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** **Exhibit No. DPU 1.0 SR** **Cost of Capital** **Surrebuttal Testimony and Exhibits** **Charles E. Peterson**

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

Surrebuttal Testimony of

Charles E. Peterson

May 22, 2014

Surrebuttal Testimony of Charles E. Peterson

Q. Please state your name, business address and title.

A. My name is Charles E. Peterson; my business address is 160 East 300 South, Salt Lake City, Utah 84114; I am a Technical Consultant in the Utah Division of Public Utilities (Division, or DPU).

Q. On whose behalf are you testifying?

A. The Division.

Q. Did you previously file testimony regarding cost of capital in this Docket?

A. Yes. I have filed direct testimony in the cost of capital phase of this docket.

Q. What is the purpose of your surrebuttal testimony?

A. My purpose is to comment on the rebuttal testimonies of PacifiCorp witnesses Mr. Bruce N. Williams and Dr. Samuel C. Hadaway.

I have tried to be brief in my surrebuttal comments. Therefore, I do not comment on all of the points that I could have commented on. Silence on a given subject should not be interpreted as agreement.

<u>Comments on Bruce N. Williams' rebuttal testimony</u>.

Q. In his rebuttal testimony, Mr. Williams proposes to modify the Company's cost of debt

to 5.20 percent. Do you agree with this modification?

A. Yes. On pages 13 and 14 of my direct testimony, I discussed one modification that the Company disclosed in response to DPU data request 37 regarding the issuance of $425 million in first mortgage bonds in March 2014. This adjustment reduced the cost of debt calculation to 5.21 percent from Mr. Williams direct testimony position of 5.28 percent. Furthermore, Mr. Williams has revised downward the estimated interest rate for a prospective debt issuance in March 2015 from a coupon of about 5.05 percent to 4.57 percent, a decline of 48 basis points--nearly half of a percent. This further reduces the overall cost of debt requested by Mr. Williams' and the Company to 5.20 percent. The Division accepts 5.20 percent as the Company's cost of debt for this docket.

Mr. Williams also testifies in his rebuttal testimony that these changes in the Company's financing expectations from his direct testimony have resulted in slight changes in the Company's requested capital structure. The Division accepts these changes in the capital structure.

Q. Mr. Williams discusses your comments on capital structure. Specifically, he claims that once one applies Standard & Poor's adjustments, then the Company's capital structure is already in the 48 to 50 percent range you suggested. Do you have a response?

A. Yes. As I have observed for several years now, Mr. Williams has never shown what, if any, practical effect the Standard & Poor's adjustment has. To the best of the Division's knowledge, the other major rating agencies, Moody's and Fitch, do not make available their similar adjustments, if any. So it is not clear what, if any, relevance the Standard & Poor's adjustment to PacifiCorp's balance sheet has to the unadjusted balance sheets of the companies in my comparable group. This disconnect leads directly to my primary point: Mr. Williams compares the adjusted PacifiCorp figure with the unadjusted comparable companies. If Standard & Poor's makes no similar adjustments to these companies or their subsidiaries, then Mr. Williams would have a point; but he does not argue and demonstrate that. If Standard & Poor's makes similar adjustments to the comparable companies or their subsidiaries, then Mr. Williams' argument is specious.

Q. Mr. Williams indicates that in the last two years, or so, the Company's requested capital structure for equity has declined 67 basis points. Do you have a comment on that?

A. Yes, but only to say that the change is moving in the right direction. As Mr. Williams recognized, the Division is not asking for any change to the Company's requested capital structure in this docket, but it may fully explore the issue in the future.

<u>Comments on Dr. Samuel C. Hadaway's rebuttal testimony</u>.

Q. What are the general points that Dr. Hadaway attempts to make in his rebuttal testimony?

A. Dr. Hadaway believes that the DCF models do not reflect Federal Reserve (Fed) policy and should largely be ignored when the Fed is keeping interest rates low to stimulate the economy;[1] that the various indicators, particularly the DCF models do not reflect his

[1] See Rebuttal Testimony of Samuel C. Hadaway, lines 141-152. Presumably Dr. Hadaway will argue for lower authorized ROEs when the Fed policy turns restrictive.

assertions of rising interest rates;[2] and that "in the context of" the Commission's Questar Gas Company decision (Questar decision)[3] regarding its authorized return on equity "it is not consistent for the other parties to offer lower ROE recommendations for RMP."[4] Therefore, Dr. Hadaway concludes that "[his] opinion that the Company's cost of equity is 10.0 percent is reasonable and appropriate."[5]

