MAWC 28

Exhibit No.:	
Issues:	Capital Structure and Overall Rate of Return
Witness:	Scott W. Rungren
Exhibit Type:	Direct
Sponsoring Party:	Missouri-American Water Company
Case No.:	WR-2015-0301 SR-2015-0302
Date:	July 31, 2015

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. WR-2015-0301
CASE NO. SR-2015-0302

DIRECT TESTIMONY

OF

SCOTT W. RUNGREN

ON BEHALF OF

MISSOURI-AMERICAN WATER COMPANY

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

IN THE MATTER OF MISSOURI-AMERICAN WATER COMPANY FOR AUTHORITY TO FILE TARIFFS REFLECTING INCREASED RATES FOR WATER AND SEWER SERVICE	)))))	CASE NO. WR-2015-0301 CASE NO. SR-2015-0302

AFFIDAVIT OF SCOTT W. RUNGREN

Scott W. Rungren, being first duly sworn, deposes and says that he is the witness who sponsors the accompanying testimony entitled "Direct Testimony of Scott W. Rungren"; that said testimony and schedules were prepared by him and/or under his direction and supervision; that if inquiries were made as to the facts in said testimony and schedules, he would respond as therein set forth; and that the aforesaid testimony and schedules are true and correct to the best of his knowledge.

Scott W. Rungren

Scott W. Rungren

State of Missouri
County of St. Louis
SUBSCRIBED and sworn to
Before me this 14th **day of** July **2015.**

Donna S. Singler

Notary Public

My commission expires: July 17, 2016

DONNA S. SINGLER
Notary Public, Notary Seal
State of Missouri
St. Louis County
Commission # 12368409
My Commission Expires July 17, 2016

DIRECT TESTIMONY
SCOTT W. RUNGREN
MISSOURI-AMERICAN WATER COMPANY
CASE NO. WR-2015-0301
CASE NO. SR-2015-0302

TABLE OF CONTENTS

DIRECT TESTIMONY

SCOTT W. RUNGREN

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. My name is Scott W. Rungren. My business address is 727 Craig Road, St. Louis, Missouri 63141.

Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

A. I am employed by American Water Works Service Company ("Service Company") as a Rates and Regulatory Analyst III. The Service Company is a subsidiary of American Water Works Company, Inc. ("American Water") that provides support services to American Water's utility subsidiaries.

Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. In May of 1983, I received a Bachelor of Science degree in Business Administration with a major in Energy Management from Eastern Illinois University. In May of 1986, I received a Master of Business Administration degree with a specialization in Finance from Northern Illinois University. From 1986 to 1999, I was employed by the Illinois Commerce Commission ("Illinois Commission"). I held various positions while employed there. I joined the Finance Department of the Illinois Commission in 1987, and was promoted to Senior Financial Analyst in 1989. My principal responsibility in that role was to analyze the cost of capital, financial condition and

corporate structure of electric, gas, telephone, and water utilities using dividend discount and risk premium models. In 1993, I transferred to the Energy Programs Division where I performed research and analysis of the integrated resource plans (IRPs) filed by Illinois electric utilities. In 1995 I returned to the Finance Department in the role of Senior Financial Analyst. I remained in the Finance Department at the Illinois Commission until February of 1999. In March of 1999, I began employment with Cinergy Corp., working in the Retail Commodity Services group and focusing on their Real Time Pricing program. In 2001, I began performing long-run generation planning studies for Cinergy's Kentucky and Indiana service areas. In 2006, by which time Cinergy Corp. had merged with Duke Energy, I began working in the Rates Department as a Rates Coordinator, assisting with the development of cost of service studies for the electric and gas operations of Duke Energy Ohio and Duke Energy Kentucky. I also prepared various rate and revenue analyses in that role. In May of 2007, I joined the Service Company as a Senior Financial Analyst. My current duties as a Rates and Regulatory Analyst with the Service Company include the preparation of reports required by the various regulatory commissions governing the jurisdictions in which American Water operates, and assisting in the preparation of financing and rate-related filings for American Water's regulated operating companies.

Q. HAVE YOU PREVIOUSLY TESTIFIED IN REGULATORY MATTERS?

A. Yes, I have presented testimony before the Missouri Public Service Commission ("MoPSC"), and have testified before the Illinois Commission, the Iowa Utilities

Board, the Indiana Utility Regulatory Commission, the Kentucky Public Service Commission, and the Public Utilities Commission of Ohio.

Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS PROCEEDING?

A. The purpose of my testimony is to present the recommend capital structure to be used for computing Missouri American Water Company's ("Company" or "MAWC") weighted average cost of capital ("WACC"). The WACC is used as the authorized overall rate of return on rate base. The Company's WACC reflects, among other things, the rate of return on common equity recommendation presented in the Direct Testimony of MAWC witness Dr. Roger Morin. In addition, I will address the impact on the Company's financial and business risk of the alternative ratemaking approaches discussed in *Staff's Water Utility Rate Design Analysis* filed in this rate case.[1]

Q. HAVE YOU PREPARED ANY SCHEDULES TO ACCOMPANY YOUR TESTIMONY?

A. Yes, I have prepared Schedule SWR-1, which consists of four pages. Page one contains a summary showing the Company's proposed WACC along with the pro forma capital component balances at January 31, 2016. Page two shows the calculation of the Company's pro forma balance and embedded cost of long-term

[1] On June 29, 2015, the Commission issued an order in this rate case directing Missouri-American Water Company to "respond to Staff's Water Utility Rate Design Analysis in the direct testimony it files as part of its general rate case filing." *Order Directing Response, Issued and Effective June 29, 2015, 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 Its Missouri Service Area. (Case No. WR-2015-0301).*

debt, page three shows the calculation of the Company's pro forma balance and embedded cost of preferred stock, and page four shows the calculation of the Company's pro forma balance of common equity, all as of January 31, 2016.

II. RECOMMENDED CAPITAL STRUCTURE AND OVERALL RATE OF RETURN

Q. WHAT CAPITAL STRUCTURE DO YOU RECOMMEND BE USED FOR COMPUTING THE COMPANY'S WACC FOR RATEMAKING PURPOSES?

A. Since this proceeding will set rates for future service, the capital structure components should be developed from estimates for the period during which those rates will be in effect. As a starting point, I used MAWC's actual capital structure as of December 31, 2014. I then adjusted the component balances in that capital structure to reflect all changes expected to occur by January 31, 2016, which is the end of the proposed true-up period. This capital structure should be used to calculate the WACC because it reflects the capital that will be in place to fund the Company's proposed rate base. The pro forma January 31, 2016 capital structure is comprised of 47.51% long-term debt, 0.12% preferred stock, and 52.37% common equity, as shown on Schedule SWR-1, page 1.

Q. DO YOU BELIEVE THAT MAWC'S PRO FORMA JANUARY 31, 2016 CAPITAL STRUCTURE IS REASONABLE FOR RATEMAKING PURPOSES?

A. Yes, I do.

Q. HOW DID YOU DETERMINE THAT CAPITAL STRUCTURE IS REASONABLE?

A. To determine whether MAWC's pro forma January 31, 2016 capital structure is reasonable for ratemaking purposes, I examined the average common equity ratios of the proxy group of nine water companies that MAWC witness Dr. Roger Morin relied on to perform his cost of equity analysis in this case. Specifically, I compared MAWC's common equity ratio in my proposed capital structure to the average equity ratio of the water companies in Dr. Morin's proxy group at December 31, 2014. The equity ratios for each company in the proxy group were obtained from the Value Line Investment Survey reports published on April 17, 2015. I excluded one company, Consolidated Water Company ("CWC"), because it has an equity ratio of 100%. The remaining eight utilities and their corresponding equity ratios are shown in the table below:

Company	Equity Ratio at 12/31/14
American States Water	60.90%
American Water Works	47.40%
Aqua America	51.50%
California Water	59.90%
Connecticut Water Service	54.20%
Middlesex Water	58.80%
SJW Corp.	48.40%
York Water	55.20%
Average	54.54%

As of the month ending December 2014, the average common equity ratio of Dr. Morin's water company proxy group (excluding CWC) was 54.54%, with a standard deviation of 4.82%, representing a range of 49.72% - 59.36% around the mean of 54.54%. Thus, MAWC's pro forma January 31, 2016 common equity ratio of

52.37% is well within this range, and is actually slightly lower than the average of the peer group noted above.

