

Exhibit No.:
Issues: Overview of Relief Requested,
Reasons for Request, Public
Communications, Community
Involvement, Value of Water
Service and Water Efficiency
Witness: Frank L. Kartmann
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

FRANK L. KARTMANN

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 FRANK L. KARTMANN

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



Frank L. Kartmann

State of Missouri

County of St. Louis

SUBSCRIBED and sworn to

Before me this 14th day of July 2015.



Notary Public

My commission expires: July 17, 2016



**DIRECT TESTIMONY
FRANK L. KARTMANN
MISSOURI-AMERICAN WATER COMPANY
CASE NO. WR-2015-0301
CASE NO. SR-2015-0302**

TABLE OF CONTENTS

I.	Introduction.....	3
II.	Reasons for Rate Relief Requested.....	8
III.	Value of Water Service.....	16
IV.	Water Efficiency	26
V.	Affordability	37
VI.	Community Involvement	38

**DIRECT TESTIMONY
OF
FRANK L. KARTMANN**

I. WITNESS INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Frank L. Kartmann, and my business address is 727 Craig Road, St. Louis,
3 Missouri 63141.

4 **Q. WHAT IS YOUR POSITION?**

5 A. I am the President of Missouri-American Water Company ("Missouri-American," the
6 "Company," or "MAWC").

7 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

8 A. There are several reasons why I am offering testimony in this case. First, and foremost,
9 as the President of the Company, I will provide an overview of why we are seeking rate
10 relief and will introduce the witnesses who will testify on behalf of the Company.
11 Second, I want to discuss the value of water service – the service that we provide – and
12 the contribution that Missouri-American makes to the State of Missouri in providing
13 these critical services that are vital to our customers’ health, welfare and economic well-
14 being. Third, and critically, it is equally important that the Missouri Public Service
15 Commission (“Commission”) understand the ways that Missouri-American is improving
16 the efficiency of the services it provides to its customers in this State and how our
17 ratemaking proposals in this case are intended to incentivize the more efficient use of

1 water and investment in our system.

2 **Q. WHAT WITNESSES WILL TESTIFY ON BEHALF OF THE COMPANY AND**
3 **WHAT SUBJECTS WILL THEY ADDRESS?**

4 A. In addition to my testimony, our witnesses are:

5 Philip C. Wood: will testify on Missouri-American's operations, staffing levels, and
6 compensation program; the Company's efforts and investments to
7 improve water efficiency and performance measurements.

8 Kevin H. Dunn: will testify about the Company's overall approach to capital
9 management and the Company's capital investments since the last
10 rate case, upcoming capital needs, the retirement of the Platte
11 County Water Treatment facility prior to the end of its book life,
12 and the request to establish an Environmental Cost Adjustment
13 Mechanism (ECAM). Finally, Mr. Dunn will also testify to the
14 declining water usage trend we have been experiencing for at least
15 the past two decades as well as residential demand forecasting.

16 Gregory P. Roach: will testify about the general decline in water usage per customer,
17 explain why that trend has occurred and is expected to continue,
18 and propose a solution for the annualization of customer usage in
19 the determination of rates.

20 Jeanne M. Tinsley: will testify about the Minimum Filing Requirements ("MFRs"),
21 proposed rate schedules and tariffs, , the Company's proposed
22 revenue stabilization mechanism (RSM), Revenues at Present

1 Rates, Revenue Adjustments, various adjustments to our pro forma
2 results of operations.

3 Gary M. VerDouw: will testify on Service Company fees and Business Transformation
4 cost recovery.

5 Todd P. Wright: will testify on rate base items, including utility plant, accumulated
6 depreciation and amortization, contributions and advances,
7 working capital, materials and supplies, prepayments, and
8 deferrals.

9 Nikole L. Bowen: will testify about fuel, power, chemicals, purchased water, rents,
10 and transportation.

11 Carl R. Meyers: will testify about income tax expense and deferred income taxes.

12 Scott W. Rungren: will testify on the recommended capital structure, overall cost of
13 capital, and business and financial risk.

14 Dr. Roger A. Morin: will testify about the Company's recommended cost of equity.

15 Karl A. McDermott: will testify about the benefits of consolidated water and wastewater
16 rate structures.

17 Paul R. Herbert: will testify to a class Cost of Service Study and tariff design,
18 including incorporation of the consolidated tariff pricing concept,

19 John J. Spanos: will testify on our depreciation study and depreciation rates, and

20 Robert C. Mustich: will testify on Missouri-American compensation and benefits
21 program.

22 **Q. WHAT ARE YOUR DUTIES AS PRESIDENT OF MISSOURI-AMERICAN?**

23 A. As President of Missouri-American, I am responsible for all aspects of the Company's

1 business including financial, operations (production, distribution, customer service,
2 engineering and capital investment planning), employee relations, environmental, and
3 regulatory affairs. In this role, I am ultimately responsible for assuring that the Company
4 is delivering high-quality water and wastewater services to about 1.5 million people
5 throughout Missouri. This responsibility includes ensuring that all activities of the
6 Company are carried out in compliance with local, state and federal laws and regulations,
7 and standards of good business practice.

8 **Q. PLEASE DESCRIBE YOUR BUSINESS EXPERIENCE.**

9 A. From 1989 to 1999, I was employed by St. Louis County Water Company holding a
10 variety of engineering and production operations positions of increasing responsibility. In
11 1999, I accepted the position of Director-Engineering with Missouri-American upon its
12 acquisition of St. Louis County Water Company and was promoted to the position of
13 Vice President-Engineering in 2000. In 2002, I was promoted to the position of Vice
14 President of Missouri-American. In 2004, I was promoted to American Water Works
15 Service Company, Inc. ("Service Company" or "AWWSC"), Central Region Director-
16 Network. In 2008, I resumed the position of Vice President of Missouri-American. In
17 2009, I was promoted to President of Missouri-American.

18 **Q. PLEASE DESCRIBE YOUR EDUCATION AND PROFESSIONAL**
19 **ASSOCIATIONS.**

20 A. I received a Bachelor of Science degree in Secondary Education from the University of
21 Illinois, Urbana-Champaign in 1986, a Bachelor of Science degree in Civil Engineering
22 from the University of Missouri, Rolla in 1989 and a Master of Business Administration

1 degree from Washington University, St. Louis, Missouri in 1999. I am an active member
2 of the American Water Works Association, National Association of Water Companies,
3 Chairman of the Missouri Energy Development Association and President of the Metro
4 Water Infrastructure Partnership.

5 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?**

6 A. Yes, I testified before this Commission in Case No. WR-2000-281, WO-2002-273, and
7 WR-2003-0500.

8 **Q. PLEASE DESCRIBE THE COMPANY'S OPERATIONS AND THE AREAS IT
9 SERVES.**

10 A. The Company's operations are widely dispersed throughout the State – the Company
11 operates 25 distinct public water systems and 56 distinct public wastewater systems in 24
12 separate counties and has 18 distinct water and 12 distinct wastewater rate tariffs. From
13 the Company's 11 water treatment plants and 29 well sites, we provide service to
14 approximately 460,000 water customers. Through the Company's 46 mechanical
15 wastewater treatment plants and 10 wastewater lagoons it serves approximately 4,900
16 wastewater customers. Through its wastewater collection only systems, the Company
17 serves about 8,800 customers in Arnold, Missouri and in its Platte County operation. All
18 these water and wastewater customers are served across more than 156 communities
19 throughout Missouri. Within these distinct systems, the Company operates a total of 119
20 water storage tanks, 432 pump stations, and over 6,700 miles of water mains, 40
21 wastewater lift stations, 1,647 wastewater manholes, and 76 miles of wastewater
22 collection system piping.

