its Retail Electric Utility Service Rates in Utah and for Approval of Its Proposed Electric Service Schedules and Electric Service Regulations.	)	**Docket No. 13-035-184**

Table of Contents to the
<u>Surrebuttal Testimony of Michael P. Gorman</u>

<u>Page</u>

Response to Mr. Bruce Williams 2

Response to Dr. Hadaway 9

Exhibit FEA___(MPG-1SR) and Exhibit FEA___(MPG-2SR)

BEFORE THE

PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of Rocky Mountain Power for Authority To Increase its Retail Electric Utility Service Rates in Utah and for Approval of Its Proposed Electric Service Schedules and Electric Service Regulations.	)	**Docket No. 13-035-184**

STATE OF MISSOURI)
) SS
COUNTY OF ST. LOUIS)

Affidavit of Michael P. Gorman

Michael P. Gorman, being first duly sworn, on his oath states:

1. My name is Michael P. Gorman. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by the Federal Executive Agencies in this proceeding on their behalf.

2. Attached hereto and made a part hereof for all purposes are my surrebuttal testimony and exhibits which were prepared in written form for introduction into evidence in the Public Service Commission of Utah, Docket No. 13-035-184.

3. I hereby swear and affirm that the testimony and exhibits are true and correct and that they show the matters and things that they purport to show.

____
Michael P. Gorman

Subscribed and sworn to before me this 21st day of May, 2014.

____
Notary Public

BEFORE THE

PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of Rocky Mountain Power for Authority To Increase its Retail Electric Utility Service Rates in Utah and for Approval of Its Proposed Electric Service Schedules and Electric Service Regulations.	)	**Docket No. 13-035-184**

Surrebuttal Testimony of Michael P. Gorman

1 **Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A Michael P. Gorman. My business address is 16690 Swingley Ridge Road,
3 Suite 140, Chesterfield, MO 63017.

4 **Q ARE YOU THE SAME MICHAEL P. GORMAN WHO PREVIOUSLY FILED**
5 **DIRECT TESTIMONY IN THIS PROCEEDING ON BEHALF OF FEDERAL**
6 **EXECUTIVE AGENCIES ("FEA")?**

7 A Yes.

8 **Q WHAT IS THE SUBJECT OF YOUR SURREBUTTAL TESTIMONY?**

9 A I will respond to arguments made by Rocky Mountain Power ("RMP" or
10 "Company") witnesses Bruce Williams and Dr. Samuel Hadaway.

11 **<u>Response to Mr. Bruce Williams</u>**

12 **Q DID MR. WILLIAMS ASSERT THAT THE COMPANY'S PROPOSED**
13 **CAPITAL STRUCTURE IN THIS CASE IS REASONABLE IN COMPARISON**
14 **TO RECENTLY AUTHORIZED CAPITAL STRUCTURES FOR OTHER**
15 **UTILITY COMPANIES?**

16 A Yes. At pages 5 and 6 of his rebuttal testimony, he asserts that during the first
17 quarter of 2014, the average common equity ratio of approved capital structures
18 for electric utilities was 51.08%. This capital structure he believes is reasonably
19 comparable to his revised capital structure which includes a common equity
20 ratio of 51.43%.

21 **Q DO YOU HAVE ANY COMMENTS ON MR. WILLIAMS' REBUTTAL**
22 **TESTIMONY?**

23 A Yes. Mr. Williams seems to believe that the commission approved rates of
24 return, including capital structures during the first quarter of 2014 are relevant
25 in establishing appropriate findings for this case. As such, Mr. Williams should
26 have also observed that the industry average authorized return on equity,
27 excluding Virginia decisions, was 9.57% in the first quarter of 2014. The
28 Regulatory Research Associates report stated as follows:

> 29 The average return on equity (ROE) authorized <u>electric</u> utilities
> 30 was 10.23% in the first quarter of 2014 (eight observations)
> 31 compared to the 10.02% authorized in calendar-2013. We note
> 32 that the 2014 data includes three surcharge/rider generation
> 33 cases in Virginia that incorporate plant-specific ROE premiums.
> 34 Virginia statutes authorize the State Corporation Commission to
> 35 approve ROE premiums of up to 200 basis points for certain
> 36 generation projects (see the <u>Virginia Commission Profile).</u>

