#### REBUTTAL TESTIMONY

OF

#### RUSSELL W. TRIPPENSEE

### MISSOURI AMERICAN WATER COMPANY CASE NO. WR-2007-0216

1	Q.	PLEASE STATE YOUR NAME AND ADDRESS.								
2	A.	Russell W. Trippensee. I reside at 1020 Satinwood Court, Jefferson City, Missouri 65109, and my								
3		business address is P.O. Box 2230, Jefferson City, Missouri 65102.								
4	Q.	BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?								
5	A.	I am the Chief Utility Accountant for the Missouri Office of the Public Counsel (OPC or Public								
6		Counsel).								
7	Q.	ARE YOU THE SAME RUSSELL W. TRIPPENSEE WHO HAS FILED DIRECT								
8		TESTIMONY IN THIS CASE?								
9	A.	Yes.								
10	Q.	WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?								
11	A.	I will present Public Counsel's response to and opposition of the Missouri American Water Company								
12		(MoAm or Company) proposal to apply a surcharge to customers in the Joplin District beginning or								
13		January 1, 2008 for costs related to the construction of a water treatment plant and related								
14		improvement projects. This proposal is set out in the direct testimony of Company witness James M								
15		Jenkins beginning on page 11, line 22 through page 19, line 6.								
16	Q.	WHY DOES PUBLIC COUNSEL OPPOSE THE SURCHARGE ON THE JOPLIN								
17		DISTRICT?								
18	A.	Public Counsel opposes the surcharge which will increase rates on a systematic basis at the beginning								
19		of each calendar quarter during the year 2008 beginning on January 1st.								

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- 1. The surcharge proposal violates the intent of the people of Missouri with regard to paying for plant prior to the plant being placed in-service.
- 2. The surcharge changes rates outside of a general rate case without considering all other relevant factors related to the cost of service.
- 3. The surcharge will cause current customers to pay for plant that is under construction and therefore is not used and useful and currently in-service providing safe and adequate water service.
- 4. The surcharge will result in inter-generational inequities between current and future ratepayers.
- 5. The surcharge will transfer some of the construction risk to ratepayers from the owners and management of the Company.
- 6. The surcharge will increase costs to the body of ratepayers over the next decade in order to benefit the subsequent body of ratepayers.
- Q. HAS THE COMPANY PREVIOUSLY PRESENTED TESTIMONY BEFORE THIS

  COMMISSION REGARDING INCLUSION OF PLANT NOT YET IN SERVICE

  BEING INCLUDED IN THE RATES CURRENT CUSTOMERS PAY?
  - Yes. MoAm and its predecessors has been quite persistent in trying to get this Commission to issue orders that would adjust rates to reflect costs related to plant that will be placed in service at some point subsequent to the end of the test year used in the then current case. In case WR-96-263, MoAm proposed a "reasonableness" standard be used in place of the "known and measurable" standard this Commission has consistently used to determine whether or not plant investments should be included in rate base. In subsequent cases, the Company has attempted to get this Commission to approve other regulatory procedures that would result in increased rates based on non-traditional regulatory procedures to inflate rate base. As example, Company proposed to reflect continuation of the Allowance for Funds Used During Construction even after the projects placed in service (Case No. WR-2000-0281).

- Q. HAVE THE VOTERS OF MISSOURI MADE A SPECIFIC EXPRESSION OF THEIR VIEW POINT REGARDING PAYING FOR UTILITY PLANT PRIOR TO THAT PLANT PROVIDING SAFE AND ADEQUATE SERVICE?
- A. Yes, they have. In an initiative vote of the citizens of this state, the following statute was enacted:

Any charge made or demanded by an electrical corporation for service, or in connection therewith, which is based on the costs of construction in progress upon any existing or new facility of the electrical corporation, or any other cost associated with owning, operating, or any other cost associated with owning, operating, maintaining, or financing any property before it is fully operational and used for service, is unjust and unreasonable, and is prohibited.

Section 393.135, RSMo 1986

This statute is specific to electric utilities but it was passed during the period of major plant additions to utility systems including two nuclear generating units whose cost was anticipated to increase rates in excess of 50% at the time they went into service. The circumstance the customers of the Joplin District are currently facing is almost identical.

- Q. ARE YOU AWARE OF THIS COMMISSION INCLUDING CONSTRUCTION WORK
  IN PROGRESS FOR ELECTRIC, GAS, WATER, OR SEWER COMPANIES IN
  THE DETERMINATION OF RATES PRIOR TO THE PROJECT BEING PLACED
  IN SERVICE?
- A. No.