1 **Q. PLEASE DISCUSS HOW THE COMPANY STAFFS ITS BUSINESS**
2 **OPERATIONS.**

3 A. We recognize our duty to staff our business in a manner consistent with the provision of
4 safe and adequate utility service. This requires a constant evaluation of the right mix of
5 internal and contract labor, straight time versus overtime, training programs and
6 investment in technology. In this vein, we continue to evaluate costs and expenses going
7 forward, always looking for the best solution for the unique and changing challenges we
8 face. A large portion of our costs is labor. We routinely review the need for positions in
9 our organization and consider whether employees in them should be transferred to other
10 positions or areas, positions should be modified, or positions should be eliminated. Cost
11 control and improved business performance are the goals of these efforts.

12 **Q. PLEASE DISCUSS THE SUPPORT THAT MISSOURI-AMERICAN'S**
13 **AFFILIATES PROVIDE THE COMPANY.**

14 A. American Water Works Service Company (“AWWSC”) provides a wide spectrum of
15 cost-effective, value-added services that enable Missouri-American to fulfill its public
16 utility responsibilities in a more cost effective manner. These services include customer
17 service, water quality testing, innovation and environmental stewardship, human
18 resources, communications, information technology, finance, accounting, tax, legal,
19 engineering, supply chain, and risk management services. AWWSC operates customer
20 service centers in Alton, Illinois and Pensacola, Florida that handle customer calls,
21 billing, and collection activities for Missouri-American and its public utility affiliates.
22 The customer service centers handle customer inquiries and correspondence and process

1 service order requests. In addition, AWWSC operates two Field Resource Coordination
2 Centers responsible for tracking and dispatching service orders for our field
3 representatives and distribution crews. AWWSC employees have expertise in water
4 quality, testing, compliance and treatment. AWWSC facilitates compliance with
5 environmental laws and regulations, and effective use of natural resources. AWWSC's
6 Information Technology Services provides effective information technology support and
7 solutions that are innovative, flexible, scalable, and secure to meet Missouri-American's
8 business needs through standardized technology and processes. AWWSC also provides a
9 variety of financial and accounting services for the Company, including payroll, human
10 resources data management, utility plant accounting, cash management, general
11 accounting and reporting, accounts payable, tax, and risk management services.

12 **Q. WHAT VALUE DO AWWSC AND OTHER AFFILIATES PROVIDE TO**
13 **MISSOURI-AMERICAN'S CUSTOMERS.**

14 A. In addition to the reasonably priced services discussed above, there are several other
15 benefits AWWSC provides. One notable example is the AWWSC Innovation
16 Development Program, which consists of an interdisciplinary team of 40 people,
17 including engineers, chemists, microbiologist, and environmental scientists, who evaluate
18 and recommend new technology to enhance operations, support operations with
19 technical, functional expertise and leverage our nationwide physical assets to test and
20 develop new opportunities.

21 American Water Capital Corp. ("AWCC") provides the Company with short-term loans,
22 long-term borrowings, and cash management services. The Company and its customers

1 have benefited from interest savings resulting from pooling the capital requirements of
2 the American system subsidiaries through AWCC, through long-term debt issues from
3 AWCC that have been less costly than those available on the private placement market,
4 and through daily cash management capabilities. In addition, the pooling and bidding of
5 the credit lines has lowered the cost for short-term debt, and AWCC's access to
6 commercial paper market has generated additional savings.

8 **II. REASONS FOR RATE RELIEF REQUESTED**

9 **Q. WHEN WERE MISSOURI-AMERICAN'S CURRENT RATES APPROVED?**

10 A. The Commission approved Missouri-American's current base rates in its Order issued
11 March 7, 2012, in Case No. WR-2011-0337. Those rates were based on a test year ending
12 December 31, 2010. In contrast, the test year in this case is the 12 months ended
13 December 31, 2014 –four years distant from the test year used to set the current rates.

14 **Q. WHAT AMOUNT OF RATE RELIEF IS THE COMPANY SEEKING IN THIS** 15 **CASE?**

16 A. Missouri-American is seeking a rate increase to produce additional base rate revenues
17 (including ISRS revenues) of \$51,028,321 per year, or a 19.6% increase. Stated
18 differently, we are seeking a rate increase to produce additional revenues (excluding
19 ISRS revenues) of \$25,135,659 per year, or a 9.7% increase

20 **Q. HOW WILL MISSOURI-AMERICAN NOTIFY ITS CUSTOMERS OF ITS** 21 **PROPOSED INCREASE IN RATES?**

22 A. Missouri American Water will notify media outlets of the filing of this petition and post

1 information on its website.

2 **Q. WHY DOES THE COMPANY NEED TO FILE THIS RATE CASE?**

3 A. We have provided service to our customers for well over 100 years. Our customers rely
4 on the Company to provide them with safe and reliable water and wastewater services.
5 We at Missouri-American take very seriously our obligation to meet our customers'
6 needs and expectations, but these services are not without cost. Providing these services
7 requires us to incur a substantial amount of operational and maintenance (O&M)
8 expense, as well as make ongoing, significant capital investments. This filing reflects that
9 our investments are the main driver of this rate case and that we have effectively reduced
10 O&M expenses over the last four years. It is not possible, however, to meet these
11 requirements without recovery of the costs associated with these necessary expenditures.
12 It is important for a regulated utility to file for rate relief when its ability to earn a fair
13 rate of return is compromised. If the Company's ability to earn a fair return is
14 compromised, then its ability to invest in maintaining and improving the water system is
15 impaired.

16 In order to continue providing improved water and wastewater services, it is essential for
17 the Company to invest in new technology and to ensure that our existing plant is replaced
18 in a timely manner. These costs will be described in the various testimony provided in
19 this filing. That said, the rate increase requested in this cause is fairly modest considering
20 the substantial investments that we have made over the last four years and are continuing
21 to make in the system.

1 **Q. WHAT ARE THE MAJOR DRIVERS OF THE NEED FOR RATE RELIEF?**

2 A. In her direct testimony, Jeanne Tinsley, the Company's Manager of Rates and Regulation,
3 describes the major drivers of the Company's need for rate relief. Of these drivers, two
4 are by far the most significant from a rate impact perspective in this case - ongoing
5 capital investment and revenue loss arising from declining usage.

6 The Company's levels of ongoing capital investment are significant. We anticipate that
7 by January 31, 2016, the Company will invest more than \$436 million in capital
8 improvements since the last rate case without realizing any capital cost recovery or
9 depreciation expense on \$215 million in capital investment, which represents the non
10 ISRS qualified investments during this time. Ongoing capital investment, together with
11 the erosive impact of past and projected declines in customer usage, accounts for
12 approximately 4% of the Company's requested increase. Ms. Tinsley's testimony shows
13 that the current ratemaking structure is not well adapted to a declining usage, no growth,
14 high investment utility environment. If the Company is to have a fair and reasonable
15 opportunity to earn its authorized revenue requirement, that structure must be adapted to
16 the Company's circumstances.

17 **Q. ARE YOU SAYING THAT THIS CASE IS FUNDAMENTALLY ABOUT**
18 **INVESTMENT IN INFRASTRUCTURE?**

19 A. Yes, that is exactly what I'm saying - with the corollary that this case is not about
20 increased O&M expense. Rate increases are generally driven by O&M expense increases,
21 increases in investment, and changes in revenue, both positive and negative. Here, the
22 evidence will show that our efforts to slow and mitigate cost increases have been very

1 successful. We have been able to do so, in part, by prudent investments in ways that
2 permit us to work smarter and more efficiently. At the same time, we need to upgrade and
3 replace our systems and infrastructure that are at the end of their useful life - which also
4 requires significant capital expenditures. This rate case reflects an increase of \$436
5 million in utility plant investments made since the last general rate case.