37 Excluding these Virginia surcharge/rider generation cases from
38 the data, the average authorized electric ROE was 9.57% for the
39 first three months of 2014 versus 9.8% in calendar-2013. The
40 average ROE authorized gas utilities was 9.54% for the first
41 quarter of 2014 (six observations), compared to 9.68% in
42 calendar-2013. The data do not include a Feb. 20, 2014 New York
43 Public Service Commission steam rate decision for Consolidated
44 Edison Co. of New York that adopted a 9.3% ROE. (See note that
45 this report utilizes the simple mean for the return averages.)[1]

46 **Q DID MR. WILLIAMS OFFER ANY CRITICISMS OF YOUR TESTIMONY?**

47 A Yes. Mr. Williams states that my credit metrics were not performed consistent
48 with Standard & Poor's ("S&P") revised credit rating criteria. He states that S&P
49 modified its credit rating criteria in November 2013, and my financial integrity
50 section of my testimony did not reflect that updated credit metric publication. He
51 specifically says that as part of the November 2013 credit metric update, S&P
52 changed its definition of Funds From Operations ("FFO"), and that my FFO was
53 calculated in a manner that is inconsistent with S&P's revised FFO definition.

54 **Q PLEASE COMMENT ON MR. WILLIAMS' ASSERTION THAT S&P REVISED**
55 **ITS METHODOLOGY, AND YOUR CREDIT METRICS ARE NOT**
56 **MEANINGFUL.**

57 A S&P did revise its benchmarks category methodology in November 2013. I did
58 not rely on that revised benchmark methodology. However, my credit metrics

[1] *Regulatory Research Associates Regulatory Focus*, "Major Rate Case Decisions—January-March 2014," April 9, 2014 at 1, emphasis added.

59 are calculated correctly, are meaningful, and do support the reasonableness of
60 my recommended rate of return.
61 Further, I do not agree with Mr. Williams' assertion that in its revised
62 calculations, S&P changed the method it used to calculate FFO. That assertion
63 is simply not correct. While S&P did change the description of the FFO
64 calculation, it did not change the FFO metric.

65 **Q WHY DO YOU BELIEVE THAT YOUR FFO CALCULATION IS CONSISTENT**
66 **WITH S&P'S NEW METHODOLOGY?**
67 A In Mr. Williams' Exhibit RMP ___ (BNW-3R), page 13, S&P states that its FFO
68 is defined as earnings before interest, taxes, depreciation and amortizations
69 ("EBITDA") less net interest expense and less current tax expense. The FFO
70 is also adjusted for the off balance sheet criteria. In calculating the FFO, I
71 started with the Company's equity return on rate base, which is earnings less
72 interest expense, and tax expense, and I add back in depreciation, amortization
73 and deferred taxes (i.e., non-cash taxes). As such, my FFO calculation is
74 consistent with S&P's definition as included in Mr. Williams' exhibit. His
75 assertion that I calculated FFO inconsistent with S&P's methodology is simply
76 without merit.

77 **Q DID S&P PROVIDE A REASON FOR UPDATING THE CORPORATE**
78 **METHODOLOGY?**
79 A Yes. In its updated methodology criteria book, S&P states the following:

80 Standard & Poor's Rating Services is updating its criteria for rating
81 corporate industrial companies and utilities. The criteria organize
82 the analytical process according to a common framework and
83 articulate the steps in developing the stand alone credit profile
84 (SACP) and issuer credit rating (ICR) for a corporate entity.[2]

85 **Q HAVE YOU UPDATED YOUR FINANCIAL INTEGRITY ANALYSIS TO**
86 **REFLECT S&P'S NEW BENCHMARK TARGET FINANCIAL RATIOS AS**
87 **REFLECTED IN ITS NOVEMBER 2013 REPORT?**

88 A Yes. My updated analysis takes into consideration RMP's revised capital
89 structure, embedded cost of debt, and S&P's revised methodology and target
90 benchmark ratios. RMP has updated its proposed capital structure and cost of
91 debt because of a new debt issuance in March. The updated capital structure
92 and cost of debt are shown on page 4 of Mr. Williams' rebuttal testimony. As
93 shown on my Exhibit FEA____(MPG-1SR), the updated analysis indicates that
94 RMP's Utah Division would produce a Debt-to-EBITDA ratio of 3.2x. This ratio
95 is unchanged from my original analysis. However, because of S&P's updated
96 target benchmark ratios, the original 3.2x fell under the "Significant" category,
97 whereas under the updated benchmark ratios, the Debt-to-EBITDA ratio falls
98 under the "Intermediate" category, with a range of 2.5x to 3.5x.