- Q. ARE YOU FAMILIAR WITH THE INFRASTRUCTURE SYSTEM REPLACMENT SURCHARGE (ISRS)?
- A. Yes. The Missouri Legislature in 2003 enacted House Bill 208 and signed into law by Governor Holden that provided for a surcharge on customer bills in what is now the St. Louis district of MoAm. This surcharge was for specific classes of non-revenue producing utility plant which had been placed

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in service during the period subsequent to the last general rate proceeding. Section 393.1000 through Section 393.1006, RSMo 2006 Cumulative Supplement, expressly identify a specific class of plant for the water industry that is subject to ISRS treatment. This indicates that absent such authority, the prohibition on single issue rate making outside a general rate proceeding requires this Commission to address all relevant factors when rates are adjusted for all other costs.

- Q. MR. JENKINS ASSERTS THAT THE JOPLIN SURCHARGE WOULD BE SIMILAR TO THE INFRASTRUCTURE SYSTEM REPLACEMENT SURCHARGE.

  DO YOU AGREE WITH HIS ASSERTION?
- A. No. The ISRS deals specifically with plant investment that is **in-service** and **used and useful** for the customer. In contrast, the proposed Joplin Surcharge is simply designed and calculated to cover the financing cost of a construction project during a period prior to the project being placed in service. Additionally, the project is designed to increase the production capacity of the Joplin Water Treatment Plant by over 30%. Obviously an increase in production capacity provides for an increased opportunity to generate revenues. This is in direct conflict with the express language of the statutes that provided for the ISRS. Section 393.1000 (8), RSMo 2006 Cumulative Supplement, specifically lists the Water Utility Plant Projects that are eligible for ISRS treatment. A review of that language does not reveal inclusion of production facilities such as the Joplin project.
- Q. PLEASE EXPLAIN WHY PUBLIC COUNSEL BELIEVES THE SURCHARGE CONSTITUTES SINGLE ISSUE RATEMAKING?
  - The Joplin Surcharge would provide for tariff changes occurring after the operation of law date without consideration of changes in any other factor included in the determination of the overall revenue requirement. Factors such as customer changes, increased accumulated depreciation reserve,

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 changes in deferred tax balances, and chemical costs are examples of some factors that would change the revenue requirement.

Schedule JMJ-3 to Mr. Jenkins Direct Testimony provides the calculation of the proposed Joplin Surcharge. A review of this schedule clearly shows that the only cost considered in the development of the Joplin Surcharge is the carrying costs associated with a project levelized balance of Construction Work in Progress (CWIP) associated with the project. It should be noted that this projected balance will not be subject to audit or scrutiny by this Commission, the Staff, or any party to this case. As these projected balances are in fact only projections, they may not even reflect actual expenditures as of the date of each proposed change in the Joplin Surcharge.

# Q. WHAT IS YOUR CONCERN WITH POTENTIAL REGULATORY POLICY ISSUES REGARDING THIS QUESTION?

To isolate and forecast one cost-of-service component in a ratemaking docket without considering all other relevant factors associated with the same time period would violate the matching principle on which this Commission has consistently set rates. The purpose of the current case is to set rates which MoAm can charge its customers. Allowing one isolated cost, that occurs over a year after the operation of law date to influence the rate making process is inappropriate and would violate the matching principle.

The Commission has previously recognized that a proper matching of revenue requirement components is necessary when it stated:

The Commission will not consider a true-up of isolated adjustments, but will examine only a "package" of adjustments designed to maintain the proper revenue-expense-rate base match at a proper point in time. *Re: Kansas City Power & Light*, 26 Mo. P.S.C. (N.S.) 104, 110 (1983)

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Missouri American Water Company, Case No. WR-97-237 & SR-97-238, Suspension Order and Notice and Order Consolidating Cases, December 23, 1996

- WHY DOES PUBLIC COUNSEL OPPOSE Q. THE THE CONSIDERATION OF ISOLATED COSTS FROM FUTURE TIME PERIODS WHEN DETERMINING THE COST OF SERVICE ON WHICH TO SET RATES?
- A. The consideration of future costs (either directly or indirectly) does not result in a proper matching of the components necessary to determine the cost of service, which is often called the revenue requirement. Public Counsel believes that traditional regulatory process (TRP) has served and can continue to service Missouri ratepayers well. TRP, as it has been applied in Missouri, is often called rate base/rate of return regulation (RBRORR).
- PLEASE EXPLAIN HOW TRADITIONAL REGULATORY PROCESS CALCULATES Q. REOUIREMENT **ASSURES** REVENUE AND THAT THE APPROPRIATE RELATIONSHIP BETWEEN THE RBRORR COMPONENTS IS MAINTAINED.
- A historic test year, such as the year ending June 30, 2006 in this case, allows the regulatory process A. to utilize actual data that is auditable and verifiable. The use of a historical test year eliminates the need to try to determine whose "guess" (often called budgets) is appropriate. Budgets are not verifiable and can easily be adjusted to suit the purpose of the party developing the budget.

