Exhibit No.:
Witness: Brian Janous
Type of Exhibit: Direct Testimony
Issue: Cost of Capital
Sponsoring Parties: Missouri Industrial Energy Consumers
Case No.: WR-2008-0311

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Missouri-American Water Company's Request for Authority to Implement a General Rate Increase for Water and Sewer Service Provided in Missouri Service Areas	)))))	**Case No. WR-2008-0311**

Direct Testimony and Exhibits of

Brian A. Janous
on Cost of Capital Issues

On Behalf of

Missouri Industrial Energy Consumers

BRUBAKER & ASSOCIATES, INC.
ST. LOUIS, MO 63141-2000

August 18, 2008
Project 8980

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of Missouri-American Water Company's Request for Authority to Implement a General Rate Increase for Water and Sewer Service Provided in Missouri Service Areas	)))))	**Case No. WR-2008-0311**

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

Affidavit of Brian Janous

Brian Janous, being first duly sworn, on his oath states:

1. My name is Brian Janous. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 1215 Fern Ridge Parkway, Suite 208, St. Louis, Missouri 63141. We have been retained by the Missouri Industrial Energy Consumers in this proceeding on their behalf.

2. Attached hereto and made a part hereof for all purposes are my direct testimony and schedules on revenue requirement issues, which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. WR2008-0311.

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

Brian Janous

Subscribed and sworn to before me this 18th day of August, 2008.

MARIA E. DECKER
Notary Public, State of Missouri
St. Louis City
Commission # 05706793
My Commission Expires May 05, 2009

Notary Public

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Direct Testimony of Brian Janous

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A My name is Brian Janous and my business address is 1215 Fern Ridge Parkway, Suite 208, St. Louis, MO 63141-2000.

Q WHAT IS YOUR OCCUPATION?

A I am an energy advisor and a consultant in the field of public utility regulation in the firm of BAI (Brubaker & Associates, Inc.).

Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A These are set forth in Appendix A to my testimony.

Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

A I am appearing on behalf of the Missouri Industrial Energy Consumers (MIEC). Member companies purchase substantial amounts of water from Missouri-American Water Company (Missouri-American or Company).

Q WHAT IS THE SUBJECT OF YOUR TESTIMONY?

A I will recommend an appropriate return on common equity (ROE), and overall rate of return (ROR) for Missouri-American Water Company.

Q PLEASE SUMMARIZE YOUR RECOMMENDATIONS.

A I recommend the Missouri Commerce Commission (Commission) authorize a return on common equity for Missouri-American of 10.03%. A 10.03% ROE is fair compensation in today's low cost capital market and would allow Missouri-American to maintain access to capital under reasonable terms and at reasonable prices. American Water Capital Corp. is the affiliate entity which issues debt on behalf of all American Water Works water utility affiliates, including Missouri-American.

My recommended return on equity for Missouri-American is based on the Discounted Cash Flow (DCF) model; the Risk Premium Model; and the Capital Asset Pricing Model (CAPM). These analyses estimate a fair return on equity based on observable market information for a group of publicly traded risk proxy companies comparable in risk to Missouri-American.

Q PLEASE DESCRIBE HOW MISSOURI-AMERICAN ATTRACTS EXTERNAL DEBT AND EQUITY CAPITAL.

A Missouri-American does not access external capital markets on its own rather it gets all of its external capital through its parent company or affiliate companies. All external equity comes from its parent company American Water Works, and all corporate debt capital is issued by American Water Capital Corp. As such, Missouri-American's entire access to external corporate debt and equity capital is determined by its parent company and affiliates' credit standing and access to capital.

Q WHAT RATE OF RETURN ARE YOU PROPOSING FOR MISSOURI-AMERICAN IN THIS PROCEEDING?

A As shown on Schedule BAJ-1, I recommend an overall rate of return of 8.02%.

Q PLEASE DESCRIBE AMERICAN WATER CAPITAL CORP.'S CREDIT RATING.

A American Water Capital Corp. has a credit rating of "A-" from Standard & Poor's and "Baa1" from Moody's. Standard & Poor's states the following concerning American Water Works' credit rating and assessment of its credit quality:

> The ratings on the Voorhees, N.J.-based AWW reflect our assessment of the company's stand-alone credit quality based on its proposed post-IPO business plan, which includes improvements in the utility's financial profile above current levels. AWW has received all regulatory approvals necessary for its divestiture from RWE AG. The ratings are also based on our expectation of regulatory support to fund the company's sizable capital-spending requirements through rate cases or supportive policies, such as infrastructure surcharges, forward-looking test years, and single tariff pricing.
>
> AWW's excellent business risk profile is characterized by an excellent competitive position with high barriers to entry; a diverse and supportive regulatory environment that provides reasonably allowed ROEs, incentives for infrastructure improvements and support for acquiring small water companies; an above-average service territory that provides some market, cash flow, and regulatory diversification; a stable customer base that is predominantly residential and commercial; and the relatively low operating risk of regulated and nonregulated operations. AWW's aggressive financial profile, uncertainties associated with its planned equity and equity unit offerings, elevated capital-spending requirements for infrastructure replacement, increased compliance costs with water-quality standards, and the company's reliance on acquisitions to provide growth partly offset these strengths.[1]

[1] Standard & Poor's Credit RatingsDirect Research Update: "American Water Works, Sub Ratings Remain On CreditWatch; IPO Timing Still Uncertain," January 29, 2008.

Q SHOULD THE COMMISSION PLACE HEAVY RELIANCE ON PROJECTED INTEREST RATES AND FUTURE CAPITAL MARKET COSTS RELATIVE TO TODAY'S OBSERVABLE CAPITAL MARKET COSTS?

A No. While projected interest rates should be given some consideration, the determination of Missouri-American's cost of capital today should be based primarily on observable and verifiable actual current market costs. The accuracy of projected changes to interest rates is highly problematic. In fact, over the past five years, the actual interest rate experienced at the time an interest rate projection was made has been a better indicator of the interest rate that would be experienced two years later than the then projected interest rate.

An analysis supporting this conclusion is illustrated on my Schedule BAJ-2. This analysis clearly illustrates that interest rate projections based on current interest rates are likely to be as accurate as economists' consensus projections of future interest rates.

On Schedule BAJ-2, under Column 1, I show the actual market yield at the time a projection was made for Treasury bond yields two years in the future. In Column 2, I show the projected yield two years out. As shown in Columns 1 and 2, over the last several years, Treasury yields were projected to increase relative to the current Treasury yields at the time of the projection.

In Column 4, I show the actual Treasury yield two years after the forecast. Under Column 5, I show the difference between the actual yield and the originally projected yield.

As shown on this exhibit, over the last five years, economists have consistently been projecting increases to interest rates. However, as demonstrated under Column 5, those yield projections have turned out to be overstated in virtually every case. Indeed, Treasury yields have actually decreased or remained flat over

the last five years, rather than increase as the economists' projections indicated. Further, as shown under Column 6, interest rates have stayed relatively flat compared to the prevailing interest rate at the time the forecast was made.

The experience with projected interest rates over the last five years shown on Schedule BAJ-2 clearly establishes that interest rate projections can be highly inaccurate. Indeed, current observable interest rates are just as likely a reasonable a proxy for future interest rates as are economists' projections. Accordingly, while I will use projected interest rates to provide some sense of the market's expectations of future capital market costs in my models, I will not use them exclusively. Rather, my cost of equity analyses will be based on the combination of current observable interest rates and projected interest rates. Thus, my analyses will capture a return on equity range reflecting a broad range of potential actual capital market costs during the period rates determined in this proceeding will be in effect.

Q ARE THERE OTHER REASONS NOT TO PROVIDE EXCLUSIVE RELIANCE ON UNCERTAIN PROJECTED INCREASES TO INTEREST RATES?

A Yes. The ratemaking process in itself provides utility protection against increased cost of capital. Indeed, if Missouri-American's utility subsidiaries' rates of return are set based on today's market cost of capital, and capital costs increase in the future, then the utilities are free to file for a rate change to reflect those higher costs. Hence, the regulatory mechanism itself provides utilities a hedge against increasing capital costs.

Return On Common Equity

Q PLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A REGULATED COMPANY'S COST OF COMMON EQUITY.

A Two United States Supreme Court decisions are often cited as establishing the framework for determining a fair cost of common equity for a regulated utility: Bluefield Water Works vs. West Virginia PSC (1923); and Federal Power Commission vs. Hope Natural Gas Company (1944). These decisions identified the general standards to be considered in establishing the cost of common equity for a public utility. These standards are that the authorized return should: (1) be sufficient to allow the utility to maintain financial integrity; (2) allow the utility to attract capital under reasonable terms; and (3) be commensurate with returns investors could earn by investing in other enterprises of comparable risk.