Q. What approach will you use to respond to Dr. Hadaway's general points?

A. I will discuss the concepts in turn.

Q. What will you discuss first?

A. First I will discuss the issue of Fed policy, rising interest rates, and DCF models since these are all tied together. The dividend yield component of the DCF models is a direct reflection of the current stock market conditions. The market participants can be assumed to know about Fed policy, interest rates and interest rate expectations. Yet despite the environment of Fed "tapering" and various forecasts for rising interest rates, investors have continued to support electric utility prices that set dividend yields around 4.0 percent. This is a direct reflection of investor consensus cost of equity for those electric utility investments. The Efficient Market Hypothesis (EMH) would predict that stock prices reflect all information available to investors, and new information is quickly reflected in those prices. In a recent text on utility finance, Drs. Giacchino and Lesser had this to say:

> Although there are academic debates over which form of the EMH, if any, is relevant, it seems clear that the Strong form of the EMH is overly restrictive…There is more debate over the relevance of the weak and semi-strong forms, but for purposes of estimating the

[2] See, for example, Rebuttal Testimony of Samuel C. Hadaway at pages 2, 4 and 7.
[3] See Questar Gas Company, Docket No. 13-057-05, Report and Order, February 21, 2014.
[4] Rebuttal Testimony of Samuel C. Hadaway, lines 106-109.
[5] Ibid., lines 16-18.

> rate of return for regulated firms, the semi-strong form of the EMH is usually regarded as relevant, because it provides the conceptual basis for focusing on expectations about future performance, rather than on past performance. In the context of the DCF model approach, the EMH means that the closing price of a stock on any given day will reflect investors' collective expectations about the stock's future performance and, hence, cash flows.
>
> Since the economic meltdown of 2008, some have argued that the EMH is "dead" and that markets are not rational. ***In our view, this debate is silly.*** The EMH states that market prices incorporate all available information and that nobody can "beat the market" with public information. It does not state that all public information is accurate, nor that all investors are rational. Moreover, regardless of debates over the EMH somehow "caused" the economic meltdown of 2008, the fact remains that the EMH provides the foundation on which to base the current price of publicly traded utilities and estimate the cost of equity capital. ***In fact, if one rejects the EMH, then regulators have no available methodologies with which to estimate the required equity return for regulated utilities.*** Without that foundation, no models—not the CAPM, not Fama-French, not the different DCF models we discuss in this chapter—can be used. In such a circumstance, precisely what would regulators use to set regulated returns, other than perhaps a dartboard? [6]

Given his statements about the DCF models and the markets generally, Dr. Hadaway apparently does not believe in the EMH or any of its flavors.

Likewise, Dr. Hadaway's own updates of actual interest rates show that since peaking in late 2013, interest rates have consistently declined in 2014.[7] Indeed, Dr. Hadaway's own client, PacifiCorp, has reduced by half a percentage point its estimate of the rate for the bond issuance in 2015 (see above discussion of Mr. Williams' rebuttal testimony). While it may be true that the "conventional wisdom" is that interest rates will increase in the future, the

[6] Giacchino, Leonardo R., Ph.D., and Jonathan A. Lesser, Ph.D. *Principles of Utility Corporate Finance* (Vienna, Virginia: Public Utility Reports, Inc., 2011), 251. (Emphasis added, internal citations omitted).
[7] Hadaway, Op. Cit. Exhibit RMP_(SCH-1R-Econ Data).

"conventional wisdom" has often been wrong. One only has to refer to the Standard & Poor's interest rate forecasts that Dr. Hadaway used to include with his testimony in previous general rate case dockets for an example.[8]

Rather than being "out of sync with the current cost of equity"[9] the traditional DCF models instead continue to be the best indicators of current investor consensus regarding the cost of equity for electric utilities.

Q. Do rising interest rates necessarily result in declining cost of equity?

A. No. If the economy is improving and growing, then generally the demand for money will increase to fund that growth. In this event demand for money will put upward pressure on interest rates. At the same time a growing economy can drive stock prices higher, which will tend to lower the cost of equity. So it is quite possible to have a situation of rising interest rates and declining cost of equity. There is nothing illogical or contrary to economic theory about that.

Q. What do you have to say about Dr. Hadaway's citation to and interpretation of the Commission's recent Questar decision?