The Commission uses two other test year procedures to insure that the data is as "fresh" as possible. Commission procedures allows for two updates of data to be considered in the cost of service. These updates are as of a date certain. The first update period is called a test year updated for known and measurable changes as of a certain date, December 31, 2006 in this case. This first update normally uses a date prior to the filing of direct testimony by all parties other than the Company. The second update period is referred to as a true-up period. This process allows for updating data as of a date

certain, June 30, 2007 in this case, after update period but prior to the operation of law date of the case. True-up updates should be used only when it is believed that significant changes in the relationship of the Rate Base/Rate of Return Regulation components may occur.

Q.

# HOW DOES THE COMMISSION ENSURE THAT THE RELATIONSHIP BETWEEN THE COMPONENTS OF THE RBRORR FORMULA IS NOT ALTERED OR DESTROYED THROUGH THE USE OF UPDATES OR A TRUE-UP AUDIT?

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 A. The Commission has traditionally entertained updates which include a complete package of all the major components of the cost of service. This package includes the following items: customer levels, plant-in-service and related items such as property taxes and depreciation expense and reserve, payroll costs including employee levels and pay rates, appropriate energy costs, and any other item which would have a material effect on the cost of service. These items, taken together, constitute the vast majority of the cost of service. A cost of service component that would have a material impact on the Revenue Requirement or which is directly related to an included cost item should be included in this package.

## Q. ARE THERE ANY OTHER POINTS ABOUT THE HISTORIC TEST YEAR THAT ARE RELEVANT TO YOUR EXPLANATION OF MISSOURI PRACTICE?

Yes. The historical data is presented on a year end test year basis. That means that all information available at the end of the period is used to develop the specific inputs into the cost of service calculation. For example, instead of using plant-in-service based on the average of the twelve months during the test year, the balance at the end of the period is used which is normally higher than the average. Similarly, customer levels, employee levels and pay rates, depreciation expense and all

other factors which experience change during the test period are included in the cost of service based on the most current data. This process is often referred to as an annualization.

- Q. DOES PUBLIC COUNSEL BELIEVE THAT THE TRADITIONAL REGULATORY
  PROCESS PROVIDES THE BEST METHOD TO MATCH THE NECESSARY COST
  OF SERVICE COMPONENTS? IF SO, PLEASE EXPLAIN HOW THE TRP HAS
  BEEN APPLIED IN MISSOURI.
- A. Public Counsel believes that the TRP provides a proper match between the various components of the cost of service. The TRP works by determining the prudent and reasonable costs of providing service to the ratepayer. This involves determining the minimum level of expenses and capital investment necessary to provide safe and adequate service. The following formula serves as the basis for setting rates under RBRORR:

Revenue Requirement = Expenses + Return on Equity

The two components, Expense and Return on Equity, when taken together, can be referred to as the cost of service. Included in expenses are payroll expense, energy charges, interest expense on debt, taxes, depreciation, and other miscellaneous expense items. Return on equity is the earnings investors require to invest in the capital expenditures necessary to provide service.

An important point that is often not recognized is that the formula reflects a **relationship** between the component parts. If the relationship is not in balance then a rate change is appropriate. It is the **relationship** and not the specific amount of any component **that is relevant**. A restatement of the formula may provide some assistance in recognizing this:

Revenue Requirement - Expenses = Return on Equity

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Each of the components in this formula are dynamic. Revenues may change due to customer growth or sales per customer, expenses incurred may change due to a multitude of factors, and the market's required return is subject to fluctuation. It is critical to recognize that the Commission must look at all factors when determining if a change in the relationship between the components has occurred that necessitates adjustments in rates. If the relationship has not changed in such a way that the required return on equity differs from the actual return on equity, then despite changes in the components, a Commission action to increase or decrease rates is not necessary. In the same vein, a regulatory method which singles out one component to the exclusion of others for special regulatory treatment is not appropriate.

