

CONTENTS

I. INTRODUCTION AND SUMMARY..... 1

II. CAPITAL STRUCTURE 7

III. COST OF DEBT 9

IV. COST OF COMMON EQUITY 10

 A. Summary and Conclusions 10

 B. An Overview of Cost of Common Equity Models 11

 C. Comparable (Proxy) Companies 22

 D. Application of Cost of Equity Models 23

 1. Single-Stage DCF Models 23

 2. Two-Stage DCF Models 26

 3. CAPM Results 27

 4. Risk Premium Results 30

V. MODELS AT THE UTAH STATE TAX COMMISSION..... 31

VI. COMMENTS ON MR. HEVERT’S COST OF EQUITY RESULTS 32

VII. COMMENTS ON JOHN REED’S ANALYSIS AND CHOOSING A COST OF EQUITY
 AT THE HIGH END OF THE RANGE_..... 39

VIII. CONCLUSIONS AND RECOMMENDATIONS 43

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EXHIBIT NO. <i>07-035-</i>
Case <i>07-035-93</i>
Date <i>Mar 20 2008</i>
Witness <i>Charles E. Petersen</i>
Reporter <i>Kelly Wilbur</i>

Testimony of Charles E. Peterson

I. INTRODUCTION AND SUMMARY

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 Division of Public Utilities (Division).

Q: On whose behalf are you testifying?

A: The Division.

Q: Please summarize your educational and professional experience.

A: I attended the University of Utah and earned a B.A. in mathematics in 1978 and a Master of Statistics (M.Stat.) through the Graduate School of Business in 1980. In 1990 I earned an M.S. in economics, also from the University of Utah.

Between 1980 and 1991 I worked as an economic and financial consultant and business appraiser for several local firms or local offices of national firms. My work frequently

involved litigation support consulting and I have testified as an expert witness in both federal and state courts.

In 1991, I joined the Property Tax Division of the Utah State Tax Commission. In 1992, I was promoted to manager over the Centrally Assessed Utility Valuation Section. I provided

24 expert testimony regarding valuation, economic and cost of capital issues, both in deposition
25 and formal hearing before the Utah State Tax Commission.

26
27 I joined the Division in January 2005 as a Utility Analyst; in May 2006 I was promoted to
28 Technical Consultant. I have worked primarily in the energy section of the Division. In
29 2007, I earned the Certified Rate of Return Analyst (CRRA) certificate from the Society of
30 Utility and Regulatory Financial Analysts (SURFA).

31
32 My current resume is attached as DPU Exhibit 2.1.

33
34 **Q: Please outline the projects you have worked on since coming to the Division.**

35 A: I was involved in evaluating cost of capital issues in the 2004 PacifiCorp rate case that was
36 settled in February 2005. I subsequently co-authored a paper regarding the Capital Asset
37 Pricing Model (CAPM) published in the *The NRRI Journal of Applied Regulation*.¹ I have
38 recently co-authored an article related to ring-fencing that was published in *Public Utilities*
39 *Fortnightly*.² In 2006 I provided written and oral testimony on cost equity supporting the
40 stipulation that settled most issues in the previous PacifiCorp general rate case (Docket No.
41 06-035-21).

42
43 I have worked on DSM, HELP, and service quality and customer guarantees involving
44 PacifiCorp. I was the Division lead on an internal research project regarding ring-fencing that
45 resulted in a report to the Utah Public Service Commission (Commission). I was the lead of

¹ The NRRI Journal of Applied Research, vol. 3, December 2005, Ohio State University, Columbus, OH, pp. 57-70.

² Public Utilities Fortnightly, Vol. 146, No. 2, February 2008, pp. 32-35, 66.

46 the economics and finance group within the Division assigned to evaluate the proposed
47 acquisition (the Acquisition) of PacifiCorp (the "Company") by MidAmerican Energy
48 Holdings Company ("MEHC"). Please see Docket No. 05-035-54. I have been the lead on a
49 number of Qualified Facilities (QF) contract cases.

