EXHIBIT

Exhibit No.:	
Issue(s):	Rate of Return
Witness:	Mark Burdette
Type of Exhibit:	Rebuttal
Sponsoring Party:	Public Counsel
Case No.:	WR-2003-0500

REBUTTAL TESTIMONY

OF

MARK BURDETTE

FILED

JAN 2 3 2004

Missouri Public Service Commission

Submitted on Behalf of
the Office of the Public Counsel

MISSOURI-AMERICAN WATER COMPANY

Case No. WR-2003-0500

November 10, 2003

Exhibit No. 53
Case No(s). WR-2003-0500
Date 12/16/03 **Rptr** SLKM

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-2003-0500

AFFIDAVIT OF MARK BURDETTE

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Mark Burdette, of lawful age and being first duly sworn, deposes and states:

1. My name is Mark Burdette. I am a Financial Analyst for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my direct testimony consisting of pages 1 through 14.

3. I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

Mark Burdette

Subscribed and sworn to me this 10th day of November 2003.

Kathleen Harrison
Notary Public

My commission expires January 31, 2006.

REBUTTAL TESTIMONY

OF

MARK BURDETTE

MISSOURI AMERICAN WATER COMPANY

CASE NO. WR-2003-0500 AND WC-2004--0168

Q. ARE YOU THE SAME MARK BURDETTE WHO FILED DIRECT TESTIMONY BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION (MPSC OR THE COMMISSION) IN THIS PROCEEDING?

A. Yes.

Q. WHAT IS THE PURPOSE OF THIS TESTIMONY?

A. I will respond to the direct testimony of MPSC Staff (Staff) witness David Murray, the direct testimony of Missouri-American Water Company (MAWC, the Company) witness Pauline Ahern and portions of the direct testimony of MAWC witness Edward Grubb.

Q ARE YOU AWARE THAT THE STAFF OF THE MISSOURI PUBLIC SERVICE COMMISSION HAS FILED A NOTICE OF EXCESSIVE EARNINGS COMPLAINT AGAINST MISSOURI AMERICAN WATER COMPANY?

A. Yes.

CAPITAL STRUCTURE

Q. WHAT ARE YOUR COMMENTS CONCERNING THE CAPITAL STRUCTURE RECOMMENDED BY MAWC?

A. Company witnesses Ahern and Grubb failed to recommend a capital structure for MAWC as of the Commission-ordered test year in this case, which is the year ending 12/31/02. They also skipped the Commission-ordered true-up date of June 30, 2003. Rather, they utilized a pro forma capital structure as of 30 November 2003.

Although Public Counsel does in certain cases agree to utilize a true-up and update period, the appropriate date for which to file recommendations in direct testimony is the test year, for which data is available. Failing to do that, the true-up date, for which hard data is available, might be appropriate. However, a pro forma capital structure based on a future date, incorporating events which have not occurred, and may not occur, is not appropriate. MAWC has essentially failed to provide the Commission with a valid capital structure to consider. The Company's recommended capital structure should not be considered by the MPSC in this proceeding.

Q. WHAT ARE YOUR COMMENTS CONCERNING THE CAPITAL STRUCTURE RECOMMENDED BY STAFF WITNESS MURRAY?

A. Mr. Murray appropriately based his recommendation on the Commission-ordered test year in this case. However, he used the capital structure for American Water Works Company, which ceased to exist as of 10 January 2003 when it was acquired by Thames Water, which is the water division of the German utility RWE.

Therefore, there will simply be no information on which to base his capital structure as of the Commission-ordered true-up date of 30 June 2003, as the publicly-traded entity American Water Works has ceased to exist.

Q. HAVE YOU ALTERED YOUR RECOMMENDED CAPITAL STRUCTURE FROM THE ONE WHICH APPEARS IN YOUR DIRECT TESTIMONY?

A. No, not at this point. During pre-hearing conferences for this case, MAWC expressed displeasure at my inclusion of short-term debt in my recommended capital structure. The Company assured me that as of the true-up date, the data would indicate that short-term debt could appropriately be excluded. However, as of the filing of this testimony, I have not received the updated information. Therefore, my recommended capital structure remains the MAWC's capital structure as of the end of the test year.