Q PLEASE DESCRIBE WHAT IS MEANT BY "UTILITY'S COST OF COMMON EQUITY."

A A utility's cost of common equity is the return investors expect, or require, in order to make an investment. Investors expect to achieve their return requirement from receiving dividends and stock price appreciation.

Q PLEASE DESCRIBE THE METHODS YOU HAVE USED TO ESTIMATE THE COST OF COMMON EQUITY FOR MISSOURI-AMERICAN.

A I have used financial models to estimate Missouri-American's cost of common equity. These models are: (1) the Discounted Cash Flow (DCF) model (utilizing Constant Growth, Two-stage Growth and Three-Stage Growth); (2) the Risk Premium Model; and (3) the Capital Asset Pricing Model (CAPM).

Q HOW DID YOU DEVELOP DCF AND CAPM ANALYSES FOR MISSOURI-AMERICAN?

A Since Missouri-American is not a publicly traded entity, I performed the DCF and CAPM analyses on two risk proxy utility groups consisting of publicly traded utilities that represent the investment risk of a water utility similar to Missouri-American. First, I relied on a group of publicly traded companies that are predominantly involved in the water utility business. Second, I used a group of natural gas local distribution companies (LDC). While the business risk of a gas LDC group is generally greater than that a water utility company, gas utilities are more widely followed. Also, the water utility industry continues to be impacted by acquisition and mergers which can impact valuation and the reliability of return on equity estimates. Hence, the use of the gas LDC group will help improve the reliability of my return on equity estimate.

Q HOW DOES M&A ACTIVITY INHIBIT YOUR ABILITY TO ESTIMATE A WATER UTILITY'S ROE?

A Stock prices, which are utilized in DCF analyses, may be reflective of merger or acquisition value as opposed to the stand alone operating value of the utility. This might also result in the betas being impacted by this non-enterprise activity.

Q HOW DID YOU SELECT YOUR WATER UTILITY GROUP?

A I relied on the water utilities included in the Value Line Investment Analyzer.

Q IS YOUR WATER UTILITY PROXY GROUP COMPARABLE IN RISK TO MISSOURI-AMERICAN?

A Yes. This group reflects reasonably comparable investment risk as compared to Missouri-American. As shown on my Schedule BAJ-3, page 1, this group has a group

average bond rating of "A+" from S&P, and "A2" from Moody's, which is reasonably comparable to American Water Capital's bond ratings of "A-" and "Baa1" from each of these rating agencies. The group's average common equity ratio, which is representative of financial risk, from Value Line and AUS Utility Reports is 53% and 49%, respectively, is reasonable comparable to the common equity ratio for Missouri-American of 48%. Overall, the group's total risk is comparable to Missouri-American's.

Q HOW DID YOU SELECT YOUR GAS LDC GROUP?

A I started with the natural gas distribution companies followed by Value Line and I excluded the companies that did not meet the following criteria:

(1) Investment grade credit rating from Standard & Poor's (S&P) and Moody's.

(2) Common equity ratio equal to or greater than 40.0%.

(3) No suspended or reduced dividends over the last two years.

(4) Consensus analysts' growth rate estimates from Zack's, Reuters and SNL.

(5) No involvement in recent merger and acquisition activities.

This group is shown on Schedule BAJ-3, page 2.

Q IS YOUR GAS LDC PROXY GROUP COMPARABLE IN RISK TO MISSOURI-AMERICAN?

A Yes. As shown on my Schedule BAJ-3, page 2, the gas LDC group has similar risk profile measures to Missouri-American. The average gas proxy group bond rating is "A" and "A3" from Standard & Poor's and Moody's, respectively, which is reasonably comparable to American Water Capital Corp.'s current bond rating. Also, the group's average common equity ratio of 53% to 55%, as reported by AUS and Value Line, indicates slightly less financial risk as compared to Missouri-American's ratio of 48%.

Q DO GAS UTILITIES GENERALLY HAVE MORE OPERATING RISK THAN WATER UTILITIES?

A Yes. While gas and water utilities face similar risks related to cost recovery or infrastructure, gas utilities must manage gas commodity cost recovery risk as well. Considering the slightly lower financial risk and slightly higher operating risk, the total risk of this gas proxy group is reasonably comparable to Missouri-American's.

Discounted Cash Flow (DCF) Model

Q PLEASE DESCRIBE THE DCF MODEL.

A The premise of the DCF model is that the price of an individual stock is determined by the present value of all expected future cash flows discounted at the investors' required rate of return or cost of capital. This model is expressed mathematically as follows:

$$P_0 = \frac{D_1}{(1+K)^1} + \frac{D_2}{(1+K)^2} \ldots \frac{D_\infty}{(1+K)^\infty} \quad \text{where} \qquad \text{(Equation 1)}$$

P_0= Current stock price
D = Dividends in periods 1 - ∞
K = Investor's required return

This model can be rearranged in order to estimate the discount rate or investor required return, "K."

$$K = D_1/P_0 + G \qquad \text{(Equation 2)}$$

K = Investor's required return
D_1 = Dividend in first year
P_0 = Current stock price
G = Expected constant dividend growth rate

Equation 2 is referred to as the "constant growth" annual DCF model since it assumes that earnings and dividends will grow at a constant rate.

Q PLEASE DESCRIBE THE INPUTS TO YOUR CONSTANT GROWTH DCF MODEL.

A As shown under Equation 2 above, the DCF model requires a current stock price, expected dividend, and expected growth rate in dividends.

Q WHAT STOCK PRICE HAVE YOU RELIED ON IN YOUR CONSTANT GROWTH DCF MODEL?

A For my proxy groups I relied on the average of the weekly high and low stock prices over a 13-week period ending July 25, 2008. An average stock price over a period of time is less susceptible to market price movements than a price on a single day.

A 13-week average stock price is short enough to contain data that reasonably reflects current market expectations, but it is not too short to be susceptible to market price variations that may not be reflective of the security's long-term value. Therefore, in my judgment, a 13-week average stock price is a reasonable balance between the need to reflect current market expectations and to capture sufficient data to smooth out aberrant market movements.

Q WHAT DIVIDEND DID YOU USE IN YOUR CONSTANT GROWTH DCF MODEL?

A I used the most recently paid quarterly dividend, as reported in the Value Line Investment Survey. This dividend was annualized (multiplied by 4) and adjusted for next year's growth to produce the D_1 factor for use in Equation 2 above.

Q WHAT DIVIDEND GROWTH RATES HAVE YOU USED IN YOUR DCF MODEL?

A The growth rate used for the DCF model should be based upon the likely growth estimate that is built into stock prices. Although an individual investor may use a number of methods to estimate the expected growth in dividends, one must determine the consensus of investor expectations with respect to growth rates. Security analyst growth estimates have been shown to be more accurate predictors

of future growth than historical growth rates. Assuming that markets are generally rational, one can reasonably assume that investors are using security analyst estimates in determining how to correctly value a stock. In other words, security analyst growth estimates are the most likely growth estimates that are built into stock prices. Consequently, I have used consensus security analyst growth estimates as a reasonable proxy for investor's expectations of future growth.

For my gas proxy group, I used the average of two analyst sources of customer growth rate estimates for my proxy group of companies: SNL and Zacks. SNL does not report on water companies, so for my water proxy group I used SNL and Value Line. All analyst projections were reported between July 25 and July 29, 2008. The consensus estimate is a simple average of surveyed analysts' earnings growth forecasts.

A simple average of the growth forecasts gives equal weight to all surveyed analysts' projections. To avoid using only one particular analyst's forecast, which may or may not be more representative of general market expectations, I used a simple average, or arithmetic mean, of multiple analyst forecasts to arrive at a good proxy for market consensus expectations. The growth rates I used in my DCF analysis are shown on my Schedule BAJ-4, pages 1 and 2.

Q WHAT ARE THE RESULTS OF YOUR CONSTANT GROWTH DCF MODEL?

A The results of my DCF analyses are shown on Schedule BAJ-5. As shown on Schedule BAJ-5, page 1, the average DCF cost of common equity for the water proxy group is 12.96%. On Schedule BAJ-5, page 2, the gas proxy group DCF cost of common equity is 10.51%.

My constant growth DCF study indicates a return on equity of 10.51% to 12.96%, with a mid-point of 11.74%.

Q DO YOU HAVE ANY COMMENTS CONCERNING THE RESULTS OF YOUR WATER UTILITY DCF ANALYSIS?