6 Over the same period of time, Missouri-American's O&M expenses actually have
7 *decreased* as compared to the amounts recognized in the last general rate case. I cannot
8 over-emphasize this point. Total O&M expenses in the test year ending December 31,
9 2014 are about \$7.1 million *less* than they were in 2010 (offset by \$3.6M of new O&M
10 costs related to acquisitions since the last rate case), which was the last general rate case
11 test year. This savings in O&M costs offsets some of the revenue requirement requested
12 for capital additions in this cause. The CPI adjusted expense reduction over this time was
13 more than \$12 million.

14 Phil Wood's testimony shows that the Company's focus on cost reduction has been
15 paying off for customers. In the Company's 2009 Rate Case, (Case No. WR-2010-0131),
16 the increase in revenue requirement associated with operating expenses stood at 20.9%,
17 while in the 2011 Rate Case (Case No. WR-2011-0337), the comparable number was
18 25.9%. In our current rate filing, the equivalent is now 1%, with fully 99% of the
19 proposed increase being driven by the revenue requirement associated with needed
20 capital expenditures to improve our system reliability, safety, water and wastewater
21 quality, meet environmental regulatory compliance requirements and system resiliency.

1 Reducing the Company's operating expense, which mitigates the rate impact of our
2 capital additions, has been accomplished despite increasing our investment in our water
3 and wastewater systems. We are putting more Missourians to work and still finding ways
4 to control costs. What this means is that our employees have been able to "do more with
5 less" by working smarter. These are very significant accomplishments. We are justifiably
6 proud of the fact that we have contained and reduced costs and hope the Commission will
7 recognize that achievement when setting rates.

8 We believe that efficient utilities should receive rates of return at the higher end of the
9 range of reasonableness, and we think that a \$7.1 million *decline* in O&M expenses is
10 proof-positive of our efficiency at MAWC. As I said, capital investment and declining
11 consumption are the primary drives for the Company's increased revenue requirement in
12 this case. Here too, however, the Company has played a role in the conservation that
13 produced some of that declining revenue through its customer education to promote the
14 efficient use of water. It would be inequitable if the Company were to be penalized for
15 its conservation and public awareness efforts by a failure to recognize the lost revenue
16 due to conservation.

17 **Q. HOW DOES THE RESPONSIBILITY TO PROVIDE SAFE AND RELIABLE**
18 **WATER AND WASTEWATER SERVICE AFFECT THE NEED TO INCREASE**
19 **RATES?**

20 A. It is important to sustain an appropriate level of investment to maintain and improve our
21 water and wastewater systems. Compared with other utilities, water and wastewater
22 utilities are the most capital intensive utilities in the industry. According to AUS Utility

1 Reports (May 2010), the water industry is three times more capital intensive than the gas
2 industry and nearly twice as capital intensive as electric utilities. While revenues per
3 customer are decreasing, the nature of water utility investment has shifted from plant
4 needed to serve new customers to non-revenue producing investments - improved leak
5 detection, infrastructure replacement and repair, and environmental compliance. The best
6 way to ensure that the appropriate levels of expenditures and capital investment are
7 consistently funded is through predictable and timely recovery of expenses and the return
8 on the capital devoted to serving our customers' needs. The timely cost recovery of these
9 expenditures in turn provides an incentive for continued capital infusion by the investors
10 who are called upon to put their capital at risk for our customers. While timely cost
11 recovery remains a challenging proposition in Missouri's historic test year regulatory
12 environment, ISRS has helped to reduce some of the regulatory lag that is otherwise
13 present. Investors' willingness to commit their capital to our company results in stronger
14 and more reliable water and wastewater systems for both current and future customers.
15 In spite of Missouri's status as a historic test year state, the willingness on the part of
16 investors has been strengthened and enhanced and recognizes the recovery of prudent
17 costs for investments through a predictable regulatory environment in which regulatory
18 lag has been reduced at least on ISRS qualified investments.

19 **Q. DESPITE THESE CHALLENGES, IS THE COMPANY WELL POSITIONED TO**
20 **ADDRESS THE STATE'S WATER INFRASTRUCTURE NEEDS?**

21 A. Yes, it is. There are all types of infrastructure needs in Missouri. The state's aging
22 infrastructure needs to be replaced and upgraded - roads, bridges, airports, water, and

1 sewer infrastructure to name a few, but we cannot depend on the government to supply
2 all of the needed capital. Water and wastewater utilities are an integral part of the state's
3 infrastructure investment challenges.

4 Attracting private capital is essential to help finance water and sewer infrastructure
5 projects. Moreover, attracting private capital depends upon predictability. A project that
6 is completed and put into service, and is supported by thoughtful and prudent
7 consideration and study, needs to be included in rate base so the Company can recover its
8 capital costs in a timely fashion from the time the project begins to serve the customer.

9 **Q. IF THE COMPANY'S RATES DO NOT PROVIDE FOR TIMELY RECOVERY**
10 **OF ITS APPROPRIATE COSTS, WOULD THERE BE AN ADVERSE IMPACT**
11 **ON THE SYSTEM?**

12 A. Yes. The inability of a utility to recover expenses and capital investment in a timely
13 manner will erode the utility's ability to properly serve its customers over time. There
14 are, however, additional methods of rate recovery, as proposed in this filing, that can
15 benefit the customer and provide timely recovery of some expenses and investments.

16 **Q. IS THAT ONE OF THE REASONS WHY THE COMPANY HAS ASKED THE**
17 **COMMISSION TO APPROVE A REVENUE STABILIZATION MECHANISM?**

18 A. Yes, it is. The best way to ensure that appropriate levels of capital investment are
19 consistently and appropriately funded is through predictable and timely recovery of
20 investments, meaningful recognition of revenue trends, and the return on the capital
21 devoted to serving our customers' needs.

1 Most of a water utility's costs are fixed, recovering investments in pipes, treatment plants
2 and other equipment, while most water revenue is variable, collected through volumetric
3 rates charged on a per-gallon basis. Traditional utility regulation was developed in the
4 growth years in the United States following World War II. This was a time when very
5 few rate cases were filed because revenue growth outstripped the growth of expenses and
6 the required return on investment. Furthermore, economies of scale permitted
7 investments to be made relatively inexpensively to accommodate the expected growth at
8 little extra cost. As a result, conventional regulation helped to finance investment and
9 cover inflation-driven expense increase where the utility's revenue growth exceeded
10 increases in its costs.

11 With the advent of the energy shortages of the 1970s, a new economic calculus began to
12 emerge. Today, with static or declining per customer consumption and revenue declining
13 due to conservation largely driven by nationwide efficiency standards, the economic and
14 environmental policy landscape is driving the need for adjustments to the traditional
15 regulation that was developed in a growth environment. People still buy new appliances
16 and fixtures, but due to federal mandates, those new appliances now use less energy and
17 water than those they replace.

18 While a historic test year relying on volumetric sales might have been appropriate when
19 the growth in usage and customers counter-balanced the growth in investment, this
20 situation no longer exists. Today, we see increasing investment amid falling revenue.
21 Missouri-American's revenue for the test year ended December 31, 2014, was \$17.6
22 million less than the \$262.0 million of revenue that was authorized in March 2012, by the

1 Missouri Public Service Commission in the Company's most recent general rate
2 proceeding.¹

3 We have a multi-decade-long investment need that is funded up front by shareholders and
4 lenders and recovered from customers over decades; yet most of our revenues are from
5 variable, volumetric sales in a declining use, no growth business environment.²
6 Unfortunately, the need to fund these significant, non-revenue producing investments
7 does not decline when customer usage declines. The adoption of an RSM supports more
8 consistent planning and efficient deployment of resources.