Q. WHY DID YOU INCLUDE SHORT-TERM DEBT IN YOUR CAPITAL STRUCTURE FOR MAWC?

A. I included short-term debt because, over the period of the test year, MAWC consistently utilized short-term debt at levels that exceeded CWIP. Also, the average level of STD (in excess of CWIP) exceeded 2% of the total capital structure. I choose to include STD when its use is consistent and the level is 2% or more of total capital.

Q. PLEASE SHOW THE CAPITAL STRUCTURE THAT YOU RECOMMEND.

A. I recommend the following capital structure be used in this proceeding:

	Percent
Common equity	40.41%
Preferred stock	0.52%
Long-term debt	55.58%
Short-term debt	3.50%
	100.0%

Q. WHAT ARE YOUR FINAL COMMENTS REGARDING THE APPROPRIATE CAPITAL STRUCTURE TO USE TO SET MAWC'S RATES?

A. Public Counsel is the only party in this proceeding that has recommended a logical and appropriate capital structure for the Commission's consideration. Therefore, Public Counsel's capital structure should be utilized to set MAWC's rates.

EMBEDDED COST RATES

Q. WHAT IS THE APPROPRIATE EMBEDDED COST RATE FOR MAWC'S LONG-TERM DEBT?

A. The embedded cost rate is 6.23% for MAWC's long-term debt as of the end of the test year.

Q. WHAT EMBEDDED COST OF LONG-TERM DEBT IS BEING RECOMMENDED BY THE COMPANY, AND DO YOU AGREE WITH THIS RECOMMENDATION?

A. MAWC's recommended cost of 6.22%. However, according to Mr. Grubb's testimony, the Company's recommended cost is a pro forma calculation based on what the Company expects to be the case on 30 November 2003 (Grubb-Direct, page 10, line 1-9). Although the Company's recommendation happens to be very close to my recommendation, the Company's methodology is fundamentally flawed. As with capital structure, the appropriate date to consider at this time is the end of the test year, certainly no later than the update period ending 30 June 2003.

Q. WHAT EMBEDDED COST OF LONG-TERM DEBT IS BEING RECOMMENDED BY THE MPSC STAFF, AND DO YOU AGREE WITH THIS RECOMMENDATION?

A. Staff witness Murray recommends an embedded cost of 6.10% based on American Waters consolidated capital structure and outstanding debt.

Because MAWC has long-term debt issued under its own name, I believe the Company's actual debt, rather than American Water's consolidated debt, is appropriate to use to calculate the embedded cost of debt.

Q. WHAT IS THE APPROPRIATE EMBEDDED COST RATE FOR MAWC'S SHORT-TERM DEBT?

A. The embedded cost rate is 2.83% for MAWC's short-term debt. Calculation of the embedded cost is shown on Schedule MB-4.

Q. WHAT IS THE APPROPRIATE EMBEDDED COST RATE FOR MAWC'S PREFERRED AND PREFERENCE STOCK?

A. The embedded cost rate is 9.06% for MAWC's preferred stock.

Q. WHAT EMBEDDED COST OF PREFERRED STOCK IS BEING RECOMMENDED BY THE COMPANY, AND DO YOU AGREE WITH THIS RECOMMENDATION?

A. Mr. Grubb proposes an embedded cost of preferred stock of 9.12%, again based on pro forma assumptions. The latest date appropriate to use for the calculation of the embedded cost of debt at this time is the end of the update period. As with capital structure and the embedded cost of long-term debt, the MPSC should not consider pro forma calculations based on events that may not occur.