A Yes. The comparable water group average five-year growth rate is 9.7%, which is too high to be sustainable over an indefinite period of time. Though not as excessive, the gas proxy group's three- to five-year growth rate is also above a sustainable level of growth. The three- to five-year growth rates, in each case, exceed the growth rate of the overall U.S. economy. Based on consensus economic projections, as published by Blue Chip Economic Indicators, over a five- to ten-year period, the U.S. economy (GDP) is estimated to grow at nominal rates of 5.0% and 4.8%, respectively.[2] A company cannot grow, indefinitely, at a faster rate than the market in which it sells its products or services. The U.S. economy growth projection represents a ceiling, or high end, sustainable growth rate for a utility over an indefinite period of time.

A utility cannot sustain a growth rate that exceeds the growth rate of the overall economy, because a utility's earnings/dividend growth is created by increased utility investment, which in turn is driven by service area economic growth. In other words, utilities invest in plant to meet sales demand growth, and sales growth in turn is tied to economic growth in their service area. Hence, nominal GDP growth is a proxy for sales growth, utility rate base growth, and earnings growth. Therefore, GDP growth is the highest sustainable long-term growth rate of a utility.

Moreover, the water proxy group's projected growth rate of 9.7% is considerably higher than the historical growth rate the proxy group has achieved over the last five to ten years. As shown on Schedule BAJ-6, page 1, the historical growth of my proxy group's dividend is substantially lower than the nominal GDP growth.

The result of this excessive 9.7% growth rate is a ROE estimate of 12.96%, which, as I will demonstrate, is so far above the results of my other ROE estimates as

[2] Blue Chip Economic Indicators, March 10, 2008.

to call into question its validity.

Q HAVE ANY REGULATORY COMMISSIONS RECOGNIZED THAT CURRENT ANALYST PROJECTED GROWTH RATES ARE NOT SUSTAINABLE?

A Yes. In Illinois-American Water Companies' (IAWC) recent rate case (Docket No. 07-0507) the Illinois Commerce Commission concluded the following:

> The record seems to support a conclusion that, at least in the near-term, growth in EPS for water utilities may be unusually high as water utilities upgrade facilities and replace aging infrastructure. The Commission, however, has a much more difficult time accepting the proposition that EPS growth for water utilities will exceed the growth rate for the U.S. economy into perpetuity. Instead, the argument that the high growth for water companies will, at some point in the future, slow to something approximating the growth rate for the U.S. economy is simply more logical and convincing.

Q DO YOU HAVE ANY COMMENTS CONCERNING THE RESULTS OF YOUR GAS PROXY GROUP DCF RESULT?

A Yes. The gas proxy DCF growth rate of 6.42%, while not as excessive as the growth rate indicated by my water group, is still above the long-term sustainable growth for a utility company. As noted above, the maximum sustainable growth rate is proxied by the GDP growth rate which is projected to be 4.8 to 5.0%. Also, note that the gas proxy group's projected growth rate of 6.42% is very high in comparison to historical growth for these proxy companies. Further, as shown on Schedule BAJ-6, page 2, the historical growth has been much closer to the inflation rate than it has been to actual GDP growth. Hence, the current projected growth, which is higher than forward-looking GDP growth, is not a reasonable growth outlook for these proxy groups.

Q WHY DO YOU BELIEVE GROWTH RATES FOR WATER UTILITY COMPANIES ARE PROJECTED TO BE SO HIGH OVER THE NEXT THREE TO FIVE YEARS?

A Water utility companies are in the midst of major construction programs which are significantly increasing their outstanding capital and net plant investment. Replacement of infrastructure and the improvements to water treatment plants to meet more stringent environmental requirements results in strong growth to utilities' rate base, and growth in earnings. This growth in earnings will be realized over the next five years or so, but will eventually return to more sustainable long-term levels.

It is simply not reasonable to expect that the earnings projections over the next three to five years will be sustainable indefinitely.

Q SINCE YOU HAVE CONCLUDED THAT YOUR GROWTH RATES USED IN YOUR CONSTANT GROWTH DCF MODEL ARE NOT SUSTAINABLE, DO YOU BELIEVE THAT THE RESULTS OF YOUR CONSTANT GROWTH DCF MODEL ARE REASONABLE?

A No, the results of constant growth DCF model are unreasonably high because they reflect growth rates that are not sustainable over an indefinite period of time. However, the growth rate is based on consensus analysts' growth rate projections, so it is a reasonable reflection of rational investment expectations over the next three to five years. The limitation on the constant growth DCF model is that it does not reflect a rational expectation that this short-term growth rate will likely be followed by slower growth at a more long-term sustainable level thereafter. Hence, I have performed a two-stage and a three-stage DCF analysis to reflect this expectation and to test the impact on the DCF results.

Two-Stage DCF Model

Q WHY DO YOU PROPOSE TO USE A TWO-STAGE DCF MODEL TO TEST THE RESULTS OF YOUR CONSTANT GROWTH DCF STUDY?

A I propose to use a two-stage DCF model because the growth rates used in my constant growth model do not reflect reasonable estimates of sustainable long-term growth. While consensus analysts' growth rate estimates are likely reflective of investors' expectations over the next three to five years, professional investors would not expect those growth rates to remain in effect indefinitely. As noted above, utilities cannot grow faster than the economies in which they sell their services. Historically, utility sales have grown at a rate that trails the growth in the overall U.S. economy.

As such, a two-stage DCF model can capture the value of this extraordinary growth over the next five years, followed by a period of sustainable long-term growth thereafter.

Q PLEASE DESCRIBE YOUR TWO-STAGE DCF MODEL.

A The two-stage DCF growth model reflects the possibility of non-constant growth to the company over time. The two-stage model reflects two growth periods: (1) a short-term growth period, which consists of the first five years; and (2) a long-term growth period, which consists of each year starting in year six through perpetuity. For the short-term growth period, I relied on the consensus analysts' growth projections described above in relationship to my constant growth model. For the long-term growth period, I assumed each company's growth would revert to the maximum sustainable growth rate for a utility company using as a proxy the consensus analysts' projected growth of the U.S. GDP.

Q WHAT STOCK PRICE, DIVIDEND AND GROWTH RATE DID YOU USE IN YOUR TWO-STAGE DCF ANALYSIS?

A I relied on the same 13-week stock price, the most recent quarterly dividend payment, and consensus analysts' growth rate projections discussed above in my constant growth DCF model. However, for the long-term sustainable growth rate starting in year six, I used the mid-point of consensus economists' five- to ten-year projected GDP nominal growth rate, or 4.9%.

Q WHAT ARE THE RESULTS OF YOUR TWO-STAGE GROWTH DCF MODEL?

A As shown on the attached Schedule BAJ-7, pages 1 and 2, the resulting common cost of equity from my two-stage DCF growth estimate for my water proxy group is 8.73% and the gas proxy group is 9.2%. As such, the two-stage DCF model indicates a return on equity for Missouri-American in the range of 8.73% to 9.2%, with a mid-point of 8.97%.

Three-Stage DCF Model

Q WHY DO YOU ALSO INCLUDE A THREE-STAGE DCF MODEL WITH YOUR DCF ANALYSIS?

A As with my two-stage analysis, my three-stage analysis tempers the results of my constant growth results by relying on a more optimistic expectation of how long the abnormally risk short-term growth rates can be sustained. Unlike the two-stage model, the three-stage model provides a more staggered transition between the higher near-term growth rates and the more sustainable longer-term growth rates. Consequently, my three-stage model provides a more conservative result than my two-stage model.

Q PLEASE DESCRIBE THE GROWTH RATES USED IN YOUR THREE-STAGE DCF MODEL.

A For the first stage (years 1-5), I used consensus analyst projections for near term growth rates. For the second stage (years 6-9), I decreased my first stage growth by an equal amount each year until I arrived at my third stage (years 10-perpetuity) which is represented by the maximum sustainable growth rate for a utility company, or the consensus analysts' projected growth of the U.S. GDP. This model then projects abnormally risk growth for 10 years and adding to sustained growth in years. For the stock price and dividend, I relied on the same inputs as I used for my other DCF analyses.

Q WHAT ARE THE RESULTS OF YOUR THREE-STAGE DCF ANALYSIS?

A As shown in attached Schedule BAJ-8, pages 1 and 2, the recommended common equity for my water proxy group is 9.02% and for my gas proxy group is 9.3%, with a mid-point of 9.16%.

Risk Premium Model

Q PLEASE DESCRIBE YOUR RISK PREMIUM MODEL USED TO ESTIMATE RETURN ON COMMON EQUITY.

A This model is based on the principle that investors will require higher rates of return from securities which have a higher perceived risk. Bonds will typically provide a lower rate of return than common equity because they offer more certainty in the form of coupon payments and seniority in the event of a bankruptcy filing. In exchange for giving up some of the certainty afforded to bond holders, common equity holders will demand a higher rate of return.