50

51 **Q: Have you previously provided testimony to the Commission?**

52 A: Yes. I first filed testimony in the Uinta Basin Telephone case (Docket No. 05-053-01)
53 regarding ring-fencing issues. I subsequently filed testimony in the PacifiCorp Acquisition
54 matter (Docket No. 05-035-54). I provided testimony in support of the stipulation regarding
55 cost of equity in the last PacifiCorp general rate case Docket No. 06-035-21. I have testified
56 before the Commission on a number of smaller matters, including special and QF contracts,
57 without pre-filing formal testimony.

58

59 **Q: What is the purpose of your testimony in this matter?**

60 A: My testimony discusses issues related to the cost of capital of the Company. Cost of capital
61 includes capital structure, cost of common equity, cost of debt and cost of preferred stock.
62 Cost of equity and overall cost of capital are important parts of the revenue requirement of a
63 regulated utility. I will provide testimony supporting the Division's belief that the appropriate
64 cost of equity for Questar Gas Company is 9.25 percent. As discussed briefly below, the
65 Division has no significant disagreement with the Company's requested capital structure of
66 51.38 percent common equity and 48.62 percent long-term debt. The Company informed the
67 Division on March 26, 2008, that it has successfully issued new debt. The debt issuance
68 includes \$50 million in a ten-year loan at 6.30 percent interest and a \$100 million amount for

69 a term of 30 years at 7.20 percent. Based on the conclusion of this debt issuance the Division
70 does not believe at this time there is a basis for adjusting the Company's cost of debt and
71 accepts the 6.72 percent figure recommended by the Questar Gas.

72

73 **Q: Are you asking the Commission to modify its view of the use of different**
74 **methodologies?**

75

76 **A:** Yes. The Commission last adjudicated cost of capital issues in the most recent previous
77 Questar Gas Company general rate case (Docket No. 02-057-02). In that case, which follows
78 the line of reasoning in earlier decisions, the Commission expressed justified skepticism
79 about the CAPM model. The Commission appeared to largely reject consideration of the
80 CAPM. However, the CAPM continues to be one of the most widely taught and used models
81 to estimate the cost of equity capital. Additionally, it is appropriate for rate of return
82 witnesses to consider more than one model in their testimony in order to, hopefully, have
83 increased confidence in and to refine their estimates. For these reasons I recommend that the
84 Commission recognize and consider this model as part of the decision-making process in
85 arriving at an appropriate authorized rate of return for a utility.³

86

87 **Q: Please outline the scope of your testimony.**

88 **A:** First I will review and comment on the basis of the Company's capital structure request.

89 Then I will review and comment on the Company's requests for cost of long-term debt

³ By extension the Commission may want to consider other models as they are from time to time offered and supported by testimony.

90 Then I will describe the methods, data, and analyses that I used to arrive at the Division's
91 recommendation for cost of equity including the selection of comparable companies.

92

93 I will review and comment on those areas in which I agree and disagree with testimony of the
94 Company's cost of equity witness, Mr. Robert Hevert. I will also briefly comment on the
95 testimony of Mr. John. J. Reed, a colleague of Mr. Robert Hevert, who has offered a study of
96 efficiency measures in support of Questar Gas Company's request (through Mr. Hevert) that
97 its allowed return on equity be awarded at or near the top of Mr. Hevert's range.

98

99 In order to prepare testimony, I set a cut-off of March 14, 2008 for stock prices and debt
100 yields. If there are significant changes in the financial markets before the hearing on this
101 matter in May, related to the gas utilities, I will update my analysis accordingly.

102

103 **Q: Please briefly summarize the work and investigations that you have performed in this**
104 **matter.**

105 A: I have reviewed and analyzed the testimonies of Questar Gas witnesses David M. Curtis, the
106 Company's Vice President and Controller, and Robert B. Hevert, an outside cost of equity
107 witness along with the supporting testimony offered by Mr. Hevert's colleague John Reed.
108 Mr. Curtis provided testimony regarding cost of debt and capital structure. Mr. Hevert filed
109 testimony on cost of equity. I have also performed my own independent estimation of cost of
110 capital, particularly with respect to cost of equity.