A. Dr. Hadaway's reference to the Questar decision and the bent of his interpretation is not unexpected. Questar Gas is a different company, in a different industry, the Commission's decision was based upon a different starting point (i.e. Questar's previous authorized return

[8] For a critique of the Standard & Poor's interest rate forecasts, see my surrebuttal testimony in Docket No. 10-035-124, pages 5-6 and DPU Exhibit 4.2-SR. It is also interesting to note that we were having a similar discussion in Docket No. 10-035-124 about potentially rising interest rates: see my surrebuttal testimony at pages 3-4.
[9] Hadaway, Op. Cit. lines 141-142.

on equity was 10.35 percent, whereas PacifiCorp's current authorized return on equity is 9.80 percent), and the Questar decision was based upon market data from an earlier time period. Therefore, after even a cursory analysis, Dr. Hadaway's reliance upon the Questar decision to support his recommended ROE is illogical and unwarranted, but nonetheless, as discussed below, Dr. Hadaway relies upon the Questar decision as his only remaining basis to support a 10.0 percent ROE for PacifiCorp.

Q. Dr. Hadaway made specific criticisms of your ROE analyses. Do you have responses to those criticisms?

A. Yes. Briefly, in addition to attempting to discredit any reliance on DCF estimators, Dr. Hadaway's primary criticisms appear to be that because interest rates are up since 2012, my ROE recommendation should be up as well; that my ROE recommendation does not reflect the Commission's Questar decision; my list of comparable, or proxy, companies differs from his; my growth rates in the DCF models are too low, but irrelevant because DCF models are irrelevant; and that I calculated results for the Capital Asset Pricing Model (CAPM) and considered other risk premium models. I will briefly respond to each of these in turn.

As discussed above, I reject completely Dr. Hadaway's assertions that the DCF models are now irrelevant: DCF models continue to reflect the market conditions an investor actually faces. Also, as I have discussed above, there is no, *a priori* reason to expect that just because interest rates are somewhat higher in one time period versus another time period, that cost of equity will necessarily be lower—one has to make actual market observations to see which direction, if any, cost of equity might have moved. In the current situation, although higher than in 2012, interest rates remain relatively low by historical standards.

I discussed the Questar decision in my direct testimony, and I discussed it further above, so I will not address it further here.

I continue to believe that some of Dr. Hadaway's proxy companies are less appropriate than those I selected either due to relatively small electric utility operations, or due to small size. Dr. Hadaway is correct, however, that in this case a selection of a reasonable sample size of companies that have operations in the electric utility industry will probably have no significant effect on the ROE estimates.

Regarding my risk premium models, Dr. Hadaway makes the correct, if obvious, observation that the selection of inputs affects the outcome.[10] The risk premium models that use interest rate differences to adjust the expected market return to estimate the cost of equity for a particular company are relatively crude estimators in that they assume direct connections between the debt rate and the cost of equity for a particular company that may not hold. I gave them the weight I felt they deserved. I included in my direct testimony a discussion of the recent estimates of the market risk premium published by Value Line and Professor Damodaran. Value Line is a widely followed stock market newsletter, and Professor Damodaran is a recognized expert in asset valuation and finance who has published a number of text books. Their estimates suggest that the returns investors are now expecting may be lower than the DCF models presented in this docket suggest and provide a validation for the