Q. WHAT EMBEDDED COST OF PREFERRED STOCK IS BEING RECOMMENDED BY THE COMPANY, AND DO YOU AGREE WITH THIS RECOMMENDATION?

A. Staff witness Murray recommends an embedded cost of 7.70% based on American Water's consolidated capital structure and preferred stock of American Water and all subsidiary companies.

Because MAWC has preferred stock issued under its own name, I believe the Company's actual preferred stock is appropriate to use to calculate the embedded cost.

COST OF COMMON EQUITY

Q. WHAT IS YOUR RECOMMENDED COST OF COMMON EQUITY FOR MAWC?

A. MAWC should be allowed a return on common equity of 9.50 to 10.00%. This return on common equity was determined using the Discounted Cash Flow Model (DCF) and Capital Asset Pricing Model (CAPM).

Q. COMPANY WITNESS AHERN GENERALLY DISPARAGES THE DISCOUNTED CASH FLOW MODEL. DO YOU AGREE WITH HER ASSERTIONS?

A. No, I do not. The Discounted Cash Flow Model is based on actual, available market data, and the Model itself is rooted in the fundamental financial concepts of the time value of money and the process of discounting future cash flows to the present (calculating 'present values').

Also, Ms. Ahern's arguments that the MPSC should authorize an ROE that supports current market-to-book ratios is fundamentally flawed. The market price of stock is a reaction to the operations of a company. Ms. Ahern would have the MPSC believe that the Commission should react to the market price.

The market generally, and equity analysts specifically, know full well that regulated utilities have the opportunity to earn returns based on the book value of rate base. The fact that any regulated utility stock trades at market-to-book ratios greater than 1.0 means only that that utility is earning a return over and above that required by the investor.

Ms. Ahern is, simply, trying to persuade the MPSC that the horse should push the cart.

Q. HAS THE MPSC CONSISTENTLY RELIED ON THE DCF MODEL IN DETERMINING THE APPROPRIATE RETURN ON EQUITY TO AUTHORIZE FOR MISSOURI'S REGULATED UTILITIES?

A. Yes. According to The Report and Order for Case No. ER-2001-299, The Empire District Electric Company, the MPSC recognizes the appropriateness of the DCF, as well as makes note of its conceptual underpinnings to the time value of money and the concept of discounting future cash flows:

> **Historically, the Commission has primarily relied upon the Discounted Cash Flow ("DCF") Method of determining the appropriate return on equity ("ROE") for a regulated utility company.** The objective of the DCF Method is to determine the discount rate that equates anticipated future cash flows from a company's common stock to the current market price of the common stock. The Company, the Staff and the OPC all recommend that the Commission rely primarily upon the DCF Method to establish the appropriate return on equity in this case.
>
> The Commission finds that Public Counsel's calculations are well reasoned and appropriate for this case. Public Counsel determined that a price of $19.52 per share should be used in the DCF model. This $19.52 stock price combined with the $1.28 dividend results in a dividend yield of 6.56%, which when combined with Public Counsel's growth rate of 3.5%, results in a rate of return range of 10.00% to 10.25%. The Commission finds that the appropriate rate of return on common equity is 10.00%. [Emphasis added]

Q. WHAT DOES COMPANY WITNESS AHERN'S DCF ANALYSIS SHOW?

A. According to Ahern-Direct, page 28, lines 21-25:

> As shown on Schedule PMA-5, Line Nos. 5 and 10, the results of the applications of the DCF model are 9.2%/10.7% for the proxy group of seven C.A. Turner water companies. **As shown on Line No. 8, the average DCF cost rate for the proxy group is 10.0%.** [Emphasis added]

Q. DOES MS. AHERN'S DCF RESULTS SUPPORT YOUR RECOMMENDED COST OF EQUITY FOR MAWC?

A. Absolutely. I recommend a Return on Equity for MAWC of between 9.50% and 10.0%. Ms. Ahern's average DCF result is 10%, which, as I pointed out in my direct testimony, could NOT have considered the new Infrastructure System Replacement Surcharge. Therefore, her DCF result completely supports my recommended cost of equity for MAWC.