I used two different methods to estimate the equity risk premium required by investors for utility companies. In both cases, I used historical regulatory commission

authorized returns for gas utility companies as a proxy for the market required return on utility common equity securities. In the first case, I compared these returns to the annual returns of Treasury bonds. In the second case, I compared commission authorized returns to "A" rated utility bond yields. I have included my Treasury bond and utility bond yield comparison as Schedule BAJ-9, pages 1 and 2, respectively. For both of these analyses, I selected the period between 1986 and 2008 during which utility common stock has traded at a premium to book value. This is significant because regulatory authorized return on equity supported utilities' ability to attract capital through the issuance of common stock without diluting existing shares.

As illustrated in my Schedule BAJ-9, page 1, the average equity risk premium of commission authorized electric utility common equity returns over U.S. Treasury bonds has been 5.0%. As shown in Schedule BAJ-9, page 2, the average equity risk premium on commission authorized electric utility common equity returns over utility bond yields has been 3.59%.

Q HOW DID YOU USE THESE EQUITY PREMIUMS TO ESTIMATE WPSC'S COST OF COMMON EQUITY?

A In the first case, I added the equity risk premium over Treasury bond yields to current projections of long-term Treasury bond yields. According to Blue Chip financial forecasts, long-term Treasury bond yields are projected to be 5.1%.[3] This projected long-term bond yield of 5.1% and an equity risk premium of 5.0% resulted in an estimated common equity return of 10.1%.

For the second part of my analysis, I added the equity risk premium over utility bond yields to the current yields on "A" rated utility bonds. As shown on Schedule BAJ-10, the average "A" rated utility bond yield over the 13-week period

[3] Blue Chip Financial Forecasts, August 1, 2008 at 2.

ending July 25, 2008 was 6.34%. Adding the bond yield of 6.34% to the estimated equity risk premium of 3.59% results in a return on common equity of 9.93%.

These two methods result in a range of 9.93% to 10.1% with a mid-point of 10.02%.

Capital Asset Pricing Model

Q PLEASE DESCRIBE THE CAPM.

A The foundation of the CAPM method is that the risk of an individual stock that is relevant to an investor is not the standalone risk of that stock, but rather its contribution of risk to an investor's overall portfolio. The theoretical basis for the CAPM method is that the market requires a rate of return for security that is equal to the risk-free rate of return plus a risk premium that is adjusted for a particular stock's risk relative to the overall market risk. The formula for calculating the market required return under the CAPM method is as follows:

$R_i = R_f + B_i \times (R_m - R_f)$ where:

R_i = Required ROR for stock i
R_f = Risk-free rate
R_m = Expected return for the market portfolio
B_i = Measure of the risk for stock i

As demonstrated above, the market premium is the difference between the expected market return, less the risk-free rate of return. Under the CAPM method, this risk premium is adjusted by the beta coefficient to determine the particular risk premium that the market would assign to a specific security.

The CAPM theory maintains that investors will only be compensated for risks that cannot be diversified away by holding a well diversified portfolio of securities. These risks that are diversifiable are generally considered business specific risks and are not systematic to the market as a whole. In a well diversified portfolio, these

non-systematic risks are eliminated by balancing in the portfolio with securities that react differently to firm specific risk factors.

The remaining risk, which is non-diversifiable, is referred to as systematic risk and is represented for a particular stock by the beta coefficient. The beta of a particular security is determined by its volatility relative to the market as a whole. A stock with a beta of 1.0 has volatility that is equal to the market, whereas a stock with a beta of 0.5 has half the volatility, or risk, of the market as a whole.

Q HOW DID YOU DETERMINE THE RISK-FREE RATE USED IN YOUR CAPM ANALYSIS?

A The risk-free rate is typically represented by U.S. Treasury securities. In my analysis I used Blue Chip Financial Forecasts' projected long-term Treasury bond yield of 5.1%

Q WHY DID YOU USE LONG-TERM TREASURY BOND YIELDS AS AN ESTIMATE OF THE RISK-FREE RATE?

A Treasury securities are backed by the full faith and credit of the United States government. Therefore, long-term Treasury bonds are considered to have negligible credit risk. Also, long-term Treasury bonds have an investment horizon similar to that of common stock. As a result, investor-anticipated long-run inflation expectations are reflected in both common stock required returns and long-term bond yields. Therefore, the nominal risk-free rate (or expected inflation rate and real risk-free rate) included in a long-term bond yield is a reasonable estimate of the nominal risk-free rate included in common stock returns.

Treasury bond yields, however, include risk premiums related to unanticipated future inflation and interest rates. Therefore, a Treasury bond yield is not a truly

risk-free rate. Risk premiums related to unanticipated inflation and interest rates are systematic or market risks. Consequently, for companies with betas less than one, using the Treasury bond yield as a proxy for the risk-free rate in the CAPM analysis can produce an overstated estimate of the CAPM return.

Q WHAT DID YOU USE FOR THE BETA TERM IN YOUR CAPM ANALYSIS?

A I used the median beta estimates for my comparable groups. Using the median beta for a group of comparable companies provides a more complete picture of the systematic risk facing an industry or a particular company in that industry. Using the group median beta, as opposed to an individual company beta, will result in a more reliable return on equity estimate. The current average beta for my water group 0.95 and for my gas proxy group is 0.82 (Schedule BAJ-11, pages 1 and 2).

Q HOW DID YOU DETERMINE THE RETURN ON THE OVERALL MARKET IN ORDER TO DEVELOP YOUR RISK PREMIUM ESTIMATE?

A I developed two market risk premium estimates for my CAPM analysis. The first is based on long-term historical market returns and the second is based upon forward looking projections.

The historical market return used to estimate the risk premium was provided by Morningstar in the Stocks, Bonds, Bills and Inflation 2008 Yearbook (Morningstar Study). The Morningstar Study concluded that the arithmetic average of the total return on the S&P 500 for the period of 1926 through 2007 was 12.3%. For the same period, the total return on long-term Treasury bonds was 5.8%. Hence, the indicated market risk premium is 6.5% (12.3% - 5.8% = 6.5%).

I developed my forward-looking risk premium estimate by adjusting the historical real market return for projected inflation. Again, using the Morningstar

Study, I took the historical arithmetic average real market return between 1926 and 2007 of 9.0% and added the current consensus analyst inflation projection of 2.4% as measured by the Consumer Price Index (CPI). The expected market return using these estimates is 11.62%[4] and the resulting market risk premium is 6.52% (11.62% - 5.1% = 6.52%).

Q HOW DOES YOUR ESTIMATED MARKET RISK PREMIUM RANGE COMPARE TO THAT ESTIMATED BY MORNINGSTAR?

A Morningstar estimates a forward-looking market risk premium based on actual achieved data from the historical period of 1926 through year-end 2007. Using this data, Morningstar estimates a market risk premium derived from the total return on large company stocks (S&P 500), less the income return on Treasury bonds. The total return includes capital appreciation, dividend or coupon reinvestment returns, and annual yields received from coupons and/or dividend payments. The income return, in contrast, only reflects the income return received from dividend payments or coupon yields. Morningstar argues that the income return is the only true riskless rate associated with the Treasury bond and is the best approximation of a truly risk-free rate. While I disagree with this assessment from Morningstar, because it does not reflect a true investment option available to the marketplace, and therefore does not produce a legitimate estimate of the expected premium of investing in the stock market versus that of Treasury bonds, I will use Morningstar's conclusion to show the reasonableness of my market risk premium estimates.

Morningstar's analysis indicates that a market risk premium falls somewhere in the range of 6.2% to 7.1%. This range is based on several methodologies. First, Morningstar estimates a market risk premium of 7.1%, which is based on the

[4] [(1 + 0.090) * (1 + 0.024) – 1] * 100

difference between the total market return on common stocks (S&P 500) less the income return on Treasury bond investments. Second, Morningstar found that if the New York Stock Exchange (the NYSE) was used as the market index rather than the S&P 500, that the market risk premium would be 6.8% and not 7.1%. Third, if only the two deciles of the largest companies included in the NYSE were considered, the market risk premium would be 6.35%.[5]

Finally, Morningstar found that the 7.1% market risk premium based on the S&P 500 was impacted by an abnormal expansion of price-to-earnings (P/E) ratios relative to earnings and dividend growth during the period 1980 through 2001. Morningstar believes this abnormal P/E expansion is not sustainable. Therefore, Morningstar adjusted this market risk premium estimate to normalize the growth in the P/E ratio to be more in line with the growth in dividends and earnings. Based on this alternative methodology, Morningstar published a long-horizon supply-side market risk premium of 6.2%.[6]

Thus, based on all of Morningstar's estimates, the market risk premium falls somewhere in the range of 6.2% to 7.1%. The midpoint is 6.65%, which is generally consistent with my estimated range of 6.50% to 6.52% used in my CAPM study.