- PREVIOUSLY YOU STATED THAT THE RBRORR FORMULA COMPONENTS ARE Q. DYNAMIC. OBVIOUSLY PRIOR TO THE PERIOD HISTORIC EFFECT. THIS USE HISTORIC FROM RECOVERING COSTS COMPANY ITS IF SOME COSTS INCREASE DURING THE FIRST YEAR THE RATES ARE IN EFFECT?
- A. No. All elements of the Rate Base/Rate of Return Regulation formula are dynamic as previously stated. The practical effect is that you cannot look at the change in only one item and determine if the relationship has been altered. As the Commission has recognized in requiring a "package" of adjustments, other items change which may offset, in either direction, the effect on the RBRORR relationship. Each dollar of revenue includes the recovery of variable costs. Therefore, as sales increase due to customer growth, increases in variable costs to provide service are already built into current rates. Similarly, the rates also include recovery of an average capital investment per customer

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or sales unit. Sales increases, therefore, provide revenues to recover corresponding capital investment increases, whether or not they occur.

I would point out that if a company was completely static, the required revenue requirement would steadily decrease because depreciation expense causes the accumulated depreciation expense reserve to grow. As this reserve grows, it reduces the rate base which in turn decreases the required return to the investors and therefore the cost of service. The Commission should also recognize that capital investments may not even occur as a result of customer growth, as most systems are able to add customers without having to add material plant in service in order to serve that customer. Therefore an incremental portion of the revenue dollars associated with plant expense and return are available to cover other cost changes or flow directly to the stockholder as increased earnings.

#### Q. PLEASE EXPLAIN THE CONCEPT OF REGULATORY LAG.

This concept refers to the difference in timing of a decision by management and the Commission's recognition of that decision, and its effect, if any, on the rate base/rate of return/revenue/expense relationship in the determination of a company's revenue requirement. Prudent management decisions may alter the rate base/rate of return/revenue/expense relationship that is the basis for the overall cost of service (a.k.a., the Overall Revenue Requirement). The relationship change increases the profitability of the firm in the short-run, until such time as the Commission reestablishes rates which properly match the new levels of the overall cost of service components. Companies are allowed to retain costs savings, i.e., excess profits during the lag period between rate cases. When faced with escalating costs that will change the rate base/rate of return/revenue/expense relationship adversely with respect to profits, regulatory lag places pressure on management to take actions to minimize the change in the relationship and the resulting decrease in profitability. Regulatory lag,

stated another way, provides management with real financial incentives to operate the business in an efficient manner.

# Q. DO EVENTS SUCH AS EXPENDITURES FOR NEW TREATMENT FACILITIES HAPPEN IN A VACUUM WITH RESPECT TO OTHER POSSIBLE CHANGES IN THE OPERATIONS OF THE UTILITY?

- A. No. The overall cost of service is made up of a multitude of factors. Isolating or focusing on only one component, such as expenditures for new plant facilities, fails to look at all relevant factors in determining the overall cost of service. Other factors may have changed that have a corresponding decrease or increase on the overall cost of service. Unless all factors are analyzed, it is not appropriate to single out one specific event.
- Q. HAS THIS COMMISSION ADDRESSED WHETHER IT IS REASONABLE TO PROTECT SHAREHOLDERS FROM ALL REGULATORY LAG?
- A. Yes. This Commission has held that it is not reasonable to protect shareholders from all regulatory lag. In Missouri Public Service Company, Cases Nos. EO-91-358 and EO-91-360, the Commission stated:

Lessening the effect of regulatory lag by deferring costs is beneficial to a company but not particularly beneficial to ratepayers. Companies do not propose to defer profits to subsequent rate cases to lessen the effects of regulatory lag, but insist it is a benefit to defer costs. Regulatory lag is a part of the regulatory process and can be a benefit as well as a detriment. Lessening regulatory lag by deferring costs is not a reasonable goal unless the costs are associated with an extraordinary event.

Maintaining the financial integrity of a utility is also a reasonable goal. The deferral of costs to maintain current financial integrity though is of questionable benefit. If a utility's financial integrity is threatened by high costs so that its ability to provide service is threatened, then it should seek interim rate relief. If maintaining financial integrity means sustaining a specific return on equity, this is not the purpose of regulation. It is not reasonable to defer costs to insulate shareholders from any risks. If costs are such that a utility considers its return on equity unreasonably low, the proper approach is to file a rate case so that a new revenue requirement can be

developed which allows the company the opportunity to earn its authorized rate of return. Deferral of costs just to support the current financial picture distorts the balancing process used by the Commission to establish just and reasonable rates. Rates are set to recover ongoing operating expenses plus a reasonable return on investment. Only when an extraordinary event occurs should this balance be adjusted and costs deferred for consideration in a later period (Emphasis added).