To further check the reasonableness of my proposed capital structure, I also examined Value Line's projected equity ratios for the eight water utilities as published in the same Value Line reports discussed above. Based on the Value Line projections the average common equity ratio for the eight water utilities will be 53.3% in 2015, 52.6% in 2016, and 52.4% over the 2018-2020 period. Thus, MAWC's pro forma January 31, 2016 equity ratio is virtually identical to Value Line's projected equity ratios for the eight water utilities.

Based on these comparisons, I concluded that MAWC's pro forma January 31, 2016 capital structure is reasonable and, therefore, should be used to compute the Company's WACC in this proceeding.

Q. DID YOU MAKE ANY PRO FORMA ADJUSTMENTS TO MAWC'S PRINCIPAL AMOUNT OF LONG-TERM DEBT?

A. Yes, I did. The Company's pro forma principal amount of long-term debt at January 31, 2016 reflects a $20 million issuance planned for mid-August 2015. This is expected to be a thirty-year taxable bond issued through American Water Capital Corp. ("AWCC"), which is American Water's financing subsidiary. The assumed interest rate on this new issuance is 4.00%, with issuance costs projected to be 1.03%. In addition, MAWC's long-term debt carrying value was adjusted to reflect the amortization of debt issuance expense and debt discount that will occur during the pro

forma period. The pro forma carrying value of long-term debt at January 31, 2016 is $480,791,318 as shown on Schedule SWR-1, pages 1 and 2.

Q. WHAT IS MAWC'S COST OF LONG-TERM DEBT?

A. MAWC's pro forma January 31, 2016 cost of long-term debt is 5.47%, as shown on Schedule SWR-1, page 1. The computation of this cost is shown on Schedule SWR-1, page 2.

Q. PLEASE DESCRIBE AWCC.

A. AWCC is a corporation organized under Delaware law with its principal office in Voorhees, New Jersey. AWCC is a wholly-owned subsidiary of American Water dedicated to providing financial services to American Water's water and wastewater service subsidiaries by aggregating the financing requirements of such subsidiaries, and creating larger and more cost efficient debt issues at more attractive interest rates and lower transaction costs than would otherwise be available for the subsidiaries.

Q. DOES AWCC PROVIDE A COST EFFECTIVE MEANS FOR MAWC TO OBTAIN LONG-TERM DEBT FINANCING?

A. Yes, it does. AWCC is generally able to arrange for the issuance of long-term debt on terms more favorable than MAWC could obtain if it issued its own debt outside of AWCC (i.e., obtaining debt from a third-party lender). MAWC also incurs lower transaction costs because of its participation in the AWCC financing arrangement.

Q. HOW DOES AWCC RECOVER THE COSTS INCURRED TO PROVIDE FINANCIAL SERVICES TO MAWC AND OTHER PARTICIPANTS?

A. The costs incurred by AWCC in connection with each long-term borrowing by AWCC are divided among each participant in proportion to the principal amount of that borrowing that is loaned to that participant. Such issuance costs are less (per dollar of debt issued) than the costs that each participant (including MAWC) would incur by issuing debt on its own behalf.

Q. PLEASE EXPLAIN THE PRO FORMA ADJUSTMENT YOU MADE TO MAWC'S PREFERRED STOCK BALANCE.

A. I started with the Company's preferred stock balance as of December 31, 2014 and then made adjustments to reflect a sinking fund payment of $250,000 that will occur on November 1, 2015, and the appropriate amortization of the issuance expense that will occur during the pro forma period. The Company's pro forma adjusted preferred stock balance is $1,227,850, as shown on Schedule SWR-1, pages 1 and 3.

Q. WHAT IS MAWC'S COST OF PREFERRED STOCK?

A. MAWC's pro forma January 31, 2016 cost of preferred stock is 9.46%, as shown on Schedule SWR-1, pages 1 and 3.

Q. PLEASE EXPLAIN THE PRO FORMA ADJUSTMENTS YOU MADE TO MAWC'S COMMON EQUITY BALANCE.

A. Starting with the Company's actual common equity balance at December 31, 2014, I made a pro forma adjustment to reflect MAWC's $30,000,000 common equity

infusion that occurred in May 2015 in the form of paid-in capital from its parent, American Water. American Water currently owns 100% of the outstanding common stock of MAWC. The funds from this equity infusion were used to pay down short-term debt that had been employed to temporarily fund additions to utility property.