Q. MS.AHERN ASSERTS THAT A RETURN ON EQUITY RECOMMENDATION SHOULD NOT BE BASED ON ANY SINGLE FINANCIAL MODEL. DID YOU RELY ON A SINGLE MODEL?

A. No, I did not. I performed both a Discounted Cash Flow analysis and a Capital Asset Pricing Model analysis in the process of forming my recommendation.

Q. WHAT ARE YOUR COMMENTS CONCERNING MR. MURRAY'S RECOMMENDED RETURN ON EQUITY?

A. Mr. Murray relied primarily on his DCF analysis for his recommended ROE for Missouri-American Water Company. The DCF Model calls for an expected dividend yield and a sustainable growth rate.

Q. DO YOU HAVE CONCERNS WITH MR. MURRAY'S DIVIDEND YIELD CALCULATION?

A. No. Although we utilized different methods to arrive at our respective dividend yields, my DCF dividend yield of 3.48% is very close to Mr. Murray's dividend yield of 3.54%.

Q. DO YOU HAVE CONCERNS WITH MR. MURRAY'S GROWTH RATE ANALYSIS?

A. Yes. Mr. Murray's recommended ROE is biased downward because he over-emphasized historical growth rates rather than primarily looking at projected growth rates. There are two fundamental problems with over-emphasizing historical growth rates.

Q. PLEASE EXPLAIN THE TWO PROBLEMS.

A. First, reliance on historical growth rates can violate the fundamental financial concepts on which the DCF model is based. The DCF model explicitly calls for an expected (i.e. future) sustainable growth rate because the valuation of a financial asset, such as a share of common stock, is based on expected future cash flows that that asset can generate. Historical growth rates can be beneficial to analyze. But consideration of historical growth rates should be relied on only to the extent that the analyst believes they could be representative of future growth. If calculations of projected growth rates show deviation from historical rates, then the analyst should place a greater emphasis on the projected rates. Mr. Murray's DCF results show a definite downward bias due to his over-reliance on historical growth rates that do indeed differ significantly from the projected rates.

Second, reliance on historical growth can exacerbate any earnings "problems" experienced by the regulated utility. For example, if a regulated utility has consistently been in a state of under-earning, then historical growth rates will reflect that condition and their use in the forward-looking DCF can perpetuate that state of under-earning. Similarly, if the utility has historically been over-earning, then historical growth rates will reflect those over-earnings. Because the DCF is fundamentally a forward-looking model, the growth rate utilized should be forward-looking.

Q. ARE YOU SAYING THAT A DCF CALCULATION SHOULD REST SOLELY ON PROJECTED GROWTH RATES?

A. No. Historical growth rates can be beneficial to analyze. However, the analyst must consider differences between historical growth rates and projected growth rates because the DCF Model calls for expected (future) sustainable growth.

Q. PLEASE EXPLAIN HOW MR. MURRAY UTILIZED HIS GROWTH RATE CALCULATIONS IN DETERMINING THE SUSTAINABLE GROWTH RATE HE USED IN HIS DCF ANALYSIS?

A. Mr. Murray averaged all of his growth rates, including the historical rates, to arrive at his recommended DCF growth rate.

As can be seen on Murray-direct, schedule 14, he calculated 5-year and 10-year historical growth rates for dividends per share, earnings per share and book value per share for his group of four comparable companies. The overall average historical growth rate for all four comparable companies is 3.36% (schedule 14-3 and schedule 15, column 1). On schedule 15, he then averages these historical rates with his projected rates (column 6).

Q. DOES MR. MURRAY GIVE EQUAL WEIGHT TO HIS HISTORICAL AND PROJECTED GROWTH RATES?

A. Yes. As can be seen on schedule 15, Mr. Murray calculated an average projected growth rate for each comparable company (columns 2-5). The overall average projected growth for all four companies is 6.42% (column 5). He then averages these projected growth rates with the historical growth rates for each company (column 6). For every company in his comparable group, his overall average of historical and projected is lower than the average projected because the average is pulled down due to the inclusion of the historical rates.