99 Based on my updated analysis, RMP would produce an FFO-to-Total
100 Debt ratio of 22%. This falls within the "Significant" range of 13% to 23%. This
101 is unchanged from my original analysis which produced an FFO-to-Total-Debt
102 ratio of 22%. It, too, fell in the "Significant" range of 20% to 30%.

---

[2]Standard & Poor's Ratings Direct, *"Criteria: Corporate Methodology,"* November 19, 2013.

103 **Q DID S&P'S UPDATED METHODOLOGY HAVE AN IMPACT ON**
104 **PACIFICORP'S CREDIT RATING?**

105 A No. PacifiCorp has maintained an "A-" credit rating from S&P since at least
106 2009.

107 **Q DOES YOUR UPDATED ANALYSIS BASED ON S&P'S UPDATED**
108 **METHODOLOGY HAVE ANY IMPACT ON YOUR ORIGINAL**
109 **RECOMMENDED RETURN ON EQUITY?**

110 A No. I continue to recommend my original 9.4% return on equity for RMP.

111 **Q DOES MR. WILLIAMS TAKE ISSUE WITH YOUR CREDIT METRIC**
112 **CALCULATIONS?**

113 A Yes. Mr. Williams states that my credit metric analysis is inappropriate because
114 it does not reflect all the liabilities considered by credit rating agencies. Mr.
115 Williams specifically takes issue with the amount of off-balance sheet debt
116 obligations I included in my analysis because it is not identical to the total debt
117 adjustments made by S&P. Based on those assertions, Mr. Williams believes
118 that my credit metric evaluation should not be given any consideration.

119 **Q IS MR. WILLIAMS' ASSESSMENT OF YOUR CREDIT METRIC**
120 **EVALUATIONS VALID?**

121 A No. It is very clear in my direct testimony that I was not attempting to calculate
122 credit metrics in the same way credit rating agencies would calculate them for

123 PacifiCorp's total Company operations. Rather, I was calculating the credit
124 metrics based on the Utah jurisdictional cost of service to determine whether or
125 not the earnings and cash flow opportunities reflected in the Utah cost of service
126 will contribute to RMP's overall financial strength and financial integrity. In
127 significant contrast, S&P would be considering all cash flows and all financial
128 obligations of PacifiCorp in assessing its credit rating. S&P does not focus in
129 on Utah jurisdictional operations, which is the focus of my rate of return and
130 financial integrity assessment. Therefore, there is a difference between S&P's
131 considerations for total Company and my considerations limited to an evaluation
132 of Utah retail operations.

133 The objective of my analysis is to determine whether or not the
134 jurisdictional revenue requirements, earnings and cash flow strength represent
135 fair compensation to RMP for its investments in equipment serving Utah retail
136 customers. In significant contrast, Mr. Williams' assessment would not
137 distinguish between PacifiCorp's cost to serve Utah customers, but would
138 instead include all financial obligations whether they relate to Utah customers
139 or other businesses outside of the Utah retail operations. Mr. Williams' preferred
140 method would allow for a rate adjustment in Utah that subsidizes PacifiCorp
141 financial obligations related to other jurisdictions or other business units.

142 Mr. Williams' arguments are inappropriate because he is not recognizing
143 the need to set just and reasonable rates for Utah customers.

144 **Q YOU MENTIONED BEFORE THAT THE INDUSTRY AVERAGE**
145 **AUTHORIZED RETURN ON EQUITY IN 2014 WAS 9.57%. WAS THERE**
146 **ANYTHING IN THE S&P DOCUMENTS THAT WOULD SUGGEST THAT**
147 **THAT IS A REASONABLE RETURN ON EQUITY BASED ON TODAY'S**
148 **CURRENT MARKET COST OF EQUITY?**

149 A Yes. In Mr. Williams' Exhibit RMP ____ (BNW-2R), page 4, S&P outlined the
150 impact of its outstanding credit ratings for utility companies. S&P stated as
151 follows:

152 IMPACT ON OUTSTANDING RATINGS

153 5. These criteria could affect the issuer credit ratings of
154 about 5% of regulated utilities globally due primarily to the
155 introduction of new financial benchmarks in the corporate
156 criteria. Almost all ratings changes are expected to be no
157 more than one notch, and most are expected to be in an
158 upward direction.[3]

159 S&P's finding on the general strength and credit rating of the industry is clear
160 evidence that recent authorized returns on equity have been supportive of credit
161 standing. Again, excluding the Virginia decisions, the electric utility average
162 authorized return in the first quarter of 2014 was 9.57%. This industry average
163 authorized return on equity was generally very close to my recommended return
164 on equity of 9.4% for RMP in this case.