9 **III. VALUE OF WATER SERVICE**

10 **Q. MR. KARTMANN, IS IT YOUR TESTIMONY THAT THE COMPANY'S**
11 **CUSTOMERS ARE RECEIVING VALUE FOR THE WATER SERVICE THEY**
12 **RECEIVE FROM MISSOURI-AMERICAN?**

13 **A.** Yes, without question, I believe that is the case. I offer the following observations about
14 the value of water:

- 15 • Americans have been largely unaware of the true cost of treating and delivering
16 clean, safe potable water to their taps and wastewater to the receiving streams of
17 Missouri. Americans pay less for water – about a penny per gallon on average –
18 than do residents of most other developed nations. Most Missourians served by

¹ Less ISRS surcharge revenue

² Because the water and wastewater industry is more capital-intensive than the electric, combination electric and gas, or natural gas utilities, the investment required to produce a dollar of revenue is greater. The water utility industry also experiences lower relative depreciation rates. Given that depreciation rates are one of the principal sources of internal cash flows for all utilities, lower depreciation rates mean that water utility depreciation as a source of internally-generated cash is far less than for electric, combination electric and gas, or natural gas utilities. Water utility assets typically have longer lives and, hence, longer capital recovery periods.

1 Missouri-American pay about a half penny per gallon. Water is also typically the
2 lowest percentage utility cost per household - less than gas/oil, telephone and
3 electricity.

- 4 • The historic under-pricing of water is largely due to a perception that water is
5 “free” – a fundamental human need supplied by the earth itself. No one is
6 charged for taking a bucket of water from a stream or other natural source of
7 supply. At the same time, very few people would drink the water from that bucket
8 or expend the effort to deliver it in sufficient quantity to a desired location. The
9 vast infrastructure required to treat and deliver water that is both safe and reliable,
10 however, is far from free.

- 11 • An historic lack of investment in infrastructure has left the nation’s vast network
12 of water and wastewater systems in serious disrepair, warranting a D grade from
13 the American Society of Civil Engineers.³ This is not simply a matter of slowly
14 leaking distribution mains in older neighborhoods -- every two minutes a large
15 water line ruptures in the U.S., resulting in trillions of gallons of water wasted
16 annually and severe economic losses and disruption to businesses.⁴

- 17 • The price tag to bring water and wastewater systems up to date in Missouri is
18 projected to be \$8.4 billion in drinking water infrastructure needs (based on 2013
19 data) and \$5.2 billion in wastewater infrastructure needs (based on 2008 data),
20 over the next 20 years.⁵ Because the majority of infrastructure funding comes
21 from revenues generated by pricing, it will take a significant shift, then, in the
22 way water and wastewater service is priced if the U.S. is to continue to meet its
23 infrastructure needs.

³ American Society of Civil Engineers 2013 Report Card on Infrastructure.
<http://www.infrastructurereportcard.org/fact-sheet/drinking-water>

⁴ Duhigg, Charles. “Saving U.S. Water and Sewer Systems Would be Costly,” The New York Times. 14 March 2010. <http://www.nytimes.com/2010/03/15/us/15water.html>

⁵ EPA Drinking Water Infrastructure Needs Survey and Assessment

- 1 • There are signs of increasing public acceptance of this new water reality. Recent
2 surveys point to changing perceptions of water’s worth among consumers and
3 industry alike, as both grow increasingly aware of its critical role in every aspect
4 of life. In 2012, a survey was conducted by Xylem, an affiliate of the water
5 related businesses of ITT Corporation. The survey found that 61 percent of
6 Americans are willing to pay a little more each month to upgrade U.S. water
7 infrastructure. Americans are willing to pay an average of \$7.70 more per month,
8 up from \$6.20 more per month in 2010.⁴ A 2011 survey of water consumers in the
9 St. Louis region, conducted by the ETC institute, at the request of the Metro
10 Water Infrastructure Partnership indicated that 62% of survey respondents
11 thought they “got a good value” for the rates they pay for water and wastewater
12 service.⁵
- 13 • When customers appreciate the true value of water, this not only helps water
14 utilities continue to provide customers with safe and clean water, but has the
15 added benefit of encouraging more conservative use and ensuring a sustainable
16 supply for future generations. American Water has joined other water resource
17 companies and organizations in an industry-wide initiative to enhance customer
18 awareness of what is involved in providing quality, reliable water service, and the
19 relative value of that service as part of the Value of Water Coalition.⁶ The
20 Coalition’s aim is to educate the public on the importance of clean, safe, and
21 reliable water to and from every home and community and to ensure quality water
22 service for future generations. Missouri-American has also undertaken efforts
23 within the state to raise customer awareness of the need to invest in local
24 infrastructure and the fact that a portion of the water bill pays for service
25 reliability. These efforts include developing project signage, educational videos,
26 printed materials, website and social media content, and using both earned and
27 paid media to enhance customer awareness and understanding of the value of
28 water and the need to regularly invest in water infrastructure. In our service

⁶www.thevalueofwater.org

1 territories in the St. Louis region we are also a founding member and active
2 participant in the Metro Water Infrastructure Partnership (MWIP). I am currently
3 the president of this organization. MWIP is a not for profit organization of
4 municipal, water district and investor owned water and wastewater utilities in the
5 St. Louis region dedicated to advancing public conversations about the
6 importance of investing in our region's water and wastewater infrastructure to
7 preserve and protect our environment, public health and safety, local economic
8 vitality and reliable water and wastewater service for future generations.

- 9 • The value of water and wastewater service, broadly speaking, is an inextricable
10 part of these conversations and informational and interactive events.

11 **Q. HOW DOES THE PRICE OF WATER COMPARE TO THOSE OF OTHER**
12 **COMMODITIES?**

13 A. Only three percent of the drinking-quality water that is delivered to American homes is
14 used for drinking on a typical day, while the overwhelming majority of it goes to washing
15 clothes and dishes, bathing, flushing, watering lawns and gardens and other uses.⁷ Yet,
16 the average household pays only about \$523 for a year's worth of water service –
17 covering all of these uses – compared to \$707 just for the soft drinks and other beverages
18 they consume.⁸

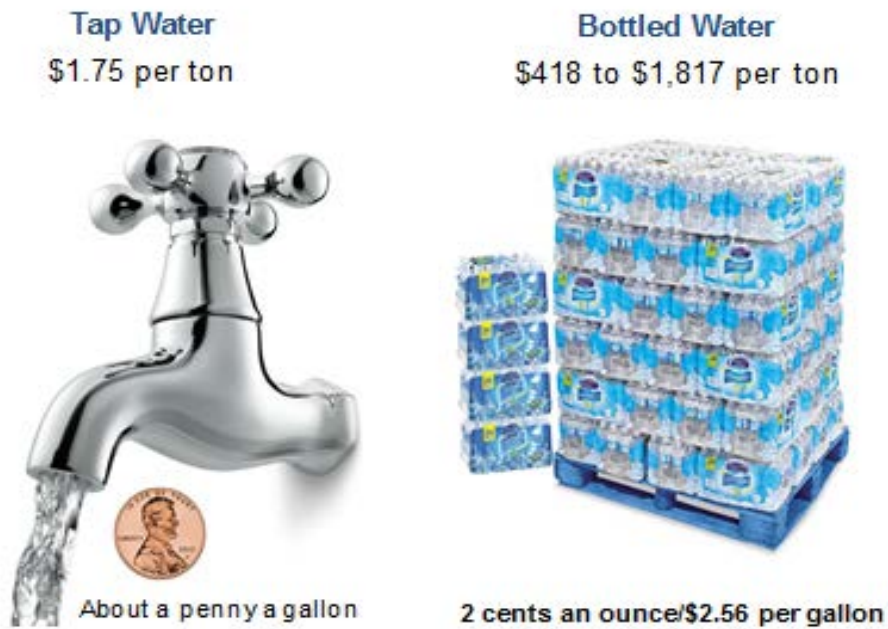
19 For many Americans, bottled water is perceived to have a greater value than tap – a result
20 of successful marketing strategies and a price tag that, depending on the brand, is 250 to

⁷ "Only Tap Water Delivers," American Water Works Association.