Q. WHAT OTHER ADJUSTMENT DID YOU MAKE TO MAWC'S COMMON EQUITY BALANCE?

A. I adjusted MAWC's December 31, 2014 retained earnings balance, which is a component of common equity, to capture the changes expected to occur by the end of the proposed true-up period ending January 31, 2016. Specifically, I added net income and subtracted dividend payments expected to occur during that period, which results in a net pro forma increase to retained earnings of $14,549,475. Adding that increment to the December 31, 2014 retained earnings balance produces a total pro forma common equity balance of $529,870,981 at January 31, 2016, as shown on Schedule SWR-1, pages 1 and 4.

Q. HAVE YOU REVIEWED THE TESTIMONY OF DR. ROGER MORIN, THE COMPANY'S COST OF EQUITY WITNESS IN THIS CASE?

A. Yes, I have.

Q. WHAT COST RATE HAVE YOU APPLIED TO MAWC'S COMMON EQUITY COMPONENT IN THIS CASE?

A. The Company has requested and used a cost of equity of 10.70%. This cost of common equity lies at the upper portion of a range of ROEs developed and

recommended by Dr. Morin, and is applied to the Company's pro forma capital structure to arrive at the 8.21% overall weighted cost of capital proposed in the Company's filing. This is shown on page 1 of Schedule SWR-1.

Q. IS DR. MORIN'S RECOMMENDED COST OF EQUITY A REASONABLE DETERMINATION OF THE INVESTOR-REQUIRED RETURN ON EQUITY FOR MAWC IN THIS CASE?

A. Yes, it is. It is certainly a reasonable and valid recommendation for the Company to utilize as the market-required return on equity since it applies to the water utilities in Dr. Morin's proxy group which have business and financial risks similar to those of the Company. The Company has had a tremendous need for capital since the last rate case, and this need will continue into the pro forma period and beyond. The Company's rates should be established using a cost of capital reflective of rates authorized for other water utilities and other utility companies with similar risk profiles, particularly those of other regulated American Water subsidiaries with which the Company must compete for capital.

III. IMPACT OF ALTERNATIVE RATEMAKING APPROACHES ON MISSOURI-AMERICAN WATER COMPANY'S FINANCIAL AND BUSINESS RISKS

Q. PLEASE EXPLAIN FINANCIAL RISK AND BUSINESS RISK.

A. A utility's cost of equity is impacted significantly by its financial and business risks. Financial risk refers to the amount of debt a business incurs to finance its operations. As Dr. Morin explains in his direct testimony, taking on higher levels of debt or financial liability increases the costs of both debt and equity financing to the utility.

Business risk derives from the probability that a company's cash flows will not be sufficient to cover its operating expenses (e.g., the cost of goods sold, rent and wages). Unlike financial risk, business risk is independent of the amount of debt incurred by the company. In his direct testimony Dr. Morin explains the impact of MAWC's business risks on his cost of equity recommendation and the potential impact that increased financial risk would have on his cost of equity recommendation.

Q. WOULD THE ADOPTION OF MAWC'S PROPOSED REVENUE STABILIZATION MECHANISM AFFECT MAWC'S FINANCIAL OR BUSINESS RISK?

A. The risk impact, if any, of a revenue stabilization mechanism ("RSM") would be on a utility's business risk (e.g., weather or failure to meet sales forecasts). In fact, an element of business risk addressed by an RSM is the chance that cooler, wetter weather will result in a revenue level that is lower than the authorized level. However, the empirical evidence demonstrates that revenue decoupling adjustments are both surcharges for under-collections of revenues for fixed costs and refunds of over-collections of revenues.[2] In the refund situation, the utility has foregone the opportunity to collect more revenue than the amount authorized in its last general rate case. While opponents of decoupling tend to testify extensively about the risk reduction associated with the possibility of surcharges to adjust for under-collection of expenses, acknowledgements of lost opportunities associated with possible refunds are far more infrequent. In essence, a company is surrendering some upside revenue potential associated with weather conditions that result in a higher-than-expected

[2] Pamela Morgan, *A Decade of Decoupling for U.S. Energy Industries,* Feb. 2013

level of sales in exchange for some downside protection against the potential that weather conditions will cause lower-than-expected sales.