---

[3] *Standard & Poor's RatingsDirect*: "Criteria/Corporates/Utilities: Key Credit Factors For The Regulated Utilities Industry," November 19, 2013 at 4, provided by RMP as Mr. Williams' Exhibit RMP ___(BNW-2R), page 4 of 24, emphasis added.

165 **Response to Dr. Hadaway**

166 **Q DID DR. HADAWAY OBSERVE ANY TYPOS IN YOUR DIRECT**
167 **TESTIMONY?**

168 A Yes. Dr. Hadaway correctly pointed out that my market risk premium range of
169 "6.9% to 5.7%" described on line 737 of page 37 in my direct testimony is in
170 error. It should read "The average of my market risk premium estimates is 6.2%
171 (6.6% to 5.7%)." Dr. Hadaway also correctly pointed out the column headings
172 on my Exhibit FEA___(MPG-5) and Exhibit FEA___(MPG-6) that are labeled as
173 "2012" should read "2013".

174 **Q DID DR. HADAWAY TAKE ISSUE WITH YOUR RECOMMENDED RETURN**
175 **ON EQUITY IN THIS PROCEEDING?**

176 A Yes. Dr. Hadaway believes that my return on equity was negatively skewed by
177 my assumptions and the application of my models. In support of this, Dr.
178 Hadaway offers criticisms of my multi-stage growth DCF study and my risk
179 premium analysis.

180 **Q WHAT ARE DR. HADAWAY'S CONCERNS RELATED TO YOUR MULTI-**
181 **STAGE GROWTH DCF ESTIMATE?**

182 A Dr. Hadaway takes issue with the GDP growth rate used as a sustainable long-
183 term growth rate. Specifically, he takes issue with the rate of inflation I assumed
184 in my nominal GDP growth rate of 2.1% as published by *Blue Chip Economic*
185 *Indicators,* as well as my real GDP growth rate. He does not agree with the

186 consensus of independent security analysts' projections of long-term GDP
187 growth rate that I used in my direct testimony. Instead, he recommends using
188 the GDP growth rate he projects in his testimony of 5.53%.

189 **Q WHAT ARE DR. HADAWAY'S CONCERNS WITH THE RATE OF INFLATION**
190 **ASSUMED IN YOUR LONG-TERM GDP GROWTH ESTIMATE?**

191 A Dr. Hadaway is concerned that the rate of inflation of approximately 2.1%, as
192 published by *Blue Chip Economic Indicators,* that I used in my GDP growth
193 estimate is far too low. He relies on his analysis which shows that the inflation
194 rate I used is lower than the average rate of inflation in four of the last six 10-year
195 time periods.

196 **Q PLEASE RESPOND.**

197 A As I explained in my direct testimony, I relied on several published estimates for
198 GDP growth such as *Blue Chip Economic Indicators*, EIA's Annual Energy
199 Outlook 2013 with Projections to 2040, as well as the CBO's annual budget and
200 economic outlook report. Each of these sources is projecting similar rates of
201 inflation of around 2%.

202 **Q IS THERE ANY OTHER SUPPORT SHOWING THAT A 2% INFLATION**
203 **OUTLOOK IS CONSISTENT WITH MARKET OUTLOOKS?**
204 A Yes. The *Blue Chip* estimates are also aligned with the Federal Reserve's
205 published long-term inflation target. In a press release, the Federal Reserve
206 stated the following:

> 207 The inflation rate over the longer run is primarily determined by
> 208 monetary policy, and hence the Committee has the ability to
> 209 specify a longer-run goal for inflation. The Committee judges that
> 210 inflation at the rate of 2 percent, as measured by the annual
> 211 change in the price index for personal consumption expenditures,
> 212 is most consistent over the longer run with the Federal Reserve's
> 213 statutory mandate. Communicating this inflation goal clearly to the
> 214 public helps keep longer-term inflation expectations firmly
> 215 anchored, thereby fostering price stability and moderate long-term
> 216 interest rates and enhancing the Committee's ability to promote
> 217 maximum employment in the face of significant economic
> 218 disturbances.[4]

219 Dr. Hadaway's criticisms of the 2.1% inflation I used in my GDP estimate
220 are without merit and go against most independent sources that project future
221 inflation outlooks.