<http://drinktap.org/consumerdnn/Portals/0/pdf/ConsumerSheet%20-%20Quality%20of%20Life.pdf>

⁸ <http://water.epa.gov/infrastructure/sustain/Water-and-Wastewater-Pricing-Introduction.cfm>

1 10,000 times more expensive than tap water.⁹ Sales of bottled water tripled from the
2 1990s to the 2000s, despite the reality that the source of 25 to 40 percent of bottled water
3 sold in the U.S. is tap water. What's more, the 60 to 75 percent of bottled water that is not
4 sourced from tap has a potentially bigger downside: FDA standards regulating bottled
5 water are far less rigorous than those set by the EPA, which governs tap water.
6 Moreover, because bottled water is typically packaged in plastic containers, it has a
7 deleterious effect on the environment; an effect that we do not create.



8
9 Water utilities deliver up to a ton (240 gallons) of water to a family of four each day. Put
10 another way, an annual residential bill of \$523 equates to just \$1.43 per day. Therefore,
11 for just \$1.43, an average residential customer has all the water he or she and their family
12 choose to drink, cook with, wash with, garden with, etc. This is about the price of a cup

⁹ Standage, Tom. "Bad to the Last Drop." The New York Times. 1 August 2005.

1 of coffee. It is hard to imagine a better bargain.

2 When one considers the average amount that Americans spend on just soft drinks and
3 other beverages, the value of our water service – for all the water a family needs to drink,
4 cook with, wash with, and for many other purposes – is an outstanding bargain. In
5 addition, water and wastewater service is typically the lowest percentage utility cost per
6 household; of the total utility charges, water and wastewater together are, on average,
7 only 12 percent of a household’s utility budget, compared to gas/oil at 18 percent,
8 telephone at 33 percent and electricity at 37 percent.¹⁰

9 The previously mentioned 2012 survey of American voters by Xylem Corporation, also
10 found that 69 percent admit that they take access to clean water for granted. A 2011
11 survey of water consumers in the St. Louis region, conducted by the ETC institute, at the
12 request of the Metro Water Infrastructure Partnership indicated that 65% of survey
13 respondents thought that aging water and wastewater infrastructure in the bi-state St.
14 Louis region will become a problem over the next five to ten years. 79% of the
15 respondents felt it was either very important or important that investments are made to
16 improve water mains and sewer pipes in the region.¹⁰

17 **Q. YOU MENTIONED THAT CUSTOMERS MAY NOT BE AWARE OF THE**
18 **THINGS THAT MUST BE DONE TO PROVIDE THEM WITH HIGH QUALITY,**
19 **ABUNDANT SUPPLIES OF WATER. PLEASE DESCRIBE THOSE THINGS.**

20 **A.** The water infrastructure system is deceptively straightforward. From source to tap, water

¹⁰ 2011 Bureau of Labor Statistics; assumes four person household.

1 travels through three main channels: the source of supply pumping station, the treatment
2 facility, and the distribution system. After raw water is pumped from its source, it is sent
3 to a treatment facility. As I mentioned earlier in my testimony, Missouri-American
4 operates 11 water treatment plants. These plants are where water is tested for quality and
5 contaminants and treated to meet or surpass the quality standards set by the EPA and
6 subsequently enforced by the Missouri Department of Natural Resources. Impurities, and
7 excess minerals are removed or treated through a combination of chemicals, a
8 progression of filtration materials, with filtered water being disinfected as a final
9 protection for consumers. Treatment facilities must keep pace with increasingly stringent
10 EPA regulations, and the introduction of new contaminants into the water supply, in
11 order to meet the specific consumption and quality needs of the communities they serve.
12 Each pumping station serves one of two primary purposes. The first is to extract raw
13 (untreated) water from a source – whether an underground aquifer, stream, river or
14 reservoir – and deliver it through the use of pressure to a treatment facility. The second is
15 to transport the water from the treatment facility to the distribution system that ultimately
16 delivers the water to the customer’s home or business. Usually situated above ground, the
17 pumping station moves water 24 hours a day using appropriately sized pumps, pipes and
18 a power source to drive the pumps. This sophisticated equipment requires regular
19 maintenance and upgrades.

20 The treated water then enters the distribution system – the network of pipes that delivers
21 water across vast expanses to homes, businesses, industrial plants and a multitude of
22 other destinations. Missouri-American has over 6,700 miles of transmission and

1 distribution mains. In order to ensure that adequate water is delivered where it needs to
2 go, engineers run computer simulations of the hydraulic activity of the water to determine
3 proper pressure, pipe sizing and other factors (a fire hydrant, for example, will require
4 different flow and pressure characteristics and larger piping than will water for residential
5 use).

6 **Q. IS MISSOURI-AMERICAN'S RATE OF INFRASTRUCTURE REPLACEMENT**
7 **A CONCERN FOR THE COMPANY'S ABILITY TO CONTINUE TO PROVIDE**
8 **A HIGH VALUE WATER SERVICE?**

9 A. Yes, it is, but we are not alone -- the state of infrastructure in America's water supply
10 systems is less than satisfactory.¹¹ In many cases, pipes intended to provide effective
11 service for 50 to 75 years have been in service for more than 100 years. To bring the
12 country's water and wastewater systems up to date will require a projected \$1 trillion
13 investment over the next 20 years, a price tag that will necessarily be shared by the
14 consumer.

15 **Q. HOW DO THESE NATIONAL CIRCUMSTANCES COMPARE TO THE REST**
16 **OF THE WORLD?**

17 A. As a percentage of household income, the U.S. Environmental Protection Agency reports
18 that U.S. residents pay less for water and wastewater services than do residents of most
19 other developed countries. The Executive Summary of the World Water Development

¹² The American Society of Civil Engineers has rated the state of U.S. water and wastewater systems a D in its 2013 Report Card on Infrastructure. Source: American Society of Civil Engineers 2013 Report Card on Infrastructure. <http://www.infrastructurereportcard.org/fact-sheet/drinking-water>

1 Report made a similar finding in 2001, ranking the U.S. fourth lowest in water pricing per
2 cubic meter (264 gallons) among developed nations.¹²

3 Because the majority of water funding comes from revenues generated by pricing, it will
4 take a significant change, then, in the way water is priced if the U.S. is to continue to
5 meet its infrastructure needs. Water pricing must cover the full costs of treatment and
6 delivery to consumers, including costs related to building, operating and maintaining and
7 replacing water systems – in other words, the true value of the service we provide. The
8 need for full-cost pricing was also underscored in The Johnson Foundation at
9 Wingspread’s “Charting New Waters: A Call to Action to Address U.S. Freshwater
10 Challenges”¹³ – the result of a two-year collaboration of U.S. businesses, farmers,
11 environmental not-for-profits, and government agencies to explore solutions to an
12 impending freshwater crisis. “For too long, our society has treated water as a cheap, non-
13 strategic and infinitely available resource. Not anymore,” said S. Curtis Johnson,
14 chairman of Diversey, Inc. and a co-signer of the call to action. “Threats to water quality
15 and access are putting our businesses, communities and way of life in jeopardy. The time
16 to act is now.” Stressing that reliable freshwater supplies are essential to U.S. economic
17 security, the report called for, among other actions, a better accounting of the full cost of
18 services delivered by municipally owned water and wastewater utilities and the sharing of
19 that information with consumers. “Revised pricing structures that more accurately reflect

¹⁴ “Executive Summary of the World Water Development Report,” Watertech online, 2001.
<http://unesdoc.unesco.org/images/0012/001295/129556e.pdf>

¹⁵ “Charting New Waters: A Call to Action to Address U.S. Freshwater Challenges,” The Johnson Foundation at Wingspread. <http://www.johnsonfdn.org/chartingnewwaters>

1 the full cost of services could be one step toward financing badly needed upgrades to
2 U.S. water and wastewater systems.” Along these lines, it is critical to ensure that the
3 price of water reflects the cost of providing that water.