Another element of business risk that an RSM could affect is the failure to meet sales forecasts. It is reasonable to assume that the revenue forecast upon which rates are based is the revenue forecast that the commission believes is most likely to represent the utility's actual revenue. If a utility is consistently failing to meet its revenue forecast – likely because the revenue forecast does not properly account for conservation – then that is a shortcoming of regulation that needs to be corrected and not an element of risk for which there needs to be an adjustment.[3] Thus, an RSM would simply provide MAWC with the ability to collect the revenue that the Commission found to be appropriate.

Q. IF THE COMMISSION WERE TO ADOPT THE COMPANY'S PROPOSED RSM IN THIS CASE, SHOULD THE COMPANY'S ALLOWED COST OF CAPITAL OR RETURN ON EQUITY ("ROE") BE ADJUSTED?

A. No, it should not. A number of commissions addressing the ROE issue have noted the absence of empirical evidence regarding how, if at all, an RSM impacts a utility's business risk.[4] This absence of evidence is not surprising since, as Company witness Dr. Roger Morin states, investors generally do not associate specific increments to

[3] See Roach DT and Tinsley DT.

[4] Pamela Morgan, *A Decade of Decoupling for U.S. Energy Industries,* Feb. 2013; Wharton, Vilbert, Goldberg & Brown, *The Impact of Decoupling on the Cost of Capital: An Empirical Investigation*, The Brattle Group, February 2011.

their return requirements with specific rate structures.[5] Ultimately, to the extent that RSMs have been adopted in over 30 states, it is reasonable to conclude that the market-required cost of common equity for water utilities already incorporates the impact of any risk-mitigation attributable to RSMs. Investors are aware that alternative regulatory mechanisms such as RSMs have been approved to help mitigate the variability of weather and declining customer consumption, and such information is already taken into account by the market.

In fact, the water companies in Dr. Morin's proxy group have approved RSMs and other alternative ratemaking approaches that are not currently available to MAWC. As a result, the impact of these alternative ratemaking approaches is already reflected in the capital market data of Dr. Morin's proxy group companies. Since Dr. Morin's proxy group includes utilities with RSMs and other alternative ratemaking approaches, any corresponding risk reduction and ROE impact is already reflected in the cost of common equity he derived for the companies in his proxy group and recommended for MAWC. Consequently, any downward adjustment to MAWC's cost of common equity to capture the impact of an RSM would be redundant and would overstate the degree to which business risk has been reduced by the RSM. For all of these reasons, there is no basis to apply a downward adjustment to MAWC's cost of common equity in the event that the Commission approves the adoption of the Company's proposed RSM.

[5] As Dr. Morin stated in his Direct Testimony, "...it is important to note that investors generally do not associate specific increments to their return requirements with specific rate structures. Rather, investors tend to look at the totality of regulatory and ratemaking approaches in place relative to those in place at comparable companies when assessing risk." (Morin DT). *See also, Staff's Water Utility Rate Design Analysis* filed in this rate case at unnumbered pp. 8-10.

Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes, it does.

Missouri-American Water Company
Weighted Average Cost of Capital
Pro Forma at January 31, 2016
Case No. WR-2015-0301
Case No. SR-2015-0302

Class of Capital	Amount	Percent of Total	Cost Rate	Weighted Cost of Capital
Long-Term Debt	$480,791,318	47.51%	5.47%	2.60%
Preferred Stock	1,227,850	0.12%	9.46%	0.01%
Common Equity	529,870,981	52.37%	10.70%	5.60%
Total Capitalization	$1,011,890,149	100.00%		8.21%

Missouri-American Water Company
Pro Forma Cost of Long-Term Debt at January 31, 2016
Case No. WR-2015-0301
Case No. SR-2015-0302

