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MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

SURREBUTTAL TESTIMONY

OF

MATTHEW J. BARNES

MISSOURI-AMERICAN WATER COMPANY

CASE NO. WR-2008-0311

Jefferson City, Missouri
October 2008

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1 A. I will address Ms. Ahern's criticisms of Staff's reliance on the Discounted
2 Cash Flow Model (DCF) and the use of the Capital Asset Pricing Model (CAPM) as a check
3 of reasonableness. I will also address Mr. Rungren's claims that the Commission should
4 adopt MAWC's stand-alone capital structure.

5 MAWC's debt is not separately rated to assist investors with their evaluation of the
6 credit quality of its debt. MAWC can have equity capital infused into it by the
7 parent company even though the source of the capital infused into it was debt issued by the
8 parent company. The Company will then have the opportunity to earn equity returns on debt
9 dollars. This is commonly referred to as double leverage. As an example, American Water
10 issues debt at 6.00 percent and infuses the debt proceeds as equity into MAWC.
11 The Commission authorizes a 10.00 percent return on equity (ROE) and adopts the
12 Company's subsidiary capital structure. In this example the Commission would be
13 authorizing the Company to earn 4.00 percent (10.00% – 6.00%) more on MAWC's ROE
14 than what is necessary.

15 The existence of double leverage is one of the criteria that is often considered when
16 determining if the subsidiary or parent company capital structure is appropriate for
17 ratemaking purposes. In this case, the existence of double leverage supports the use of the
18 parent company's consolidated capital structure. The parent's consolidated capital structure is
19 less likely to be manipulated for ratemaking purposes because it is also the capital structure
20 that has the most bearing on the financial stability of American Water and its subsidiaries'
21 operations.

22 Although the debt that MAWC receives from American Water Capital Corporation
23 (AWCC) is not directly guaranteed by American Water, Staff maintains that, because the

1 AWCC debt issued to third parties is supported by American Water in a “Support
2 Agreement,” from a financial analysis perspective, this would appear to be better than a
3 guarantee because the third parties that buy AWCC’s debt do not have to pursue payment
4 through American Water’s individual water utility subsidiaries.

5 **RESPONSE TO MS. AHERN’S REBUTTAL TESTIMONY**

6 Q. On page 7, line 6, through page 9, line 20, of her rebuttal testimony, Ms. Ahern
7 explains why she believes you erred by using the total return on long-term government bonds
8 rather than just the income return when you derived the historical earned equity risk premium.
9 Is an investor in government bonds only going to receive a return based on the coupon of the
10 bond, which is the income from the interest rate stated on the bond?

11 A. Only if the investor holds the bond until maturity and bought the bond at par
12 value. Otherwise investors will receive a total return, which is based on changes in the price
13 of the bond and reinvestment returns. Therefore, it is appropriate to measure the market risk
14 premium by comparing total returns on stocks versus total returns on risk-free treasuries
15 because this is what investors will expect to receive.

16 Q. On page 9, line 2 through page 10, line 8 of her rebuttal testimony, Ms. Ahern
17 discusses her position that the use of current yields on 30-year U.S. Treasury bonds is flawed
18 because estimating the cost of capital for ratemaking purposes is prospective. How do you
19 respond?

20 A. It is logical to use current yields for the same reason it is logical to use
21 current stock prices in the DCF model. As with current stock prices, current yields reflect
22 investors’ required rates of return for future uncertainties. If I require a yield of 6 percent on
23 my investment in a bond today, I have done so based on my assessment of not only

1 company-specific factors, such as credit risk, but also the uncertainty of changes in
2 interest rates in the future. In applying the DCF model, it is not appropriate to use some
3 future estimate of the stock price to determine the cost of common equity. Consequently, it is
4 most appropriate to use current yields when estimating the cost of capital.

5 Q. On page 11, line 8, through page 13, line 6, of her rebuttal testimony,
6 Ms. Ahern discusses why she believes it is more appropriate to use arithmetic averages
7 compared to geometric averages when estimating the equity risk premium. What is
8 your response?