Q PLEASE SUMMARIZE THE RESULTS OF YOUR CAPM ANALYSIS.

A As shown on Schedule BAJ-12, page 1 for my water proxy group, the CAPM method using both historical and projected market risk premiums provides an estimate return on equity of 11.28% and 11.29%, respectively, with an average of 11.28%. As shown on Schedule BAJ-12, page 2, for my gas proxy group, the CAPM model returns

[5] Morningstar observes that the S&P 500 and the NYSE Decile 1-2 are both large capitalization benchmarks. *Ibbotson SBBI 2008 Valuation Yearbook* (Morningstar, Inc.) at 72 and 74.
[6] Id. at 92-98.

results of 10.76% and 10.77% with an average of 10.76%. The mid-point of my water and gas proxy group CAPM results is 11.02%.

Q DO YOU HAVE ANY COMMENTS ABOUT THE RESULTS OF YOUR CAPM ANALYSES?

A Yes. The results of my CAPM analysis for my water proxy group represents an unreasonably high estimate of the return on common equity for Missouri-American due to the current relatively high betas. As shown in my Schedule BAJ-11, page 1, the current betas for my water proxy group are 35% higher than the average betas for the previous 5-year period. This is a result of the current period of relatively high growth due to the significant investment in rate base. However, this growth (and resulting betas) gives off the false impression that the systematic risk for the water industry is comparable to that of the overall economy (i.e., a beta of 0.95 versus 1.0 for this overall economy), and this is simply not the case. The water industry is still a relatively low risk industry as compared to the overall market.

Return On Equity Summary

Q BASED ON THE RESULTS OF YOUR RATE OF RETURN ON COMMON EQUITY ANALYSES DESCRIBED ABOVE, WHAT RETURN ON COMMON EQUITY DO YOU RECOMMEND FOR MISSOURI-AMERICAN?

A Based on my analyses, I estimate an appropriate return on equity for Missouri-American to be 10.03%.

TABLE 2

ROE Summary Results

Description	Result
Three-Stage DCF	9.16%
Risk Premium	10.02%
CAPM	
Water & Gas Groups	11.02%
Gas Group	10.76%

My analysis resulted in a range for my estimated return on equity for Missouri-American of 9.16% to 11.02%, with an average of 10.09%. The low end represents the results of my three-stage DCF analysis. The upper end represents the results of my CAPM analysis, including my water group results. If I exclude my water group CAPM for the reasons I discussed above, my range becomes 9.16 to 10.76, with an average of 9.96%. To give only partial weight to my water group CAPM, the average of these results, or 10.03% ((10.09+9.96)/2), is my recommended ROE that should be used to set Missouri-American's rates in this proceeding.

I rejected the use of my constant growth DCF analysis for reasons discussed above. Namely, I found that analyst consensus growth estimates do not provide a reasonable estimate of sustainable growth rates as required by the constant growth DCF model. I choose, instead, to use the results of my three-stage DCF model. Using my three-stage DCF estimate results in a more conservative estimate due to its greater reliance on short-term growth rates as compared to my two-stage model.

1 **Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

2 A Yes.

Qualifications of Brian A. Janous

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Brian A. Janous. My business address is 1215 Fern Ridge Parkway, Suite 208, St. Louis, Missouri 63141.

Q WHAT IS YOUR OCCUPATION AND BY WHOM ARE YOU EMPLOYED?

A I am a consultant in the field of public utility regulation with the firm of Brubaker & Associates, Inc. (BAI), energy, economic and regulatory consultants.

Q PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A I was graduated from the University of Missouri at Columbia in 2000 with a Bachelor of Science degree in Finance and Banking and a Bachelor of Arts degree in Philosophy. Upon graduation, I accepted a position with Brubaker & Associates, Inc. Since that time, I have participated in numerous rate and restructuring matters throughout the United States and Canada and I have testified before the Illinois Commerce Commission and the Public Service Commission of Wisconsin. I have also worked in several competitive markets to assist clients with the development of purchasing strategies. I am currently a Senior Consultant in the firm.

In May 2004, I completed a Master of Business Administration degree from Webster University.

The firm of Brubaker & Associates, Inc. provides consulting services in the field of energy procurement and public utility regulation to many clients including large industrial and institutional customers, some utilities and, on occasion, state regulatory agencies. More specifically, we provide analysis of energy procurement options

based on consideration of prices and reliability as related to the needs of the client; prepare rate, feasibility, economic and cost of service studies relating to energy and utility services; prepare depreciation and feasibility studies relating to utility service; assist in contract negotiations for utility services; and provide technical support to legislative activities.

In addition to our main office in St. Louis, the firm also has branch offices in Phoenix, Arizona and Corpus Christi, Texas.

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Missouri-American Water Company

Proposed Rate of Return

Line	Description	Amount (1)	Weight (2)	Cost (3)	Weighted Cost (4)
1	Long-Term Debt	$ 374,411,531	51.99%	6.17%	3.21%
2	Preferred Stock	$ 2,600,573	0.36%	9.17%	0.03%
3	Common Equity	$ 343,216,593	47.65%	10.03%	4.78%
4	**Total**	**$ 720,228,697**	**100.0%**		**8.02%**

Source:
Schedule SWR-1.

Missouri-American Water Company

Accuracy of Interest Rate Forecasts

(Long-Term Treasury Bond Yields - Projected Vs. Actual)

Line	Date	Publication Data: Actual Yield (1)	Publication Data: Projected Yield (2)	Publication Data: For Quarter (3)	Actual Yield in Projected Quarter (4)	Projected Yield Higher (Lower) Than Actual Yield* (5)	Actual Yields Differential** (6)
1	Dec-00	5.8%	5.8%	1Q, 02	5.6%	0.2%	0.2%
2	Mar-01	5.7%	5.6%	2Q, 02	5.8%	-0.2%	-0.1%
3	Jun-01	5.4%	5.8%	3Q, 02	5.2%	0.6%	0.2%
4	Sep-01	5.7%	5.9%	4Q, 02	5.1%	0.8%	0.6%
5	Dec-01	5.5%	5.7%	1Q, 03	4.9%	0.8%	0.6%
6	Mar-02	5.3%	5.9%	2Q, 03	4.7%	1.2%	0.6%
7	Jun-02	5.6%	6.2%	3Q, 03	5.2%	1.0%	0.4%
8	Sep-02	5.8%	5.9%	4Q, 03	5.2%	0.7%	0.6%
9	Dec-02	5.2%	5.7%	1Q, 04	4.9%	0.8%	0.3%
10	Mar-03	5.1%	5.7%	2Q, 04	5.4%	0.3%	-0.3%
11	Jun-03	5.0%	5.4%	3Q, 04	5.1%	0.3%	-0.1%
12	Sep-03	4.7%	5.8%	4Q, 04	4.9%	0.9%	-0.2%
13	Dec-03	5.2%	5.9%	1Q, 05	4.8%	1.1%	0.4%
14	Mar-04	5.2%	5.9%	2Q, 05	4.6%	1.3%	0.6%
15	Jun-04	4.9%	6.2%	3Q, 05	4.5%	1.7%	0.4%
16	Sep-04	5.4%	6.0%	4Q, 05	4.8%	1.2%	0.6%
17	Dec-04	5.1%	5.8%	1Q, 06	4.6%	1.2%	0.4%
18	Mar-05	4.9%	5.6%	2Q, 06	5.1%	0.5%	-0.3%
19	Jun-05	4.8%	5.5%	3Q, 06	5.0%	0.5%	-0.2%
20	Sep-05	4.6%	5.2%	4Q, 06	4.7%	0.5%	-0.2%
21	Dec-05	4.5%	5.3%	1Q, 07	4.8%	0.5%	-0.3%
22	Mar-06	4.8%	5.1%	2Q, 07	5.0%	0.1%	-0.2%
23	Jun-06	4.6%	5.3%	3Q, 07	4.9%	0.4%	-0.3%
24	Sep-06	5.1%	5.2%	4Q, 07	4.6%	0.6%	0.5%
25	Dec-06	5.0%	5.0%	1Q, 08	4.4%	0.6%	0.6%
26	Jan-07	4.7%	5.1%	2Q, 08	4.6%	0.5%	0.2%
29	Apr-07	4.8%	5.0%	3Q, 08			
30	May-07	4.8%	5.1%	3Q, 08			
31	Jun-07	4.8%	5.1%	3Q, 08			
32	Jul-07	5.0%	5.4%	4Q, 08			
33	Aug-07	5.0%	5.2%	4Q, 08			
34	Sep-07	5.0%	5.2%	4Q, 08			
35	Oct-07	4.9%	5.2%	1Q, 09			
36	Nov-07	4.9%	5.1%	1Q, 09			
37	Dec-07	4.9%	4.8%	1Q, 09			
38	Jan-08	4.6%	4.9%	2Q, 09			
39	Feb-08	4.6%	4.6%	2Q, 09			
40	Mar-08	4.6%	4.8%	2Q, 09			
41	Apr-08	4.4%	4.8%	3Q, 09			
42	May-08	4.4%	4.9%	3Q, 09			
43	Jun-08	4.4%	4.9%	3Q, 09			
44	Jul-08	4.6%	5.1%	4Q, 09			
45	Aug-08	4.6%	5.1%	4Q, 09			

Source:
Blue Chip Financial Forecasts, Various Dates.
* Col. 2 - Col. 4.
** Col. 1 - Col. 4.