Subledger	Rate	Issue Date	Maturity Date	Principal Amount	Amount Outstanding @ 12/31/14	Pro Forma Adjustments	Pro Forma Amount Outstanding @ 1/31/16	Unamortized Issuance Expense @ 12/31/14	Pro Forma Adjustments	Monthly Amortization Debt Expense	Unamortized Issuance Expense @ 1/31/16	Unamortized Debt Discount @ 12/31/14	Pro Forma Adjustments	Monthly Amortization Debt Discount	Unamortized Debt Discount @ 1/31/16	Carrying Value @ 1/31/16	Annual Amortization Debt Expense	Annual Amortization Debt Discount	Annual Interest Expense	Total Cost
New Taxable	4.000%	08/15/15	08/15/45	$0	$0	$20,000,000	$20,000,000	$0		$572	$202,853					$19,797,147	$6,867	$0	$800,000	$806,867
BD170005	7.790%	06/01/97	06/01/27	8,000,000	8,000,000		8,000,000	47,172		317	43,057					7,956,943	3,798	0	623,200	626,998
BD170006	8.580%	04/21/95	03/01/25	3,000,000	3,000,000		3,000,000	26,374		216	23,564					2,976,436	2,593	0	257,400	259,993
BD170007	7.140%	03/16/94	03/01/34	12,500,000	12,500,000		12,500,000	160,450		698	151,382					12,348,618	8,370	0	892,500	900,870
BD170017	4.600%	12/20/06	12/01/36	57,480,000	57,480,000		57,480,000	1,116,825		4,240	1,061,706					56,418,294	50,879	0	2,644,080	2,694,959
BD170018	6.593%	10/22/07	10/15/37	103,000,000	103,000,000		103,000,000	769,830		2,888	752,288					102,247,712	34,654	0	6,790,790	6,825,444
BD170019	6.550%	08/01/08	05/31/23	70,000,000	70,000,000		70,000,000	147,541		1,468	128,456					69,871,544	17,617	0	4,585,000	4,602,617
BD170021	5.050%	11/21/11	10/15/37	25,000,000	25,000,000		25,000,000	0		0	0					25,000,000	0	0	1,262,500	1,262,500
BD170024	4.925%	06/11/12	10/15/37	18,292,000	18,292,000		18,292,000	0		0	0					18,292,000	0	0	900,881	900,881
BD170025	4.925%	06/11/12	10/15/37	10,944,000	10,944,000		10,944,000	0		0	0					10,944,000	0	0	538,992	538,992
BD170026	2.650%	06/11/12	10/15/17	10,443,000	10,443,000		10,443,000	0		0	0					10,443,000	0	0	276,740	276,740
BD170027	2.650%	06/11/12	10/15/17	3,826,000	3,826,000		3,826,000	0		0	0					3,826,000	0	0	101,389	101,389
BD170032	2.800%	07/02/12	10/16/17	2,069,000	2,069,000		2,069,000	0		0	0					2,069,000	0	0	57,932	57,932
BD170033	2.800%	07/02/12	10/16/17	7,906,000	7,906,000		7,906,000	0		0	0					7,906,000	0	0	221,368	221,368
BD170034	2.800%	07/02/12	10/15/17	11,429,000	11,429,000		11,429,000	0		0	0					11,429,000	0	0	320,012	320,012
BD170035	2.800%	07/02/12	10/15/17	16,198,000	16,198,000		16,198,000	0		0	0					16,198,000	0	0	453,544	453,544
BD170028	4.900%	07/02/12	10/15/37	2,331,000	2,331,000		2,331,000	0		0	0					2,331,000	0	0	114,219	114,219
BD170029	4.900%	07/02/12	10/15/37	10,364,000	10,364,000		10,364,000	0		0	0					10,364,000	0	0	507,836	507,836
BD170030	4.900%	07/02/12	10/15/37	13,081,000	13,081,000		13,081,000	0		0	0					13,081,000	0	0	640,969	640,969
BD170031	4.900%	07/02/12	10/15/37	22,712,000	22,712,000		22,712,000	0		0	0					22,712,000	0	0	1,112,888	1,112,888
BD170036	4.300%	12/17/12	12/01/42	15,000,000	15,000,000		15,000,000	142,570		426	137,038	27,100		76	26,314	14,836,648	5,106	910	645,000	651,016
BD170037	3.400%	07/31/13	12/21/21	20,000,000	20,000,000		20,000,000	0		0	0					20,000,000	0	0	680,000	680,000
BD170038	3.850%	11/20/13	03/01/24	25,000,000	25,000,000		25,000,000	174,558		1,586	153,935	87,046		809	76,535	24,769,531	19,037	9,703	962,500	991,240
BD170008	5.500%	05/18/93	01/01/23	4,950,000	0		0	103,846		1,082	89,784					-89,784	12,981	0	0	12,981
BD170009	5.000%	02/01/98	02/01/28	4,500,000	0		0	166,414		608	158,504					-158,504	7,302	0	0	7,302
BD170010	5.850%	07/26/96	07/01/26	6,000,000	0		0	171,218		1,241	155,089					-155,089	14,889	0	0	14,889
BD170011	5.000%	11/01/98	11/30/28	19,000,000	0		0	370,130		10,886	228,610					-228,610	130,634	0	0	130,634
BD170013	5.900%	03/01/00	03/01/30	23,000,000	0		0	789,192		2,886	751,680					-751,680	34,626	0	0	34,626
BD170014	5.200%	04/01/02	04/01/32	15,000,000	0		0	316,732		9,316	195,629					-195,629	111,788	0	0	111,788
BD170020	8.250%	02/04/09	12/01/38	25,000,000	0		0	745,172		6,772	657,133					-657,133	81,266	0	0	81,266
BD350006 - Q	0.000%	01/01/05	11/30/29	0	0		0	425,125		2,375	394,250					-394,250	28,500	0	0	28,500
BD350007 - R	0.000%	01/01/05	01/31/21	0	0		0	402,814		5,518	331,080					-331,080	66,216	0	0	66,216
BD350008 - S	0.000%	01/01/05	01/31/21	0	0		0	460,955		5,423	390,456					-390,456	65,076	0	0	65,076
BD350009 - T	5.500%	02/01/93	02/01/23	15,000,000	0		0	210,194		2,167	182,024					-182,024	26,003	0	0	26,003
BD350010 - U	5.700%	06/01/95	06/01/25	12,000,000	0		0	205,563		1,645	184,185					-184,185	19,734	0	0	19,734
BD350011 - V	5.500%	11/01/96	11/01/26	19,900,000	0		0	375,745		2,646	341,346					-341,346	31,753	0	0	31,753
BD350013 - X	5.100%	03/01/98	03/01/28	25,000,000	0		0	286,044		8,413	176,674					-176,674	100,957	0	0	100,957
BD350014 - Y	5.000%	03/01/99	03/01/29	40,000,000	0		0	829,466		3,027	790,112					-790,112	36,327	0	0	36,327
				$683,925,000	$468,575,000	$20,000,000	$488,575,000	$8,463,930	$0	$76,414	$7,680,834	$114,146	$0	$884	$102,849	$480,791,318	$916,973	$10,613	$25,389,740	$26,317,326