9 A. Suppose that an investor makes a \$1 stock investment over a three-year period.
10 If an investor pays \$1 for a stock in year 1 and in year 2 the stock increases to \$1.50, then the
11 investor would have a 50 percent growth rate. In year three the price of the stock decreases
12 by 50 percent to \$.75. If an investor performed a simple arithmetic average of these two
13 returns, then they would think that they received 0 percent $[(50 \text{ percent} + -50 \text{ percent})/2]$
14 growth in the investment over the three-year period. However, in reality the investor actually
15 had a 25 percent decline in the investment over this three-year period. This is why solely
16 relying on the arithmetic mean is questionable.

17 Q. On page 15, line 24, through page 16, line 20, of her rebuttal testimony,
18 Ms. Ahern discusses how your recommended return on common equity compares to that of
19 authorized ROEs published by Regulatory Research Associates (RRA). What segments of the
20 utility industry are followed by RRA?

21 A. RRA publishes information on natural gas distribution and electric
22 utility companies.

1 **RESPONSE TO MR. RUNGREN'S REBUTTAL TESTIMONY**

2 Q. On page 4, lines 1 through 3, of his rebuttal testimony, Mr. Rungren says,
3 "MAWC is a separate corporate entity that issues its own debt and common stock and,
4 therefore, has an independently determined capital structure..." Is it true that MAWC issues
5 its own debt?

6 A. It is true that MAWC has the capability to issue its own debt if they can issue it
7 at a lower cost than what AWCC can issue it for. Staff is unaware if MAWC has issued its
8 own debt recently with the exception of Environmental Improvement and Energy Resources
9 Authority (the Authority) bonds, which are actually issued directly by the Authority and then
10 the proceeds are loaned to MAWC with the same terms as the bonds.

11 Q. Continuing with the previous question, is it true that MAWC issues common
12 stock to third-party investors?

13 A. No. American Water issues common stock to obtain proceeds for its
14 subsidiaries. Any stock MAWC has outstanding is owned wholly by the parent company,
15 American Water. This is one reason the Commission should reject the Company's proposed
16 capital structure and accept the Staff's.

17 Q. Has this Commission relied on the fact that the consolidated capital structure is
18 the capital structure analyzed by credit analysts to adopt the consolidated capital structure in
19 past decisions?

20 A. Yes. In the Report and Order in the Missouri Gas Energy rate case in 2004,
21 Case No. GR-2004-0209, the Commission stated the following: "When a business analyst
22 such as Moody's or Standard & Poor's examines Southern Union to assess its credit
23 worthiness, it looks to that unadjusted consolidated capital structure to make its

1 determination.” *In the Matter of Missouri Gas Energy*, 12 Mo.P.S.C.3d 581, 589
2 (September 21, 2004).

3 Q. In which recent rate cases has the current Commission adopted a consolidated
4 capital structure approach?

5 A. In the following cases: MGE rate cases, Case No. GR-2004-0209 and
6 Case No. GR-2006-0422; the Empire rate cases, Case Nos. ER-2004-0570, ER-2006-0315,
7 and ER-2008-0093; the KCPL rate cases, Case No. ER-2006-0314 and Case No. ER-2007-
8 0291; and the Aquila rate case, Case No. ER-2007-0004. In fact, the Commission adopted the
9 parent’s consolidated capital structure of Algonquin Water Resources of Missouri, LLC, in
10 Case No. WR-2006-0425 even though the parent company, Algonquin Power Income Fund, is
11 a Canadian company.

12 **SUMMARY AND CONCLUSIONS**

13 Q. Please summarize the conclusions of your surrebuttal testimony.

14 A. My conclusions regarding the capital structure and cost of common equity are
15 listed below:

- 16 1. The use of MAWC’s capital structure as proposed by
17 Missouri Industrial Energy Consumers and MAWC is
18 inappropriate. It does not reflect American Water’s
19 actual support of the capital of its subsidiary, MAWC.
20 The calculation of the cost of capital for MAWC should
21 be based on American Water’s actual consolidated
22 capital structure as of March 31, 2008; and
- 23 2. My cost of common equity, which is 9.60 percent to
24 10.60 percent, would produce a fair and reasonable rate
25 of return of 7.60 percent to 8.04 percent for the Missouri
26 jurisdictional water utility rate base for MAWC.

27 Q. Does this conclude your surrebuttal testimony?

28 A. Yes, it does.