Q. COULD YOU PLEASE EXPLAIN FURTHER AND GIVE EXAMPLES OF MR. MURRAY'S GROWTH RATE CALCULATIONS?

A. Yes. Mr. Murray calculated historical growth rates and projected growth rates for each comparable company, then weighted these equally to arrive at an overall average growth rate for each company.

For example, the average historical growth rate utilized by Mr. Murray for American States Water Company is 3.03%. The average projected growth for the same company is 4.0%. Mr. Murray weights these two averages equally to arrive at an overall average growth rate of 3.52% for American States.

The average historical growth rate for Middlesex Water Company is 2.81% (column 1). All three of Middlesex's projected growth rates are 7.00%. However, Mr. Murray calculates an overall average growth rate of 4.91% by giving equal weight to the 2.81% historical average and the 7.00% projected average.

The most glaring example of placing too much emphasis on historical rates occurs with California Water Services Group. Mr. Murray's overall average historical growth rate for this company is –0.09%, *negative 0.09%.* The three projected growth rates for California Water are 3.0%, 3.0% and 9.0%, for an average of 5.0%. Mr. Murray takes the average projected rate of 5.0% and averages this number with the negative historical rate for an overall average growth rate of 2.45% for California Water. Despite three positive projected growth rates, all substantially greater than Mr. Murray's calculated average historical growth, he did not place any greater emphasis on the projected rates as called for by the DCF model.

In general, Mr. Murray's DCF growth rate calculations utilized for his recommendation are biased downward due to the fact that he placed equal emphasis on historical and projected growth rates.

Q. WHAT DO MR. MURRAY'S GROWTH RATE CALCULATIONS MEAN IN TERMS OF HIS RECOMMENDED COST OF COMMON EQUITY FOR MAWC?

A. Mr. Murray's recommended ROE for MAWC is biased downward.

INFRASTRUCTURE SYSTEM REPLACEMENT SURCHARGE
HB 208 (92ND GENERAL ASSEMBLY)

Q. WOULD YOU PLEASE AGAIN EXPLAIN THE INFRASTRUCTURE SYSTEM REPLACEMENT SURCHARGE (ISRS) AND ITS EFFECTS ON MAWC?

A. Yes. Following is the same questions and answers as appeared in my direct testimony regarding the ISRS.

Q: WHAT IS THE INFRASTRUCTURE SYSTEM REPLACEMENT SURCHARGE?

A: The Infrastructure System Replacement Surcharge (ISRS) is a surcharge approved by the Missouri Legislature in the spring of 2003 which creates a mechanism that Missouri-American can use in its St. Louis County service territory to recover expenditures on infrastructure replacement outside the confines of a general rate case. The new provisions are found at Sections 393.1000 through 393.1006 RSMo (2003 Supp.) According to the legislative summary of the truly agreed to and finally passed version of HB 208, the new law allows water corporations:

> …serving more than 10,000 customers in St. Louis County and all gas corporations to file petitions with the Public Service Commission for rate adjustments that recover from customers prudently incurred costs for infrastructure replacement projects. Eligible projects may include replacement of deteriorating equipment, safety enhancements, and non-reimbursed costs of facility relocations required by highway and other public works construction. Projects may not increase revenue by connecting to new customers and must not have been included in the corporation's last general rate case. Commission staff may examine the petition and submit a report within 60 days. The commission may hold a public hearing and must issue an order that becomes effective within 120 days after the petition is filed. **During its consideration of the petition, the commission may not examine the corporation's other revenue requirements or rate-making issues.**
>
> Adjustment charges must appear on customers' bills as a separate charge and may only apply to classes of customers that receive benefits