111

112 **Q: What was the Company's original filed position regarding cost of capital?**

113 A: When the Company originally filed for a June 30, 2009 test year, the Company asked for the
 114 following cost of capital rates of return:⁴

115	<u>Component</u>	<u>Structure</u>	<u>Cost</u>
116	Long-Term Debt	47.71%	6.56%
117	Common Stock	52.29%	11.25%
118	WACC	100.00%	9.01%

119
 120 Subsequently the Commission ordered a test year 12-months ending December 31, 2008,
 121 causing the Company to file revised testimony. Finally last week, based upon the actually
 122 issuance of the anticipated new debt, Mr. Curtis revised the Company's cost of capital
 123 request to the following:⁵

124	<u>Component</u>	<u>Structure</u>	<u>Cost</u>
125	Long-Term Debt	48.62%	6.72%
126	Common Stock	51.38%	11.25%
127	WACC	100.00%	9.05%

128
 129
 130 **Q: With respect to the Company's filed testimony, what have you concluded?**

131 A: As outlined above, I determined that the capital structure and the cost of long-term debt are
 132 reasonable. I believe that the cost of equity point estimate recommendation by Mr. Hevert is
 133 too high and lies far outside what I would consider a reasonable range for Questar Gas
 134 Company.

⁴ Direct Testimony of Bruce N. Williams, December 2007, p. 3.

⁵ Direct Testimony (Updated) of David M. Curtis, Exhibit QGC 5.21U, p. 3 of 3.

135
 136 Division Exhibit 2.2 summarizes the capital structure and cost of capital point estimates
 137 supported by the Division, and depicts the Division's final weighted average cost of capital is
 138 8.02 percent. The following table summarizes the capital structure and cost of capital point
 139 estimates supported by the Division as set forth on Exhibit 2.2.

140	<u>Component</u>	<u>Structure</u>	<u>Cost</u>
141	Long-Term Debt	48.62%	6.72%
142	Common Stock	51.38%	9.25%
143	WACC	100.00%	8.02%

144 There is a caveat with this recommended cost of capital. The recommended cost of equity
 145 may be perceived by Wall Street as too low relative to Questar Gas' peers. The result may be
 146 a reduction in the Company's debt rating, which would generally result in a higher cost of
 147 capital. I will discuss this in more detail later in my testimony.

148

149 II. CAPITAL STRUCTURE

150

151 **Q: What is Questar Gas' current capital structure?**

152 A: I examined the latest actual capital structure of the Company that was set forth in the
 153 Company's SEC Form 10-K as of December 31, 2007. At that date, the Company's capital
 154 structure was 52.1 percent common equity, 47.9 percent long-term debt. These figures are
 155 almost identical to the Company's 2000 to 2007 average of 52.0 percent common equity and
 156 48.0 percent long-term debt.

157 **Q. Did you compare Questar Gas' capital structure with the capital structure of the other**
158 **companies in the electric utility industry?**

159 Yes. I compiled the capital structures of publicly traded proxy or comparable companies.⁶

160 The data are derived from the SEC Form 10-K filed by each company. Division Exhibit 2.3
161 summarizes the capital structures of the comparable companies for both the most recent
162 fiscal year and a multi-year average. These comparable companies have bond ratings from
163 the principal rating agencies that are similar to Questar Gas' bond ratings.

164
165 The equity percentage in the capital structures of these comparable companies varied from
166 about 42 percent to 65 percent. The average equity percentage is 52.8 percent, which is only
167 slightly higher than Questar Gas' capital structure equity percentage. As can be readily seen
168 from DPU Exhibit 2.3, Questar Gas Company's capital structure is very close to the middle
169 of the range of these comparable companies.

170

171 **Q: Did the Division consider the capital structure effects on the Company's debt ratings?**

172 **A:** Yes. Standard & Poor's published criteria indicated that among other factors, a company
173 with Questar Gas' risk profile⁷ needs to have an equity (common and preferred) percentage
174 of 50 percent, or higher, to maintain its current bond rating. Because Standard & Poor's
175 includes short-term debt the result is the regulatory capital structure needs to be higher than
176 50 percent equity in order to satisfy this particular rating agency criterion. However, as
177 suggested by the data in Division Exhibit 2.3, some variation in the capital structure relative

⁶ The selection of the comparable companies will be described in detail in the cost of equity section of my testimony.

⁷ Standard & Poor's gives a utility a risk profile grade between 1 and 10 (1 is best), based on its evaluation of the company's business and regulatory environment. Questar Gas Company has a risk rating of 3, an above average (low risk) profile.