222 **Q IS DR. HADAWAY'S PROPOSAL TO USE HIS LONG-TERM GDP GROWTH**
223 **RATE IN LIEU OF THE CONSENSUS ECONOMISTS' LONG-TERM GDP**
224 **GROWTH RATE APPROPRIATE FOR ACCURATELY ESTIMATING RMP'S**
225 **MARKET COST OF EQUITY IN THIS PROCEEDING?**
226 A No. Dr. Hadaway's proposal is inappropriate for several reasons. First, the
227 objective of analyzing the current market cost of equity is to attempt to measure

---

[4]Federal Reserve Press Release, January 25, 2012 (emphasis added).

228 economic and financial factors used by investors to value stocks. Hence, it is
229 the market's general expectation of future GDP growth which is relevant, not
230 the individual opinion of Dr. Hadaway or me.

231 My GDP growth forecast is based on consensus published independent
232 economists' projections of future GDP growth. This information is available to
233 investors, and likely used by investors to make investment decisions. In
234 significant contrast, Dr. Hadaway's GDP growth forecast is found only in his
235 testimony and is highly unlikely to be reflective of consensus investors and that
236 used by investors to value utility securities. It is known with certainty that Dr.
237 Hadaway's GDP outlook is far higher than the consensus of independent
238 economists.

239 Dr. Hadaway's methodology is simply not a method that reliably captures
240 the consensus of investors' current outlooks. Therefore, he has not produced
241 a reliable estimate of the market's current cost of equity for assuming the
242 investment risk of RMP and the proxy companies.

243 Second, Dr. Hadaway's method of estimating future GDP growth is tied
244 to historical actual realized GDP growth. Dr. Hadaway's analysis is unreliable
245 because he has not captured the expectation of changes in U.S. GDP growth
246 going forward relative to the past. The U.S. economy is now facing significant
247 competition from other countries around the world which likely will impact its
248 growth going forward relative to the growth experienced in the past. Therefore,
249 using only historical data to form expectations of the future, does not reflect

250 likely changes in the world economic and competitive position, and, therefore,
251 does not reflect the consensus of investors' outlooks.

252 **Q WHAT IS A REASONABLE ESTIMATE OF A MULTI-STAGE GROWTH DCF**
253 **MODEL?**

254 A Using the consensus analysts' GDP growth forecast rather than Dr. Hadaway's
255 individual estimate, my multi-stage growth DCF model produces average and
256 median estimates of 8.83% and 8.94%, respectively, as I indicated in my direct
257 testimony. (Gorman Direct Testimony at 25).

258 **Q PLEASE DESCRIBE DR. HADAWAY'S CRITICISMS OF YOUR RISK**
259 **PREMIUM ANALYSIS.**

260 A Dr. Hadaway believes I have understated the equity risk premium because I
261 have not relied on a simple inverse relationship between interest rates and
262 equity risk premiums. Dr. Hadaway believes that if I would have embraced his
263 proposed simplistic relationship, that the equity risk premium would consistently
264 understate the Company's current cost of equity.

265 **Q ARE DR. HADAWAY'S RISK PREMIUM ARGUMENTS ACCURATE?**

266 A No. The clear finding in academic research on equity risk premiums is that the
267 relationship between interest rates and risk premiums changes over time based
268 on a multitude of factors. Second, academic research concludes that the
269 relationship between equity risk premiums and interest rates changes based on

270 the perception of the risk difference between equity investments and fixed
271 income investments, and not simply interest rates.

272 This relationship is not based on a simple inverse relationship between
273 risk premiums and interest rates, but rather is tied to perceived risk differentials
274 between the two competing investments, as described in my direct testimony.

275 **Q PLEASE DESCRIBE THE ACADEMIC RESEARCH ON THE RELATIONSHIP**
276 **BETWEEN EQUITY RISK PREMIUMS AND INTEREST RATES.**

277 A The academic literature on the inverse relationship between interest rates and
278 equity risk premiums has observed that there has been a transient inverse
279 relationship that was not tied to changes in nominal interest rates. It was caused
280 by changes to perceived risk differentials between debt and equity investments.
281 Further, the relationship between interest rates and equity risk premiums is not
282 constant, but rather can change materially over time.