4 **Q. ARE INVESTOR OWNED WATER UTILITIES POSITIONED TO ADDRESS**
5 **THE NEEDS OF THE WATER UTILITY INDUSTRY?**

6 A. Yes. We have all sorts of infrastructure needs in this country - things that have been
7 around for years that need to be replaced and upgraded - roads, bridges, levees, water and
8 wastewater infrastructure. States and municipalities typically fund a significant portion
9 of infrastructure spending, but we cannot depend on the government to supply all of the
10 capital that will be needed. We need to attract as much private capital as possible to
11 support our infrastructure investment needs so that government capital can concentrate on
12 those areas where there is very little direct private investment - such as roads, bridges,
13 schools, etc. Water and wastewater utilities are an integral part of our country’s
14 infrastructure investment solutions. Attracting private capital is essential to help finance
15 water and wastewater infrastructure projects. Moreover, private capital depends upon
16 predictability. If we put a project in service, and it is supported by thoughtful and
17 prudent consideration and study, then it needs to be included in our rate base where it can
18 earn a return in a timely fashion.

19 **Q. IS THE VALUE OF WATER SERVICE A SUBJECT THAT THE COMMISSION**
20 **SHOULD CONSIDER WHEN EVALUATING THE VARIOUS ELEMENTS OF**
21 **THE COMPANY’S RATE FILING?**

22 A. Yes, it should be a critical element of the Commission’s evaluation of our request. The

1 choice throughout history to under-price the treatment and delivery of clean, safe water to
2 American households has resulted in a perception that this vital resource is both plentiful
3 and cheap. At the same time, illustrating the real-life consequences of ignoring the adage
4 “an ounce of prevention is worth a pound of cure,” an historic lack of infrastructure
5 investment across all levels of government has left the nation’s water systems in a serious
6 state of disrepair.

7 There are encouraging signs that the tide is turning, evidenced by a recent wave of
8 infrastructure stories in the national media, the introduction of bipartisan legislation (the
9 Sustainable Water Infrastructure Investment Act of 2011) that would free up billions of
10 private capital dollars for investment in the nation’s water infrastructure; and a call for
11 water infrastructure investment by the U.S. Conference of Mayors. Full-cost recovery and
12 appropriately designed pricing will not only help water utilities continue to provide
13 customers with safe and clean water but will have the added benefit of encouraging more
14 conservative use, ensuring a sustainable supply for future generations.

15 **IV. WATER EFFICIENCY**

16 **Q. PLEASE EXPLAIN THE CONCEPT OF WATER EFFICIENCY.**

17 A. Water efficiency means using improved practices and technologies to deliver water
18 service more efficiently. For example, improved metering results in more accurate usage
19 information and increases employee efficiency. Leak detection programs can reduce the
20 amount of water, pressure, and energy required to deliver the same amount of water to
21 consumers' taps. Improving water efficiency reduces operating costs (e.g., pumping and

1 treatment) and reduces the need to develop new supplies and expand our water
2 infrastructure. It also reduces withdrawals from limited freshwater supplies, leaving
3 more water for future use and improving the ambient water quality and aquatic habitat.
4 Missouri-American's water efficiency efforts include supply-side practices, such as more
5 accurate meter reading and leak detection, leak surveys, main replacement and repair
6 programs, as well as demand-side strategies, such as rate design and public education
7 programs to encourage the wise use of water. Water efficiency saves customers money in
8 the long run, protects the environment, supports integrated resource planning, and
9 enhances the economy.

10 **Q. HOW IS THE CONCEPT OF WATER EFFICIENCY RELEVANT TO THIS**
11 **CASE?**

12 A. Water efficiency is the thread that runs throughout the entire fabric of this case. At its
13 core, this case is about investments that Missouri-American Water is making to better
14 serve our customers. Those investments include main and service replacements to
15 provide a better, more reliable system. They include the foundational technology
16 investments in the Business Transformation program ("BT") that will enable us to
17 fundamentally change the way we are doing business. They include investments in new
18 metering and innovative data collection technologies that will help us work smarter and
19 more efficiently.

20 This case reflects the changes to the way we do business to improve water efficiency.
21 Missouri-American continually strives to develop and implement water efficiency
22 measures that deliver steady or improved levels of service to consumers while mitigating

1 cost increases. By reducing the layers of the organization and increasing the spans of
2 control, we have reduced costs and improved internal communication. We leverage the
3 size and scale of American Water to improve transactional efficiencies through increased
4 automation, the adoption of more effective business processes, and a continuous
5 improvement mindset.

6 Finally, our rate design proposals are intended to provide incentives for the more efficient
7 use of water and investment in our system. Their purpose is to identify the appropriate
8 price of water service and provide a rate structure that is consistent with that goal. In
9 summary, the entirety of our case is driven by the efficient provision and use of our water
10 service.

11 **Q. WHAT IS THE COMPANY'S ULTIMATE GOAL?**

12 A. Our goal is to provide quality water and wastewater services as efficiently as possible,
13 and by doing so, to increase the value of the services that we provide our customers. We
14 challenge ourselves to build a culture of continuous improvement and excellence as a
15 way of providing a path for sustainability. As the President of Missouri-American, I
16 derive great satisfaction from seeing this commitment across the business to continuous
17 improvement to benefit our customers and shareholders.

18 **Operational Efficiency**

19 **Q. PLEASE DESCRIBE SOME OF MISSOURI-AMERICAN'S EFFORTS TO**
20 **IMPROVE MANAGEMENT EFFICIENCY.**

21 A. The Company continually strives to find more efficient and cost effective ways to operate

1 and maintain its business. As part of that effort, we strive to manage our cost structure as
2 efficiently as possible. Missouri-American uses various operational and efficiency
3 reviews to further focus on improving customer service and efficiency of production and
4 field operations. Through the size and breadth of American Water, Missouri-American
5 has continued to increase its purchasing power and obtain significant discounts on the
6 necessary equipment needed to manage and maintain our system – including pipes,
7 meters, fittings, and water treatment chemicals - that we otherwise would be unable to
8 obtain were we a separately owned water system. Over the last few years Missouri-
9 American has reduced the number of employee positions in its organization by 94 (or
10 more than 12%) as a result of process improvements, technology deployment, job
11 consolidation, selective outsourcing and organizational streamlining. These changes were
12 made almost completely through attrition, minimizing impact to employees. It is
13 important to recognize as well that efficiencies such as these position reductions have
14 been accomplished over the same period we have been growing our operations through
15 the acquisition of 5 water and 5 wastewater systems. Our intense focus on expenses
16 produces direct benefits to our customers. MAWC is continually evaluating the cost of
17 doing business. These efforts will provide future efficiencies for the Company and its
18 customers, which mitigates cost increases and results, over time, in less frequent rate
19 cases. Phil Wood, Missouri-American’s Vice President of Operations, provides some
20 details of these cost control measures in his Direct Testimony.

21 **Q. WILL YOUR ON-GOING REVIEW OF EXPENSES RESULT IN A DECREASE**
22 **IN EMPLOYEE HEADCOUNT FOR MISSOURI-AMERICAN?**

1 A. Not necessarily. The purpose of an ongoing review is not specifically to reduce
2 headcount. The intention is to improve efficiencies and customer service, and to control
3 cost to our customers. The Company continues to evaluate the total number of
4 employees needed to properly manage its operations in the most efficient manner
5 practicable.