- Q. WAS THE COMMISSION'S "EXTRAORDINARY AND NONRECURRING"

  STANDARD AS OUTLINED IN RE: M.P.S. AFFIRMED BY THE WESTERN

  DISTRICT COURT OF APPEALS?
- A. Yes, the Western District Court of Appeals states:

"[An AAO deferral] . . . distorts the balancing process utilized by the Commission to establish just and reasonable rates. Because rates are set to recover continuing operating expenses plus a reasonable return on investment, only an extraordinary event should be permitted to adjust the balance . . ." <u>State ex. Rel. Missouri Office of the Public Counsel v. Public Service Commission</u>, 858 S.W. 2d 806, 810 (Mo. App. 1993).

The Court of Appeals also noted that the Uniform System of Accounts (USOA) defines "extraordinary items" as:

[t]hose items related to the effects of events and transactions which have occurred during the current period and which are not typical or customary business activities of the company . . . Accordingly, they will be events and transactions of significant effect which would not be expected to recur frequently and which would not be considered as recurring factors on any evaluation of the ordinary operating processes of business. . . <u>Id</u>. at 810.

- Q. YOU INDICATED THAT THE PROPOSED JOPLIN SURCHARGE WILL CREATE
  AN INTER-GENERATIONAL INEQUITY; PLEASE EXPLAIN WHAT YOU MEAN
  BY THE TERM INTER-GENERATIONAL INEQUITY.
- A. The individuals and other entities (businesses, organizations, government entities, etc) that make up the total group we commonly refer to as ratepayers are a dynamic group that is constantly changing.
   Customers come onto or leave the system daily. Sound public policy and basic tenets of fairness

dictate that a customer pay those cost incurred at the time they receive service. That principle is embodied in the prohibition against retro-active ratemaking, the matching principle used for ratemaking by this Commission, and underlies the basis for excluding CWIP from the determination of current rates.

An inter-generational inequity occurs when the cost of serving one generation of ratepayers (ratepayers in any given year) is shifted to another generation of ratepayers.

- Q. PLEASE EXPLAIN HOW THE PROPOSED JOPLIN SURCHARGE WILL CREATE
  AN INTER-GENERATIONAL INEQUITY.
- A. The surcharge will shift the financing costs associated with providing service to future generations of customers to current customers. The construction project will not provide service to Joplin ratepayers during 2008. However the Joplin Surcharge would require these customers to pay for the associated financing charges for that project.
- Q. IS THERE CERTAINTY THAT THE PROJECT WILL BECOME OPERATIONAL AND PROVIDE SERVICE TO CUSTOMERS AT SOME POINT IN THE FUTURE?
- A. No. A risk of any project is that the project will either not work at all or will not meet its designed output. This Commission is well aware of the in-service criteria that its Staff has proposed for various major production facilities. To require the current generation of ratepayers to pay the financing costs associated with this project prior to the project being shown to have the ability to provide safe and adequate service is bad public policy and contrary to this Commission's practices over the almost 30 years I have spent in regulatory matters in this state.
- Q. DOESN'T MR. JENKINS ASSERT THAT THERE IS NO SHIFTING OF CONSTRUCTION RISK AS A RESULT OF THIS PROPOSED SURCHARGE?