283 Most of the academic literature addressing this issue that I am familiar
284 with is based on market data from the 1980s and very early 1990s. During the
285 1980s and very early 1990s, an inverse relationship did exist. However, that
286 relationship did not exist prior to 1980, and it has not been shown to be the case
287 since the early 1990s. For example, in a paper written by Eugene Brigham,
288 Dilip K. Shome and Steve R. Vinson, entitled "The Risk Premium Approach to
289 Measuring a Utility's Cost of Equity," published in *Financial Management/Spring*
290 *1985,* the authors stated:

291 Any number of events could occur to cause the perceived
292 riskiness of stocks versus bonds to change, but probably the most

293 pervasive factor, over the 1966-1984 period, is related to inflation.
294 Inflationary expectations are, of course, reflected in interest rates.
295 Therefore, one might expect to find a relationship between risk
296 premiums and interest rates. As we noted in our discussion of
297 Exhibit 3, risk premiums were positively correlated with interest
298 rates from 1966 through 1979, but, beginning in 1980, the
299 relationship turned negative.

300 These academics found that there was a positive relationship between
301 interest rates and equity risk premiums before 1980, and an inverse relationship
302 from 1980-1984. This study does not establish a consistent relationship
303 between interest rates and equity risk premiums over the entire period.

304 In the more recent, yet still outdated, study by Robert S. Harris and
305 Felicia C. Marston published in the *Journal of Applied Finance* – 2001, "The
306 Market Risk Premium: Expectational Estimates Using Analysts' Forecasts," the
307 authors expanded an earlier study of risk premiums to cover the period of 1982-
308 1998. In this study, the authors did note a historical inverse relationship
309 between equity risk premiums and interest rates. However, the authors went
310 into detail to explain why that historical relationship was likely affected more by
311 relative investment risk changes, and not simply changes to nominal interest
312 rates as Dr. Hadaway implies in his testimony. The authors state as follows:

313 The market risk premium changes over time and appears
314 inversely related to government interest rates but is positively
315 related to the bond yield spread, which proxies for the incremental
316 risk of investing in equities as opposed to government bonds.

317 Importantly, the authors in that same study concluded as follows:

318 As a result, our evidence does not resolve the equity premium
319 puzzle; rather, the results suggest investors still expect to receive
320 large spreads to invest in equity versus debt instruments.

321 There is strong evidence, however, that the market risk premium
322 changes over time. Moreover, these changes appear linked to the
323 level of interest rates as well as ex ante proxies for risk drawn from
324 interest rate spreads in the bond market.

325 Clearly, the academic literature does not support a simplistic inverse
326 relationship between interest rates and equity risk premiums. Rather, the
327 authors of these studies recognize that equity risk premiums change with
328 perceived changes in investment risk. Dr. Hadaway's simplistic analysis takes
329 no account of changes to perceived risk, and inappropriately increases equity
330 risk premiums for no other reason than a reduction in nominal interest rates.

331 **Q ARE CHANGES TO NOMINAL INTEREST RATES ALONE AN ADEQUATE**
332 **GUIDE TO MEASURE EQUITY RISK PREMIUMS?**

333 A No, they are not. Reductions to nominal interest rates are simply not an
334 adequate reason for increases to equity risk premiums. Indeed, decreases to
335 interest rates over the last ten years have been likely caused by reduced
336 inflation expectations, which would decrease both bond interest rates and
337 common equity required returns. Reduced inflation expectations alone should
338 not change relative debt to equity investment risk, and thus would not cause
339 equity risk premiums to increase. Consequently, Dr. Hadaway's proposal to
340 reflect only an inverse relationship between equity risk premiums and bond
341 interest rates is too simplistic to produce a reliable return estimate, and it should
342 be rejected.

343 **Q DID DR. HADAWAY REACH CONCLUSIONS BASED ON YOUR**
344 **RECOMMENDED RETURN ON EQUITY FOR ENTERGY ARKANSAS**
345 **VERSUS YOUR RECOMMENDED RETURN ON EQUITY IN THIS CASE?**

346 A Yes. At pages 27 and 28 of his rebuttal testimony, Dr. Hadaway observed that
347 I recommended a 9.4% return on equity for Entergy Arkansas in testimony filed
348 in August of 2013. He states that since that time, interest rates have increased.
349 He notes, that a projected Treasury bond of 4.50% compares to a 4.0% bond
350 rate in my August 2013 testimony. He also observes that "Baa" utility bond
351 yields have increased to 5.03%, compared to the 4.87% yield included in my
352 August 2013 testimony. With this information, Dr. Hadaway asserts that my
353 return on equity recommendation should have increased 16 to 50 basis points
354 since August 2013.