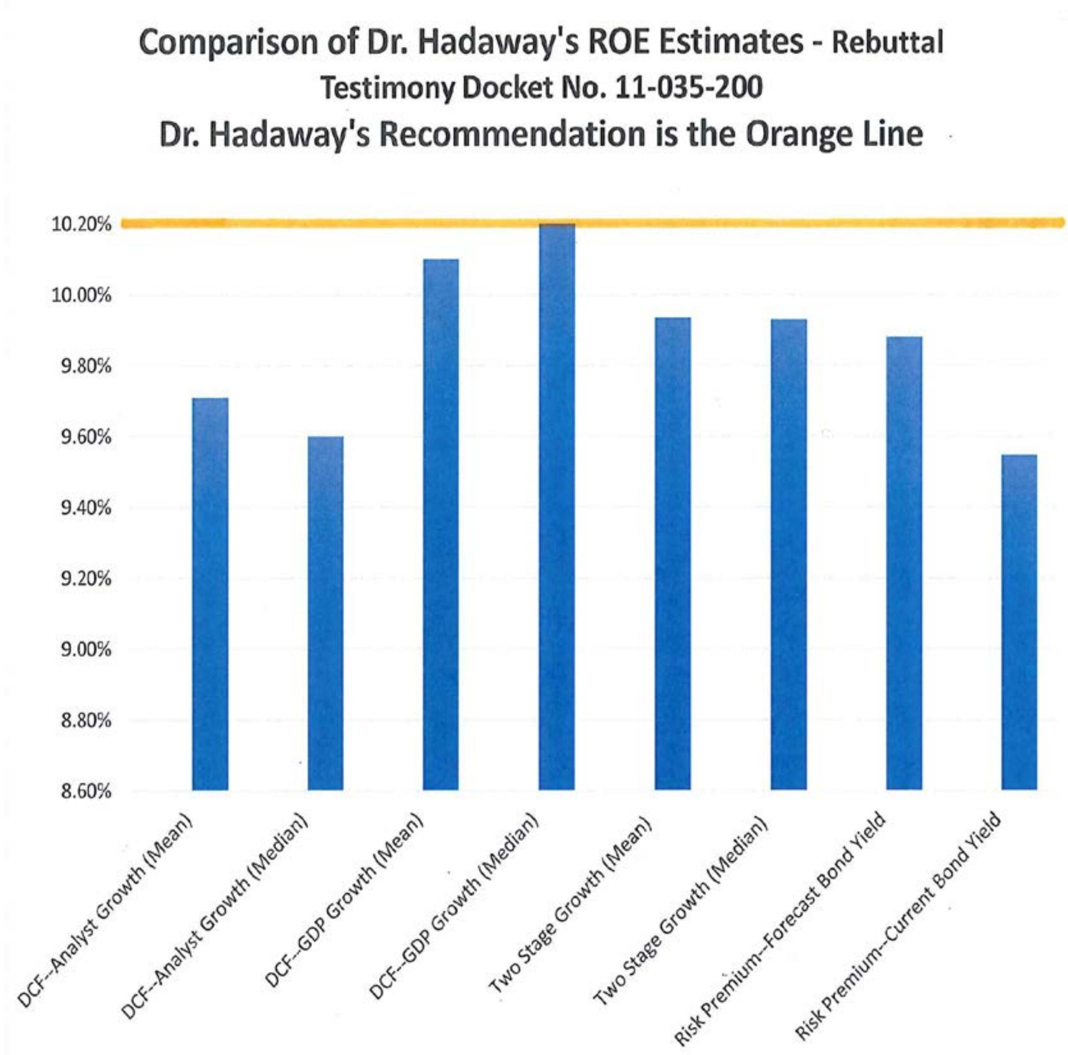
[10] Ibid., lines 282-288.

rates of return estimates from the CAPM.

Q. Dr. Hadaway states that "Mr. Peterson continues to be mistaken about my giving 100 percent weight to a GDP growth rate DCF analysis in prior cases."[11] Do you have any further comments?

A. Yes. I also made this assertion regarding Dr. Hadaway's testimony in Docket No. 11-035-200. The following chart sets forth data taken from Dr. Hadaway's rebuttal testimony, Exhibit RMP_SCH-7R and Exhibit RMP_SCH-8R in Docket No. 11-035-200. The reader can decide the degree of my "mistake."

[11] Ibid., page 16.