178 to a rating agency guideline does not necessarily result in a change in the debt rating.
179 However, the Company's efforts to date to maintain or increase somewhat its equity capital
180 percentage are reasonable in light of this rating agency criterion, especially given the increase
181 in capital expenditures envisioned by the Company.

182

183 **Q. What is your conclusion regarding capital structure?**

184 A. Questar Gas' request for a capital structure of 51.6 percent common stock and 48.4 percent
185 long-term debt is reasonable.

186

187 **III. COST OF DEBT**

188

189 **Q: What did you do with respect to the cost of debt?**

190 A: I reviewed the testimony and related exhibits of Company witness David M. Curtis. Mr.
191 Curtis requested 6.72 percent for cost of debt in his updated direct testimony. This debt rate
192 is higher than the original request which was 6.56 percent. This change was due to the
193 noticeably higher rate on the 30-year debt issuance at 7.20 percent announced March 26,
194 2008. Originally the Company forecasted that the debt could be issued for 6.50 percent. This
195 higher rate surprised me. Mr. Curtis verbally explained to me that the current turmoil in the
196 credit markets made it difficult to find investors willing to go out 30 years. According to Mr.
197 Curtis, the Company did not want to issue all of the debt for 10 years, for which better rates
198 are available because the Company already has a lot of debt maturing 10 years from now and
199 it did not want to take the risk of having to refinance such a large portion of debt.⁸

200

⁸ David Curtis on a telephone conference call that included Barrie McKay, March 27, 2008.

201 **Q: What did you conclude regarding the cost of long-term debt?**

202 A: The cost of long-term debt appears to be reasonable. The current difficulties in the credit
203 markets are well publicized, so it seems likely that the Company would have difficulties in
204 issuing debt at more favorable interest rates.

205

206 **Q: Is there an issue here that remains open?**

207 A: Yes. The question is did the Company need to act now, i.e. the end of March 2008, to issue
208 the debt or could it have waited a few months to see if market conditions improved? Given
209 the apparent unlikelihood of significant interest rate increases in the near-term, waiting might
210 have been prudent if the Company's cash flow or short-term borrowings could have satisfied
211 the Company's needs. Given the late date that this debt issuance occurred relative to the due
212 date of testimony, I am reserving comment on this issue until a possible later supplement to
213 my direct testimony.

214

215 **IV. COST OF COMMON EQUITY**

216

217 **A. SUMMARY AND CONCLUSIONS**

218 **Q: Please summarize your cost of equity calculations and conclusion.**

219 A: First I identified comparable (proxy) companies that I would use to estimate the cost of
220 equity for Questar Gas. These comparable companies are summarized on Division Exhibit
221 2.4. I will explain the selection process for the comparable companies later in my testimony.
222 Using data from public sources related to the comparable companies, I calculated several
223 variations of the standard single-stage discounted cash flow (DCF) model and the two-stage

224 DCF model. In calculating these models, I used both the closing (spot) price of the common
225 stock of these companies as of March 14, 2008 and the 30-day average closing stock price. I
226 considered several variations of the capital asset pricing model (CAPM) using different
227 historical periods to estimate the market risk premium, different sources of beta, and the 20-
228 year U.S. Treasury bond and the 90-day U.S. Treasury Bill rates as estimates of the risk-free
229 rate. Finally, I constructed estimates using a risk-premium model based upon Value Line
230 financial strength ratings. This last Value Line-based model is considered here primarily as a
231 "reasonableness test." I am not asking the Commission to endorse this model.

232
233 Division Exhibit 2.5 sets forth the results of the models and calculations that I have made.
234 As indicated at the bottom of Exhibit 2.5, I recommend a point estimate of 9.25 percent as
235 the cost of common equity applicable to Questar Gas Company at this point in time.

236

237 **B. AN OVERVIEW OF COST OF COMMON EQUITY MODELS**

238 **Q: What methods did you look at in order to estimate the current market cost of equity for**
239 **Questar Gas?**

240 **A:** I used standard discounted cash flow models (DCF) coupled with two types of risk premium
241 models to support and complement the DCF analyses. Regarding the DCF models I
242 considered both the simple or single stage model and two-stage DCF models. Within each
243 model I considered variations of different growth rates.

244