355 **Q PLEASE RESPOND TO DR. HADAWAY'S COMPARISON OF YOUR**
356 **AUGUST TESTIMONY TO YOUR CURRENT TESTIMONY.**

357 A Dr. Hadaway's analysis is incomplete. While interest rates have increased in
358 this case relative to 2013, DCF return estimates have actually decreased. In
359 my Entergy Arkansas testimony, my constant growth, sustainable growth, and
360 multi-growth stage analysis for Entergy Arkansas are shown below in Table 1
361 under Column 1. Under Column 2, I show the same results for my DCF studies
362 in this case.

TABLE 1

DCF Comparison

Description	Entergy Arkansas[1] (1)	Current Case[2] (2)
Constant Growth DCF	9.15%	9.28%
Sustainable Growth DCF	8.69%	8.73%
Multi-Stage Growth DCF	8.96%	8.83%
Average	8.93%	8.95%

Sources:
[1]Arkansas Public Service Commission, Docket No. 13-028-U, Gorman Direct Testimony at 28.
[2]Gorman Direct Testimony at 26.

363 As shown in Table 1 above, DCF return estimates in this case are nearly
364 identical to those in the Entergy Arkansas case.
365 I would also note, that while Treasury bond yields were very low in the
366 Entergy Arkansas case, I actually disregarded the results of my CAPM, because
367 I felt the CAPM return on equity estimate was too low to support my
368 recommended return on equity range.
369 The CAPM is largely driven by the risk-free rate or projected Treasury
370 bond yield. The low CAPM return estimates in the Arkansas case were not used
371 to formulate my recommended return on equity range for Entergy Arkansas.
372 Because Treasury bond yields have increased, and CAPM return
373 estimates are more in line with what I believe to be reasonable results, I found
374 my CAPM return estimates in this case to be generally supportive of my
375 recommended range.

376 **Q DO YOU HAVE ANY ADDITIONAL CONCERNS CONCERNING DR.**
377 **HADAWAY'S REBUTTAL TESTIMONY?**

378 A Yes. Beginning on page 1, and throughout the remainder of his rebuttal
379 testimony, Dr. Hadaway expresses concern for rising interest rates due to the
380 Federal Reserve ("the Fed") ending its quantitative easing program through
381 tapering. While I appreciate Dr. Hadaway's concern, it is not certain that interest
382 rates will rise anytime soon.

383 **Q IS THERE CERTAINTY THAT THE TAPERING OF THE FED'S**
384 **QUANTITATIVE EASING POLICY WILL RESULT IN AN INCREASE IN**
385 **UTILITIES' COST OF CAPITAL?**

386 A No. The Fed has tapered its quantitative easing four times in the last five
387 months, and interest rates for utility securities have not increased, but rather
388 have been stable to slightly lower. This is shown on my Exhibit FEA ___ (MPG-
389 2SR). Treasury yields, as well as interest rates for utility bonds rated "Baa" and
390 "A," have actually decreased in the 13-week period ending May 16, 2014,
391 compared to the 26-week average. This is significant because two of the four
392 times the Fed has announced tapering of the quantitative easing program have
393 taken place in the last 13 weeks: once in March 2014, and again in April 2014.

394 In these steps, the Fed reduced its procurement of collateralized
395 mortgage agreements and Treasury securities from $85 billion per month prior
396 to December 2013, down to about $45 billion per month currently. Despite this
397 tapering of the Fed's quantitative easing, utilities' cost of capital has not

398 increased. In fact, 30-year Treasury yields have fallen 54 basis points, “Baa”
399 and “A” rated utility bond yields have fallen 61 and 59 basis points, respectively,
400 since December 13, 2013, the Friday before the Fed’s first tapering
401 announcement

402 While the Fed’s quantitative easing does create uncertainty about future
403 interest rates, it is not proper to interpret the risk as a certainty that interest rates
404 will increase once the Fed’s quantitative easing is terminated.

405 **Q DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

406 A Yes, it does.

\\Doc\Shares\ProlawDocs\SDW\9908\Testimony-BAI\259181.docx