6 **Q. DOES THE COMPANY INVEST IN ITS EMPLOYEES, AND DO THOSE**
7 **INVESTMENTS YIELD EFFICIENCIES?**

8 A. Yes. The Company emphasizes continuing employee development, and our Continuous
9 Improvement training program has created ascertainable benefits for our customers.
10 When practiced as a management system, the principles of Six Sigma and Lean are a high
11 performance system for executing business strategy. We have trained 154 employees on
12 the principles of LEAN and Six Sigma, and they have earned their yellow belts. We have
13 found that the results of applying Six Sigma principles- added value, efficiency,
14 elimination of errors and waste have led to many examples of reduced expense, capital
15 avoidance, improved process efficiency, and error reduction in the Company's operations.
16 These improvements can be expected to help control costs, now and in the future. The
17 Six Sigma management system drives clarity around the business strategy and the metrics
18 that most reflect success with that strategy. It provides the framework to prioritize
19 resources for projects that will improve the metrics, and it leverages leaders who will
20 manage the efforts for sustainable and improved business results.

21 **Q. HOW HAS MISSOURI-AMERICAN'S CUSTOMER SERVICE BEEN**
22 **AFFECTED BY THESE EFFORTS?**

1 A. There is thoughtful consideration of how customer service may be affected by any
2 decisions or actions taken in altering the manner in which our utility is operated. Our
3 customer call volume and quarterly customer survey satisfaction results are closely
4 monitored to detect any negative trends in service and general satisfaction quality.

5

6

Capital Investment

7 **Q. PLEASE DESCRIBE THE COMPANY’S ONGOING MAIN REPLACEMENT**
8 **PROGRAM.**

9 A. Missouri-American, through comprehensive capital planning, continues to make the
10 necessary investments in developing and maintaining adequate sources of supply,
11 treatment, pumping, transmission and distribution facilities, as well as to comply with
12 applicable environmental laws and regulations. “Adequate,” however, may not be
13 “optimal.” For example, it may be “adequate” to replace our distribution system
14 infrastructure as it breaks, but “optimal” is needed to accelerate our infrastructure
15 replacement rate to more closely match the estimated useful life of the respective assets.

16 As explained in Mr. Dunn’s testimony, our current capital investment on main
17 replacement is approximately \$73 million annually. In the last 3 years ending December
18 31, 2014, we will have replaced, on average, 57 miles of water main per year or
19 approximately 0.85% of the entire system annually. At this funding level, we have been
20 able to provide direct employment to approximately 200 contractor employees in addition
21 to approximately 100 employees of our own workforce. Prior to the Infrastructure

1 System Replacement Surcharge (ISRS) mechanism, water main replacement investment
2 was about \$7 million per year. As explained in Mr. Dunn's testimony, for Missouri-
3 American to achieve the 100-year main replacement schedule or 1% annually, capital
4 expenditures must increase by approximately \$13 million annually.

5 **Q. ARE UNDERGROUND TRANSMISSION AND DISTRIBUTION**
6 **INFRASTRUCTURE THE ONLY SYSTEM COMPONENTS FOR WHICH**
7 **CAPITAL INVESTMENT CAN PRODUCE COST SAVINGS?**

8 A. No. The Company also considers the nexus between the electric and water sectors as it
9 thinks about efficiencies, reducing water loss is only part of those considerations. The
10 electric and water sectors are closely aligned: energy extraction and production require a
11 significant amount of water, while the treatment and delivery of water and wastewater
12 services requires a significant amount of energy, representing about four percent of all
13 U.S. energy consumption each year.¹⁴

14 In his testimony, Mr. Wood also highlights areas in addition to "pipe in the ground" in
15 which Company investments will pay dividends for customers. MAWC has undertaken
16 efforts to enhance water and energy efficiency by replacing outdated water pumps,
17 installing solar panels at pumping stations and streamlining other processes.

18 The benefits of MAWC improving energy efficiency programs are three-fold. They
19 benefit water companies by providing us with an opportunity to expand our energy

¹⁴ As evaluated by the American Society of Civil Engineers in its 2013 Report Card on U.S. Infrastructure, that share could rise significantly as a result of the antiquated and inefficient nature of U.S. water and wastewater infrastructure.

1 efficiency efforts. They reduce operating costs through reduced energy consumption so
2 we can deliver water at lower prices to our customers while at the same time reducing
3 carbon emissions.

4 **Q. PLEASE DISCUSS SOME OF MISSOURI-AMERICAN'S OTHER KEY**
5 **INVESTMENT IN IMPROVED TECHNOLOGIES AND PRACTICES.**

6 A. American Water's Business Transformation ("BT") program and Fathom are critically
7 important investments. As Mr. Wood explains in his Direct Testimony, our new
8 integrated information technology systems provide a platform for connecting people,
9 processes, assets, and industry-based knowledge, and encompass more than technology
10 replacements — they enable us to change how we manage our business.

11 **Q. PLEASE PROVIDE A BRIEF OVERVIEW OF MISSOURI-AMERICAN'S**
12 **BUSINESS TRANSFORMATION PROGRAM.**

13 A. American Water undertook the Business Transformation program to update and
14 modernize its business processes and information technology systems. The scope of the
15 BT program includes a range of the Company's core functional areas, including: human
16 resources, finance and accounting, purchasing and inventory management, capital
17 planning, cash management, and customer and field services. Although the BT
18 investment was absolutely needed to replace legacy systems near the end of useful lives,
19 the program also promotes operating excellence, efficiency, and economies of scale as it
20 enhances the customer experience. Investing in the BT program and its enterprise
21 management capabilities is exactly what other responsible, forward-looking companies
22 and governments in America are doing to work smarter and better.

1 **Customer Efficiency**

2 **Q. IN SPITE OF NOT PRESENTLY HAVING AN RSM ARE THERE ANY**
3 **MEASURES YOU TAKE TODAY TO ENCOURAGE CUSTOMERS TO USE**
4 **WATER EFFICIENTLY?**

5 A. Yes, MAWC offers several programs that encourage customers to use water efficiently.
6 Our website home page has a link to water saving information and we provide
7 information on social media, particularly in the summer months.

8
9 **Q. DO YOU PARTNER WITH OTHER ORGANIZATIONS IN PROMOTING**
10 **WATER EFFICIENCY?**

11 A. In the St. Louis area, we work with the local Community Action Agency at several
12 community events each year, providing help to their clients in managing their water bills.
13 We promote water conservation at several community events, such as Earth Day
14 celebrations, with materials and interactive activities.

15
16 Every year we work with the EPA in promoting "Fix A Leak Week" in February. Our
17 customers receive bill inserts that direct them to additional information on our website.
18 We also promote leak detection and awareness to local media.

19
20 In many of our operations, summer water usage increases significantly as a result of lawn
21 irrigation activities. In collaboration with the Soil and Water Conservation District and
22 the University of Missouri Extension Office, Missouri American Water developed a

1 brochure that promotes water-wise lawn watering. We use this information at
2 community events and as a resource for media and customer inquiries.

3
4 **Q. ARE THERE ANY OTHER MAWC PROGRAMS THAT PROMOTE WATER**
5 **EFFICIENCY?**

6 A. Yes, our annual environmental grants program frequently includes funding for programs
7 that promote wise water usage -- from rain gardens to rain barrels. Volunteers at our
8 school outreach program bring interactive activities that engage children in discussions of
9 watershed protection and wise water usage.