Missouri-American Water Company

Water Proxy Group

Line	Proxy Group	Bond Ratings[1]		Common Equity Ratios	
		S&P	Moody's	*AUS*[1]	*Value Line*[2]
		(1)	(2)	(3)	(4)
1	American States Water Co.	A	A2	49.0%	51.4%
2	Aqua America Water Co.	AA-	N/R	43.0%	48.4%
3	California Water Service Group	N/R	N/R	55.0%	55.9%
4	Connecticut Water Services	AAA	N/R	49.0%	55.1%
5	Middlesex Water Company	A	N/R	48.0%	49.0%
6	SJW Corporation	N/R	N/R	52.0%	58.2%
7	Southwest Water Company	N/R	N/R	46.0%	56.3%
8	York Water Company	A-	N/R	47.0%	51.7%
9	**Average**	**A+**	**A2**	**48.6%**	**53.3%**
10	Missouri-American Water[3]	A-	Baa1	47.7%	

Sources:

[1] *AUS Utility Reports*; July 2008.

[2] *The Value Line Investment Analyzer.*

[3] Schedule SWR-1.

Missouri-American Water Company

Gas Distribution Proxy Group

Line	Proxy Group	Bond Ratings[1]		Common Equity Ratios	
		S&P	Moody's	*AUS*[1]	*Value Line*[2]
		(1)	(2)	(3)	(4)
1	AGL Resources	A-	A3	47.0%	49.8%
2	Atmos Energy	BBB	Baa3	50.0%	48.0%
3	Laclede Group	A	A3	48.0%	54.6%
4	New Jersey Resources	A+	N/R	55.0%	62.7%
5	Nicor Inc.	AA	A1	65.0%	69.0%
6	Northwest Nat. Gas	AA-	A2	52.0%	53.7%
7	Piedmont Natural Gas	A	A3	51.0%	51.6%
8	South Jersey Inds.	A	Baa1	56.0%	57.3%
9	Southwest Gas Corp.	BBB-	Baa3	46.0%	41.9%
10	WGL Holdings Inc.	AA-	A2	58.0%	60.3%
11	**Average**	**A**	**A3**	**52.8%**	**54.9%**
12	Missouri-American Water[3]	A-	Baa1	47.7%	

Sources:

[1] *AUS Utility Reports*; July 2008.

[2] *The Value Line Investment Survey,* June 13, 2008.

[3] Schedule SWR-1.

Missouri-American Water Company

Water Proxy Group
Growth Rate Estimates

Line	Proxy Group	Value Line[1] Estimated Growth %	Value Line[1] Number of Estimates	Zack's[2] Estimated Growth % (1)	Zack's[2] Number of Estimates (2)	Average of Estimates
1	American States Water Co.	10.00%	1	10.00%	1	10.00%
2	Aqua America Water Co.	9.00%	1	9.60%	5	9.30%
3	California Water Service Group	8.50%	1	9.25%	4	8.88%
4	Connecticut Water Services	N/A	N/A	N/A	N/A	N/A
5	Middlesex Water Company	N/A	N/A	8.00%	1	8.00%
6	SJW Corporation	N/A	N/A	10.00%	1	10.00%
7	Southwest Water Company	12.00%	1	8.50%	2	10.25%
8	York Water Company	N/A	N/A	11.50%	2	11.50%
9	**Average**	**9.88%**	**1**	**9.55%**	2	**9.70%**

Sources:
[1] *The Value Line Investment Survey*, July 25, 2008.
[2] www.zackselite.com; downloaded on July 29, 2008.

Missouri-American Water Company

Gas Distribution Proxy Group
Growth Rate Estimates

Line	Proxy Group	Zack's Estimated Growth %[1] (1)	Zack's Number of Estimates (2)	SNL Estimated Growth %[2] (3)	SNL Number of Estimates (4)	Average of Estimates (5)
1	AGL Resources	4.75%	4	5.30%	2	5.03%
2	Atmos Energy	5.29%	7	5.00%	3	5.15%
3	Laclede Group	10.00%	1	N/A	N/A	10.00%
4	New Jersey Resources	8.00%	2	6.00%	1	7.00%
5	Nicor Inc.	5.75%	4	4.50%	2	5.13%
6	Northwest Nat. Gas	6.50%	4	5.00%	3	5.75%
7	Piedmont Natural Gas	5.40%	5	6.00%	4	5.70%
8	South Jersey Inds.	8.33%	3	7.00%	3	7.67%
9	Southwest Gas Corp.	8.00%	2	6.00%	2	7.00%
10	WGL Holdings Inc.	7.50%	2	4.00%	1	5.75%
11	**Average**	**6.95%**	**3.4**	**5.42%**	**2**	**6.42%**

Sources:
[1] www.zackselite.com; downloaded on July 29, 2008.
[2] www.snl.com; downloaded on July 29, 2008.

Missouri-American Water Company

Water Proxy Group
Constant Growth DCF Model

Line	Proxy Group	13-Week AVG Stock Price[1] (1)	Average Growth (%) (2)	Annual Dividend[2] (3)	Adjusted Yield (4)	Constant Growth DCF (5)
1	American States Water Co.	$34.63	10.00%	$1.00	3.18%	13.18%
2	Aqua America Water Co.	$16.83	9.30%	$0.50	3.25%	12.55%
3	California Water Service Group	$35.26	8.88%	$1.17	3.62%	12.49%
4	Connecticut Water Services	$24.26	N/A	$0.87	N/A	N/A
5	Middlesex Water Company	$18.06	8.00%	$0.70	4.19%	12.19%
6	SJW Corporation	$29.03	10.00%	$0.64	2.44%	12.44%
7	Southwest Water Company	$10.40	10.25%	$0.24	2.54%	12.79%
8	York Water Company	$14.95	11.50%	$0.48	3.61%	15.11%
9	**Average**	**$22.93**	**9.70%**	**$0.70**	**3.26%**	**12.96%**

Sources:
[1] http://moneycentral.msn.com, downloaded on July 29, 2008.
[2] *The Value Line Investment Survey;* July 25, 2008.

Missouri-American Water Company

Gas Distribution Proxy Group
Constant Growth DCF Model

Line	Proxy Group	13-Week AVG Stock Price[1] (1)	Average Growth (%) (2)	Annual Dividend[2] (3)	Adjusted Yield (4)	Constant Growth DCF (5)
1	AGL Resources	$34.74	5.03%	$1.68	5.08%	10.10%
2	Atmos Energy	$27.19	5.15%	$1.30	5.03%	10.17%
3	Laclede Group	$39.92	10.00%	$1.50	4.13%	14.13%
4	New Jersey Resources	$33.09	7.00%	$1.12	3.62%	10.62%
5	Nicor Inc.	$40.50	5.13%	$1.86	4.83%	9.95%
6	Northwest Nat. Gas	$45.62	5.75%	$1.50	3.48%	9.23%
7	Piedmont Natural Gas	$26.50	5.70%	$1.04	4.15%	9.85%
8	South Jersey Inds.	$37.87	7.67%	$1.08	3.07%	10.74%
9	Southwest Gas Corp.	$30.00	7.00%	$0.90	3.21%	10.21%
10	WGL Holdings Inc.	$34.69	5.75%	$1.44	4.39%	10.14%
11	**Average**	**$35.01**	**6.42%**	**$1.34**	**4.10%**	**10.51%**

Sources:
[1] http://moneycentral.msn.com, downloaded on July 29, 2008.
[2] *The Value Line Investment Survey;* June 13, 2008.