> from the infrastructure replacement project. Charges must be applied in a manner consistent with the customer class cost-of-service study from the corporation's most recent general rate proceeding. Charges will not be approved if the corporation's last general rate proceeding was more than three years before the petition was filed or if the adjustment produces revenue exceeding 10% of the base revenue level approved in the corporation's last general rate proceeding. Rates may not be adjusted more than twice a year, and charges may not be collected for more than three years unless the corporation has filed or is the subject of a new general rate proceeding. Estimated monthly charges are subject to annual reconciliation. [Emphasis added]

Q. DOES THE INFRASTRUCTURE SYSTEM REPLACEMENT SURCHARGE AFFECT MAWC'S BUSINESS RISK?

A. Yes, it reduces MAWC's business risk.

Q. IN WHAT WAY IS MAWC'S RISK REDUCED?

A. For the single issue of new plant placed into service, the Company no longer faces the traditional business risk of regulatory lag. The ISRS allows MAWC to collect revenue via a specific surcharge without having to go through the process of a rate case. The Company will be able to begin collection of revenues more quickly, collect greater overall revenue, and overall earnings will be more stable, which reduces the risk faced by the equity investor.

Q. DOES THE ISRS MECHANISM ALLOW FOR ANY REDUCTION IN EARNINGS?

A. No. The ISRS does not allow for a reduction in earnings. The Company's earnings can only go up.

In fact, under the new regulatory paradigm created by HB208, all other things being equal, MAWC will experience greater earnings that what would have been achieved absent HB208 provisions because the Company will not have to wait for a new rate case to be completed.

Q. DOES THE COMPANY FACE ANY SINGLE-ISSUE THREAT OF A REDUCTION IN EARNINGS WITHOUT GOING THROUGH THE PROCESS OF A RATE CASE?

A. No. There is no mechanism in place that would reduce the Company's earnings based on a single-issue apart from a full rate case. In other words, as a result of HB208, the Company now has a single-issue mechanism to increase earnings between rate cases, but faces no similar single-issue mechanism that could reduce earnings.

Q. DO MAWC'S CUSTOMERS THEREFORE CONTINUE TO FACE THE RISK OF REGULATORY LAG WHILE THAT RISK FOR THE COMPANY HAS BEEN REDUCED?

A. Yes. MAWC's customers continue to face the risk of regulatory lag on any costs or expenses that *go down* between rate cases, but will be faced with additional charges due the ISRS.

For example, if a single-issue expense such as payroll goes down, that reduced cost would not be reflected in rates paid by MAWC's customers until the Company went through a full rate case. This is in stark contrast to the Company's ability to increase customer's bills via the ISRS without having to file a rate case.

Q. DOES HB208 ALLOW MAWC TO INCREASE EARNINGS EVEN IF ALL OTHER REGULATORY FACTORS WOULD ACTUALLY REQUIRE A REVENUE DECREASE?

A. Yes. If all relevant overall cost of service items were reviewed, and MAWC would appropriately face an overall revenue decrease, HB208 still allows for rates to increase, thus increasing overall Company revenues. Similarly, even if a review of overall cost of service items showed the Company should be granted the opportunity to earn greater revenues, HB208 could allow the Company to earn an even greater level of revenues than would otherwise be appropriate.

Q. DOES HB208 ALLOW FOR A REVIEW OF OVERALL COST OF SERVICE ITEMS?

A. No. HB208 specifically precludes a complete review, and ratepayers have no recourse.

Q. HOW DOES THE EXISTENCE OF THE ISRS AFFECT YOUR RECOMMENDATIONS TO THE MISSOURI PUBLIC SERVICE COMMISSION?

A. I believe the existence of the ISRS reduces MAWC's basic regulatory business risk for the single issue of new plant placed into service and shifts that traditional regulated-utility risk to ratepayers. This fact could not have been considered or taken into account by the Company's return on equity witness Pauline M. Ahern, as she filed testimony on 19 May 2003 and HB208 was not signed into law until 9 July 2003.

Therefore, I believe it would be appropriate for the MPSC to consider a return on equity in the lower portion of any range under consideration, and certainly well below the recommendation of the Company's witness.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.