10
11 **Alternative Ratemaking Proposal**

12 **Q. WHY ARE YOU PROPOSING A REVENUE STABILIZATION MECHANISM**
13 **(RSM)?**

14 A. We believe that this alternative regulatory mechanism will both advance the
15 Commission's goals and moderate future rate increases on customers. Currently, the way
16 rates are set, if our water customers use less water, our earnings will decline because our
17 revenues will drop. The idea behind the revenue stability mechanism is that it is
18 inappropriate to "penalize" MAWC for improving water efficiency. Implementation of
19 this alternative regulatory mechanism will remove a disincentive to promote water
20 efficiency and will support earnings that permit continued water efficiency investments.
21 Ms. Tinsley provides further details on this alternative cost recovery mechanism in her
22 Direct Testimony.

23 **Q. PLEASE BRIEFLY EXPLAIN HOW THIS PROPOSED COST RECOVERY**

1 **MECHANISM AFFECTS CUSTOMERS AND FULFILLS REGULATORY**
2 **GOALS.**

3 A. As discussed further in Ms. Tinsley’s Direct Testimony, declining usage per customer
4 and the resulting reductions in water sales has been a source of fiscal stress for Missouri-
5 American and is a potential disincentive to further investment in efficiency. This problem
6 is exacerbated by the fact that water supply in general is a rising-cost industry. The way
7 regulation can support appropriate levels of expenditures so that necessary capital
8 investments are consistently funded is through predictable and timely rate recovery. That
9 means removing the disincentives to capital investment from the ratemaking process
10 (e.g., via alternative rate mechanisms) and providing regulatory incentives to capital
11 investment (e.g., ISRS). In fact, at its 2013 annual meeting, the National Association of
12 Regulatory Utility Commissioners (“NARUC”) adopted a resolution that supports
13 consideration of alternative recovery mechanisms for water and wastewater utilities and
14 identifies the following benefits:

15 Alternative regulatory mechanisms can enhance the
16 efficiency and effectiveness of water and
17 wastewater utility regulation by reducing regulatory
18 costs, increasing rates for customers, when
19 necessary, on a more gradual basis; and providing
20 the predictability and regulatory certainty that
21 supports the attraction of debt and equity capital at
22 reasonable costs and maintains that access at all
23 times.¹⁵

24 Ultimately, it is customers who benefit because it allows investor-owned utilities to

¹⁶ *Resolution Endorsing Consideration of Alternative Regulation that Supports Capital Investment in the 21st Century for Water and Wastewater Utilities* - Sponsored by the Committee on Water, Recommended by the NARUC Board of Directors November 19, 2013, Adopted by the NARUC Committee of the Whole November 20, 2013. (Attached as Petitioner’s Exhibit AJD-3)

1 anticipate a consistency of regulatory oversight necessary to attract capital at lower prices
2 than their unregulated industrial counterparts. With very little variation, the Company's
3 costs do not vary significantly with usage, so a RSM would properly match cost
4 incurrence with cost recovery. For utilities and customers, a price that reflects true costs
5 is a more efficient price, and the proposed RSM would fulfill this goal.

6 **V. AFFORDABILITY**

7 **Q. WHAT TARGETED CUSTOMER ASSISTANCE PROGRAMS DOES**
8 **MISSOURI-AMERICAN CURRENTLY OFFER TO ADDRESS**
9 **AFFORDABILITY CONCERNS?**

10 A. Missouri-American offers its customers flexible payment arrangements through
11 installment agreements if they are financially able to pay a past due water service bill. A
12 payment arrangement allows Missouri-American customers the opportunity to pay off a
13 past due bill balance to keep utility accounts in good standing. A past due amount is
14 spread out over a specified period of time (monthly or quarterly installments, as the
15 billing frequency dictates), and customers are required to pay the agreed upon monthly or
16 quarterly installment in addition to paying their monthly or quarterly utility charges in
17 full by the bill due date each month or quarter. Paying both the monthly or quarterly
18 installment and current utility charges gives customers extra time to bring their utility
19 account up to date. The length of a payment arrangement can vary and there is no limit to
20 the number of installment agreements available to our customers provided that prior
21 installment agreements terms have been fully met. Missouri-American also has a
22 customer assistance program, known as H2O Help, funded by company donations and

1 contributions from our customers. The program is administered by local Community
2 Action Agencies.

3 **Q. ARE THERE OTHER OPPORTUNITIES AVAILABLE TO ADDRESS**
4 **AFFORDABILITY CONCERNS NOT CURRENTLY UTILIZED BY MISSOURI-**
5 **AMERICAN?**

6 A. Yes, further consolidation of rates of Missouri-American's multiple rate districts (18
7 water and 12 wastewater) would allow Missouri-American to spread the revenue
8 requirement resulting from capital investment and operating cost equally on a per gallon
9 basis by customer class across all its districts in a common rate tariff group. We have
10 filed our rate case using a consolidated rate structure in which multiple districts are
11 consolidated into common rate tariff groups. Dr. McDermott describes the benefits of
12 consolidated pricing in more detail in his Direct Testimony.

13 **VI. COMMUNITY INVOLVEMENT**

14 **Q. PLEASE DESCRIBE MISSOURI-AMERICAN'S OUTREACH EFFORTS IN**
15 **THE COMMUNITIES THAT IT SERVES.**

16 A. Throughout its 25 county service territory, Missouri-American is considered a
17 responsible corporate citizen, and is known for its community involvement and
18 volunteerism. Our management team encourages and supports our employees and their
19 families in serving as community volunteers. The Company even has goals for its
20 management to ensure that volunteerism is encouraged through regular Company
21 activities. We focus our community investments in four key areas: water and the
22 environment, water and healthy living, environmental education and community

1 sustainability. We give back to the community by supporting innovative, environmental
2 grant programs that improve, protect or restore drinking water supplies and surrounding
3 watersheds. Firefighter grants support our partnerships with fire service agencies in our
4 communities. We believe in investing in innovative programs that align with our core
5 business of water and wastewater service, and are committed to working with community
6 partners to develop sustainable solutions to local environmental issues. Community
7 outreach activities organized by the Company include: providing free water with a mobile
8 hydration station at community events around the state, participating in and donating to
9 local civic, economic and philanthropic organizations, providing water treatment plant
10 tours and other educational opportunities in partnership with local schools and
11 universities, participating in Earth Day activities, recycling drives and pharmaceutical
12 drop-off programs, to name a few. At numerous community events throughout the year
13 Missouri-American provides instruction on watershed stewardship through its interactive
14 watershed demonstration site that visually shows how proper management practices at
15 home, in a rural environment and in business can protect soil and water resources.

16 **Q. IN WHAT OTHER ACTIVITIES HAS MISSOURI-AMERICAN PARTNERED**
17 **LOCALLY?**

18 A. Being a good neighbor is part of our mission at Missouri-American. The employees of
19 Missouri-American play an active role in the communities we serve by getting involved
20 in a variety of environmental and educational activities related to water – everything from
21 watershed and river clean-up efforts to school programs focused on drinking water and
22 source water protection. We work with a number of community-based partners
23 throughout our service areas to positively impact the overall quality of life where our

1 employees and neighbors live and work. It takes more than a one-time grant or volunteer
2 effort to make a lasting difference, so we seek out and support organizations that
3 understand how to best meet the needs of the community. Our participation in activities
4 sponsored by outside organizations include local Chambers of Commerce, local
5 environmental groups, the schools and local United Way organizations in the
6 communities we serve.

7 **Q. WHAT IS THE LEVEL OF EMPLOYEE ENGAGEMENT IN THESE**
8 **COMMUNITY ACTIVITIES?**

9 We began measuring the number of employees involved in community activities
10 sponsored by the Company several years ago and are very proud to report that in 2007 the
11 number of employees involved was 7 and in 2014 that number had grown to 336
12 employees. We find that these activities not only support the communities we serve, but
13 also help develop the leadership skills of our employees that will benefit them and the
14 Company as they step into roles of increasing responsibility throughout their careers.

15 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

16 A. Yes, it does.