Missouri-American Water Company

Water Proxy Group
GDP and Dividend Growth Rates

Line	Proxy Group	Dividend Growth		Inflation (CPI)			Nominal GDP			
		Past		Past		3-5 Years	Past		Projected*	
		10 Years	5 Years	5 Years	10 Years	Projection	5 Years	10 Years	5 Years	10 Years
		(1)	(2)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	American States Water Co.	1.0%	1.5%							
2	Aqua America Water Co.	7.0%	7.5%							
3	California Water Service Group	1.0%	0.5%							
4	Connecticut Water Services	N/A	1.5%							
5	Middlesex Water Company	N/A	2.0%							
6	SJW Corporation	N/A	5.5%							
7	Southwest Water Company	9.5%	9.0%							
8	York Water Company	N/A	N/A							
9	**Average**	**4.6%**	**3.9%**	**2.9%**	**2.6%**	**2.5%**	**5.8%**	**5.3%**	**5.0%**	**4.8%**

Source:
The Value Line Investment Survey; July 25, 2008.
* *Blue Chip Economic Indicators,* March 10, 2008, at 15.

Missouri-American Water Company

Gas Distribution Proxy Group
GDP and Dividend Growth Rates

Line	Proxy Group	Dividend Growth		Inflation (CPI)			Nominal GDP			
		Past		Past		3-5 Years	Past		Projected*	
		10 Years	5 Years	5 Years	10 Years	Projection	5 Years	10 Years	5 Years	10 Years
		(1)	(2)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	AGL Resources	2.5%	4.0%							
2	Atmos Energy	2.5%	1.5%							
3	Laclede Group	1.0%	1.0%							
4	New Jersey Resources	3.5%	4.0%							
5	Nicor Inc.	3.5%	1.0%							
6	Northwest Nat. Gas	1.5%	2.0%							
7	Piedmont Natural Gas	5.0%	4.5%							
8	South Jersey Inds.	2.0%	3.5%							
9	Southwest Gas Corp.	N/A	N/A							
10	WGL Holdings Inc.	1.5%	1.5%							
11	**Average**	**2.6%**	**2.6%**	**2.9%**	**2.6%**	**2.5%**	**5.8%**	**5.3%**	**5.0%**	**4.8%**

Source:
The Value Line Investment Survey; June 13, 2008.
* *Blue Chip Economic Indicators,* March 10, 2008, at 15.

Missouri-American Water Company

Water Proxy Group
Two-Stage Growth DCF Model

Line	Proxy Group	13-Week AVG Stock Price[1] (1)	Annual Dividend[2] (2)	First Stage Growth (3)	Second Stage Growth[3] (4)	Two-Stage Growth DCF (5)
1	American States Water Co.	$34.63	$1.00	10.00%	4.90%	8.68%
2	Aqua America Water Co.	$16.83	$0.50	9.30%	4.90%	8.67%
3	California Water Service Group	$35.26	$1.17	8.88%	4.90%	9.04%
4	Connecticut Water Services	$24.26	$0.87	N/A	4.90%	N/A
5	Middlesex Water Company	$18.06	$0.70	8.00%	4.90%	9.55%
6	SJW Corporation	$29.03	$0.64	10.00%	4.90%	7.80%
7	Southwest Water Company	$10.40	$0.24	10.25%	4.90%	7.96%
8	York Water Company	$14.95	$0.48	11.50%	4.90%	9.41%
9	**Average**	**$22.93**	**$0.70**	**9.70%**	**4.90%**	**8.73%**

Sources:

[1] http://moneycentral.msn.com, downloaded on July 29, 2008.

[2] *The Value Line Investment Survey;* July 25, 2008.

[3] *Blue Chip Economic Indicators*, March 10, 2008.

Missouri-American Water Company

Gas Distribution Proxy Group
Two-Stage Growth DCF Model

Line	Proxy Group	13-Week AVG Stock Price[1] (1)	Annual Dividend[2] (2)	First Stage Growth (3)	Second Stage Growth[3] (4)	Two-Stage Growth DCF (5)
1	AGL Resources	$34.74	$1.68	5.03%	4.90%	10.00%
2	Atmos Energy	$27.19	$1.30	5.15%	4.90%	9.97%
3	Laclede Group	$39.92	$1.50	10.00%	4.90%	9.80%
4	New Jersey Resources	$33.09	$1.12	7.00%	4.90%	8.79%
5	Nicor Inc.	$40.50	$1.86	5.13%	4.90%	9.76%
6	Northwest Nat. Gas	$45.62	$1.50	5.75%	4.90%	8.48%
7	Piedmont Natural Gas	$26.50	$1.04	5.70%	4.90%	9.16%
8	South Jersey Inds.	$37.87	$1.08	7.67%	4.90%	8.28%
9	Southwest Gas Corp.	$30.00	$0.90	7.00%	4.90%	8.35%
10	WGL Holdings Inc.	$34.69	$1.44	5.75%	4.90%	9.42%
11	**Average**	**$35.01**	**$1.34**	**6.42%**	**4.90%**	**9.20%**

Sources:

[1] http://moneycentral.msn.com, downloaded on July 29, 2008.

[2] *The Value Line Investment Survey;* June 13, 2008.

[3] *Blue Chip Economic Indicators*, March 10, 2008.

Missouri-American Water Company

Water Proxy Group
Three-Stage Growth DCF Model

Line	Proxy Group	13-Week AVG Stock Price[1] (1)	Annual Dividend[2] (2)	First Stage Growth (3)	Second Stage Growth Year 6 (4)	Year 7 (5)	Year 8 (6)	Year 9 (7)	Third Stage Growth[3] (8)	Three-Stage Growth DCF (9)
1	American States Water Co.	$34.63	$1.00	10.00%	8.98%	7.96%	6.94%	5.92%	4.90%	8.98%
2	Aqua America Water Co.	$16.83	$0.50	9.30%	8.42%	7.54%	6.66%	5.78%	4.90%	8.94%
3	California Water Service Group	$35.26	$1.17	8.88%	8.08%	7.29%	6.49%	5.70%	4.90%	9.30%
4	Connecticut Water Services	$24.26	$0.87	N/A	N/A	N/A	N/A	N/A	4.90%	N/A
5	Middlesex Water Company	$18.06	$0.70	8.00%	7.38%	6.76%	6.14%	5.52%	4.90%	9.76%
6	SJW Corporation	$29.03	$0.64	10.00%	8.98%	7.96%	6.94%	5.92%	4.90%	8.05%
7	Southwest Water Company	$10.40	$0.24	10.25%	9.18%	8.11%	7.04%	5.97%	4.90%	8.23%
8	York Water Company	$14.95	$0.48	11.50%	10.18%	8.86%	7.54%	6.22%	4.90%	9.86%
9	**Average**	**$22.93**	**$0.70**	**9.70%**	**8.74%**	**7.78%**	**6.82%**	**5.86%**	**4.90%**	**9.02%**

Sources:
[1] http://moneycentral.msn.com, downloaded on July 29, 2008.
[2] *The Value Line Investment Survey;* July 25, 2008.
[3] *Blue Chip Economic Indicators*, March 10, 2008.

Missouri-American Water Company

Gas Distribution Proxy Group
Three-Stage Growth DCF Model

Line	Proxy Group	13-Week AVG Stock Price[1] (1)	Annual Dividend[2] (2)	First Stage Growth (3)	Second Stage Growth Year 6 (4)	Year 7 (5)	Year 8 (6)	Year 9 (7)	Third Stage Growth[3] (8)	Three-Stage Growth DCF (9)
1	AGL Resources	$34.74	$1.68	5.03%	5.00%	4.98%	4.95%	4.93%	4.90%	10.01%
2	Atmos Energy	$27.19	$1.30	5.15%	5.10%	5.05%	5.00%	4.95%	4.90%	9.99%
3	Laclede Group	$39.92	$1.50	10.00%	8.98%	7.96%	6.94%	5.92%	4.90%	10.17%
4	New Jersey Resources	$33.09	$1.12	7.00%	6.58%	6.16%	5.74%	5.32%	4.90%	8.92%
5	Nicor Inc.	$40.50	$1.86	5.13%	5.08%	5.04%	4.99%	4.95%	4.90%	9.78%
6	Northwest Nat. Gas	$45.62	$1.50	5.75%	5.58%	5.41%	5.24%	5.07%	4.90%	8.53%
7	Piedmont Natural Gas	$26.50	$1.04	5.70%	5.54%	5.38%	5.22%	5.06%	4.90%	9.21%
8	South Jersey Inds.	$37.87	$1.08	7.67%	7.11%	6.56%	6.01%	5.45%	4.90%	8.43%
9	Southwest Gas Corp.	$30.00	$0.90	7.00%	6.58%	6.16%	5.74%	5.32%	4.90%	8.46%
10	WGL Holdings Inc.	$34.69	$1.44	5.75%	5.58%	5.41%	5.24%	5.07%	4.90%	9.48%
11	**Average**	**$35.01**	**$1.34**	**6.42%**	**6.11%**	**5.81%**	**5.51%**	**5.20%**	**4.90%**	**9.30%**

Sources:

[1] http://moneycentral.msn.com, downloaded on July 29, 2008.