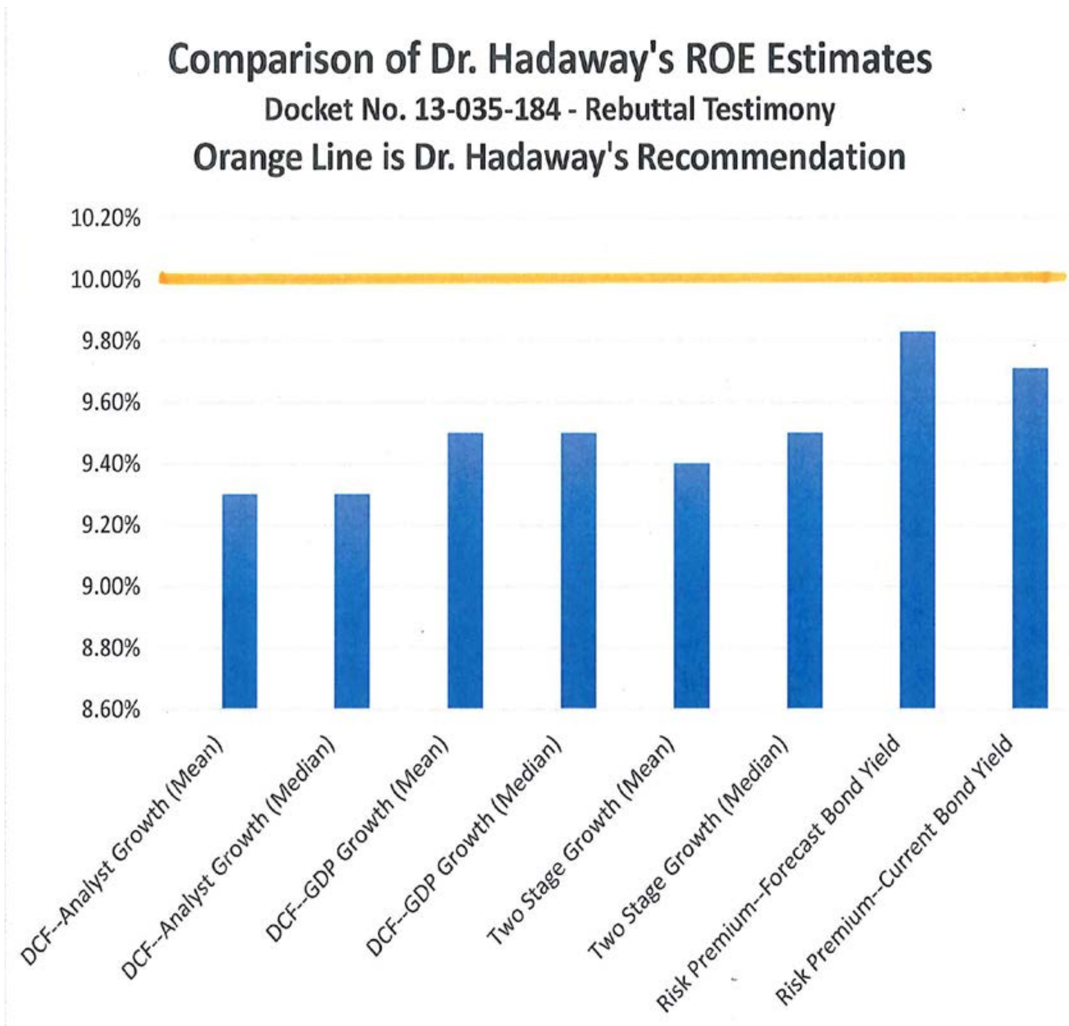


Q. Do you have any comments on Dr. Hadaway's updated ROE analysis as set forth in his rebuttal testimony?

A. Yes. The following chart compares his current "technical" estimates of ROE set forth in his rebuttal testimony with his continuing advocacy for a 10.0 authorized ROE for PacifiCorp. Since I have critiqued his methods in this docket and in earlier dockets, I will not provide a detailed analysis of his update.[12] Furthermore, Dr. Hadaway has provided an update of

[12] Rebuttal Testimony of Samuel C. Hadaway, pages 1-3, Exhibit RMP_(SCH-5R) and Exhibit RMP_(SCH-6R).

authorized returns awarded by other commissions around the country.[13] To the extent this information is relevant, it now supports an ROE of about 9.86 percent, i.e. less than the 10.0 percent Dr. Hadaway continues to advocate.



Q. What do you conclude about Dr. Hadaway's update and conclusion?

A. As I stated above, Dr. Hadaway's sole support for his 10.0 percent ROE recommendation is his interpretation of the Commission's recent Questar decision. Dr. Hadaway now appears to

[13] Ibid., Exhibit RMP_(SCH-2R-ROE Data).

advocate that parties and the Commission abandon any connection to current market data in determining an authorized ROE. Dr. Hadaway's divination of an ROE without reference to current market conditions is arbitrary, capricious, and not in the public interest.

Q. Do you have any concluding comments?

A. Yes. First, I accept Mr. Williams' calculation of the revised embedded cost of debt value of 5.20 percent from the 5.21 percent set forth in my direct testimony. This slight change in the overall cost of debt together with the minor change in capital structure results in my estimated weighted average cost of capital declining to 7.28 percent from the 7.29 percent recommended in my direct testimony. DPU Exhibit 1.1 SR sets forth my revised conclusion regarding the weighted average cost of capital.

Second, I have not dealt with every issue raised by Dr. Hadaway in his rebuttal testimony. However, his rebuttal testimony is unpersuasive. Therefore, I continue to support and advocate the position in my direct testimony that the appropriate cost of equity for PacifiCorp is 9.25 percent, within a reasonable range of 8.65 to 9.55 percent. The overall weighted average cost of capital that I am recommending is 7.28 percent.

Q. Does this conclude your surrebuttal testimony?

A. Yes.