Cost of Long-Term Debt = [Total Cost / Carrying Value] 5.47%

Missouri-American Water Company
Pro Forma Cost of Preferred Stock at January 31, 2016
Case No. WR-2015-0301
Case No. SR-2015-0302

Type, Par Value	Dividend Rate	Date Issued	Amount Outstanding @ 12/31/14	Adjustments	Amount Outstanding @ 1/31/16	Unamortized Issuance Expense @ 12/31/14	Adjustments	Unamortized Issuance Expense @ 1/31/16	Carrying Value @ 1/31/16	Annual Amortization	Annual Dividends	Total Annual Cost
Preference Stock $100 par	9.18%	10/3/91	$1,500,000	($250,000)	$1,250,000	$23,690	($1,540)	$22,150	$1,227,850	$1,421	$114,750	$116,171
Total Preferred Stock			$1,500,000	($250,000)	$1,250,000	$23,690	($1,540)	$22,150	$1,227,850	$1,421	$114,750	$116,171

Total Cost of Preferred Stock = [Total Annual Cost/Carrying Value] 9.46%

Missouri-American Water Company
Pro Forma Common Equity at January 31, 2016
Case No. WR-2015-0301
Case No. SR-2015-0302

	Balance @ 12/31/14	Equity Infusion	Adjustments Net Income	Dividends Paid	Balance @ 1/31/16
Common Stock	$95,994,075		-	-	$95,994,075
Paid-in Capital	196,529,923	$30,000,000	-	-	226,529,923
Retained Earnings	192,797,508	-	$50,432,287	($35,882,812)	207,346,984
Total Common Equity	$485,321,506	$30,000,000	$50,432,287	($35,882,812)	$529,870,981

Pro-Forma Adjustments:

Additional Paid-in Capital		$30,000,000		
Retained Earnings				
Add: Net Income Available to Common				
ABP Jan '15 - Jan '16			$50,432,287	
Less: Common Stock Dividends				
ABP Jan '15 - Jan '16				($35,882,812)
Total Pro Forma RE Adjustment				$14,549,475