[2] *The Value Line Investment Survey;* June 13, 2008.

[3] *Blue Chip Economic Indicators*, March 10, 2008.

Missouri-American Water Company

Equity Risk Premium - Treasury Bond

Line	Date	Authorized Gas Returns[1] (1)	Treasury Bond Yield[2] (2)	Indicated Risk Premium (3)
1	1986	13.46%	7.78%	5.68%
2	1987	12.74%	8.59%	4.15%
3	1988	12.85%	8.96%	3.89%
4	1989	12.88%	8.45%	4.43%
5	1990	12.67%	8.61%	4.06%
6	1991	12.46%	8.14%	4.32%
7	1992	12.01%	7.67%	4.34%
8	1993	11.35%	6.59%	4.76%
9	1994	11.35%	7.37%	3.98%
10	1995	11.43%	6.88%	4.55%
11	1996	11.19%	6.71%	4.48%
12	1997	11.29%	6.61%	4.68%
13	1998	11.51%	5.58%	5.93%
14	1999	10.66%	5.87%	4.79%
15	2000	11.39%	5.94%	5.45%
16	2001	10.95%	5.49%	5.46%
17	2002	11.03%	5.43%	5.60%
18	2003	10.99%	4.96%	6.03%
19	2004	10.59%	5.05%	5.54%
20	2005	10.46%	4.65%	5.81%
21	2006	10.44%	4.91%	5.53%
22	2007[3]	10.24%	4.84%	5.40%
23	2008[3]	10.44%	4.41%	6.03%
24	**Average**	**11.49%**	**6.50%**	**5.00%**

Sources:

[1] Regulatory Research Associates, Inc., *Regulatory Focus*, Jan. 85 - Dec. 06.

[2] Economic Report of the President 2007: Table 73. The yields from 2002 to 2005 represent the 20-Year Treasury yields obtained from the Federal Reserve Bank.

[3] Regulatory Research Associates, Inc. *Special Report - January-March 2008, Major Rate Case Decisions.*

Missouri-American Water Company

Equity Risk Premium - Utility Bond

Line	Date	Authorized Gas Returns[1] (1)	Average "A" Rating Utility Bond Yield[2] (2)	Indicated Risk Premium (3)
1	1986	13.46%	9.58%	3.88%
2	1987	12.74%	10.10%	2.64%
3	1988	12.85%	10.49%	2.36%
4	1989	12.88%	9.77%	3.11%
5	1990	12.67%	9.86%	2.81%
6	1991	12.46%	9.36%	3.10%
7	1992	12.01%	8.69%	3.32%
8	1993	11.35%	7.59%	3.76%
9	1994	11.35%	8.31%	3.04%
10	1995	11.43%	7.89%	3.54%
11	1996	11.19%	7.75%	3.44%
12	1997	11.29%	7.60%	3.69%
13	1998	11.51%	7.04%	4.47%
14	1999	10.66%	7.62%	3.04%
15	2000	11.39%	8.24%	3.15%
16	2001	10.95%	7.76%	3.19%
17	2002	11.03%	7.37%	3.66%
18	2003	10.99%	6.58%	4.41%
19	2004	10.59%	6.16%	4.43%
20	2005	10.46%	5.65%	4.81%
21	2006	10.44%	6.07%	4.37%
22	2007[3]	10.24%	6.07%	4.17%
23	2008[3]	10.44%	6.17%	4.27%
24	**Average**	**11.49%**	**7.90%**	**3.59%**

Sources:

[1] Regulatory Research Associates, Inc., *Regulatory Focus*, Jan. 85 - Dec. 06.

[2] *Mergent Public Utility Manual*, Mergent Weekly News Reports, 2003. The utility yields for the period 2001-2006 were obtained from the Mergent Bond Record.

[3] Regulatory Research Associates, Inc. *Special Report - January-March 2008, Major Rate Case Decisions.*

Missouri-American Water Company

Utility Bond Yields

Line	Date	"A" Rating Utility Bond Yield (1)	"Baa" Rating Utility Bond Yield (2)
1	07/25/08	6.54%	7.11%
2	07/18/08	6.51%	7.07%
3	07/11/08	6.33%	6.90%
4	07/03/08	6.33%	6.89%
5	06/27/08	6.31%	6.86%
6	06/20/08	6.40%	6.95%
7	06/13/08	6.48%	7.03%
8	06/06/08	6.29%	6.85%
9	05/30/08	6.36%	6.93%
10	05/23/08	6.22%	6.78%
11	05/16/08	6.27%	6.78%
12	05/09/08	6.20%	6.69%
13	05/02/08	6.24%	6.73%
14	**Average**	**6.34%**	**6.89%**

Source:
www.moodys.com, Bond Yields and Key Indicators.

Missouri-American Water Company

Water Proxy Group
Beta

Line	Proxy Group*	2003 (1)	2004 (2)	2005 (3)	2006 (4)	2007 (5)	Present (6)
1	American States Water Co.	0.65	0.70	0.70	0.80	0.90	1.05
2	Aqua America Water Co.	0.70	0.75	0.80	0.85	0.85	0.95
3	California Water Service Group	0.60	0.70	0.75	0.85	0.95	1.15
4	Connecticut Water Services	0.60	0.65	0.70	0.85	0.85	0.85
5	Middlesex Water Company	0.55	0.60	0.70	0.80	0.80	0.90
6	SJW Corporation	0.50	0.55	0.60	0.75	0.85	1.15
7	Southwest Water Company	0.60	0.65	0.65	0.80	0.90	1.05
8	York Water Company	0.50	0.55	0.50	0.50	0.55	0.50
9	**Average**	**0.59**	**0.64**	**0.68**	**0.78**	**0.83**	**0.95**

Source:
The Value Line Investment Survey; July 25, 2008.
* The historical data was obtained from the *Value Line Investment Analyzer*.

Missouri-American Water Company

Gas Distribution Proxy Group
Beta

Line	Proxy Group*	2003 (1)	2004 (2)	2005 (3)	2006 (4)	2007 (5)	Present (6)
1	AGL Resources	0.75	0.80	0.85	0.95	0.85	0.85
2	Atmos Energy	0.65	0.65	0.70	0.75	0.80	0.85
3	Laclede Group	0.65	0.70	0.75	0.85	0.90	0.90
4	New Jersey Resources	0.65	0.70	0.75	0.80	0.80	0.85
5	Nicor Inc.	0.95	1.00	1.10	1.20	1.05	0.95
6	Northwest Nat. Gas	0.60	0.65	0.70	0.75	0.80	0.80
7	Piedmont Natural Gas	0.70	0.75	0.75	0.80	0.80	0.85
8	South Jersey Inds.	0.50	0.55	0.60	0.70	0.70	0.85
9	Southwest Gas Corp.	0.70	0.80	0.75	0.85	0.85	0.90
10	WGL Holdings Inc.	0.65	0.75	0.80	0.80	0.85	0.90
11	**Average**	**0.68**	**0.74**	**0.78**	**0.85**	**0.84**	**0.87**

Source:
The Value Line Investment Survey; June 13, 2008.
* The historical data was obtained from the *Value Line Investment Analyzer*.

Missouri-American Water Company

Water Proxy Group
CAPM

Line	Description	Historical Premium (1)
1	Risk-Free Rate[1]	5.10%
2	Risk Premium[2]	6.50%
3	Beta[3]	0.95
4	CAPM	11.28%

Line	Description	Prospective Premium (1)
5	Risk-Free Rate[1]	5.10%
6	Risk Premium[2]	6.52%
7	Beta[3]	0.95
8	CAPM	11.29%
9	**CAPM Average**	**11.28%**

Sources:

[1] *Blue Chip Financial Forecasts*; August 1, 2008 at 2.

[2] *SBBI*; 2008 at 31 and 120.

[3] *The Value Line Investment Survey;* July 25, 2008.

Missouri-American Water Company

Gas Distribution Proxy Group
CAPM

Line	Description	Historical Premium (1)
1	Risk-Free Rate[1]	5.10%
2	Risk Premium[2]	6.50%
3	Beta[3]	0.87
4	CAPM	10.76%

Line	Description	Prospective Premium (1)
5	Risk-Free Rate[1]	5.10%
6	Risk Premium[2]	6.52%
7	Beta[3]	0.87
8	CAPM	10.77%
9	**CAPM Average**	**10.76%**

Sources:

[1] *Blue Chip Financial Forecasts*; August 1, 2008 at 2.

[2] *SBBI*; 2008 at 31 and 120.

[3] *The Value Line Investment Survey;* June 13, 2008.