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- Mr. Jenkins answers the question by stating "No". However it the next sentence he admits "the chance of customers paying for facilities that do not end up in service are minimal". It cannot be both ways. The Joplin Surcharge does shift some of the construction risk associated with the project from the Company to the ratepayer. If the project does encounter problems or doesn't perform up to design characteristics, the current generation of customers will already have paid for a portion of the costs. This clearly constitutes a shifting of risk.
- MR. **ASSERTS** Q. **JENKINS** THAT THE PROJECT IS NOT **ANALAGOUS** ELECTRIC GENERATING PLANTS BECAUSE THOSE PLANTS LOAD GROWTH, OFTEN YEARS IN THE FUTURE", WHEREAS THIS **PROJECT** WILL MODERNIZE AND INCREASE THE OF AN EXISTING PLANT. (JENKINS DIRECT, LINE 15 - 20) PLEASE COMMENT ON MR. JENKINS' ASSERTION.
- A. Mr. Jenkins' statement asserting that dissimilarity between electric generating additions and water treatment facilities does not conform to reality. A common reason to rehabilitate an electric generating facility is to increase efficiency or meet environmental concerns, just as Mr. Jenkins asserts is the purpose of this project. Furthermore, Mr. Jenkins, despite referencing it earlier in his testimony, does not mention during his discussion on page 18 regarding load growth, that the plant capacity will increase by over 30% as a result of this project. Company witness Alan J. Deboy indicates that capacity increase will be sufficient to meet project demand through 2021 or well beyond the "ten year" time frame used by Mr. Jenkins in his attempt to differentiate this water project from an electric project.
- Q. MR. JENKINS ASSERTS THAT THE PROPOSED JOPLIN SURCHARGE WILL SAVE CUSTOMERS \$1.7 MILLION BECAUSE RATE BASE WILL BE LOWER.

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"BOTTOM LINE, THIS "PAY-AS-YOU GO" STRATEGY WOULD RESULT IN A SAVINGS OF \$1.7 MILLION DOLLARS TO THE JOPLIN RATEPAYERS".

DO YOU AGREE WITH MR. JENKINS QUANTIFICATION OF THE SAVINGS?

- No. The \$1.7 Million savings is the difference between rate base with and without the Joplin Surcharge. The customers (all future generations after 2008) will realize those savings ratably over the 40 plus year life of the plant. However Mr. Jenkins **ignores** that the current generation of customers will pay \$2,369,652 during 2008 as a result of the proposed Joplin Surcharge if it is adopted in order to obtain those savings over a 40 plus year period.
- Q. ISN'T IT TRUE THAT ANNUAL RATES WOULD BE LESS ON A GOING FORWARD BASIS AFTER 2008 UNDER THE PROPOSED JOPLIN SURCHARGE?
- A. That is simply a reflection of the reduction in the rate base and represents a realization of the \$1.7 Million savings in AFUDC referred to by Mr. Jenkins. However consideration of the \$2.369 Million paid by the customers must be taken into consideration to determine when the customers break even on this proposal and realize a benefit from Mr. Jenkins "pay-as-you go" proposal. A customer's break even point occurs when the dollars they provide the Company up front via the proposed Joplin Surcharge are equal to the subsequent savings in rates that would occur as a result of the reduction in AFUDC in rate base.

#### Q. HAVE YOU CALCULATED THAT BREAK EVEN POINT?

Yes. From a financial standpoint two break even points are relevant. The first is to look only at the nominal dollars and ignore the time value of money. It would be some time during 2019 or eleven years after the plant goes in-service that customers would break even on a nominal dollar basis. This calculation (along with the Net Present Value break even calculation) represents the shortest time frame for a break even point as it assumes that rates would change every year on January 1 to

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recognize the reduction in rate base resulting from the accumulated depreciation reserve. Absent these rate changes, the break even point would be farther out and the Company would reap excess profits.

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#### Q. WHY IS THE NET PRESENT VALUE BREAK EVEN POINT RELEVANT?

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VALUE BASIS?

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Q. PLEASE SUMMARIZE YOUR REBUTTAL TESTIMONY.

## A. The purpose of a Net Present Value calculation is to determine how much a person or entity would

pay today in order to receive a future stream of revenue. As the old saying goes, a dollar today is worth more than a dollar tomorrow. That is because you can invest or otherwise earn on your dollar today. Therefore future dollar savings have to be discounted back to reflect this fundamental financial principle.

### HAVE YOU CALCULATED THE BREAK EVEN POINT ON A NET PRESENT

Yes with a qualification. The qualification is that based on the assumptions used in the nominal

dollar break even analysis, there is not a break even point during the next 40 years from the customers' perspective. The value of the contribution via the proposed Joplin Surcharge would always have more value than the accumulated net present value of the stream of future revenues.

Even if the Commission would ignore that each generation of ratepayers is separate and distinct and simply look at current ratepayers as the on-going body of ratepayers, the proposed Joplin Surcharge would not make rational economic sense to the current ratepayers. They would be required to pay monies up front and not receive commensurate stream of earnings (future rate savings) over the next 40 years.

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- A. Public Counsel opposes the proposed Joplin Surcharge. It is designed to enrich the Company at ratepayer's expense, shift construction risk onto the ratepayer, and would represent a fundamental shift in the regulatory paradigm that has served Missouri for the last several decades.
  - Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?
  - A. Yes.

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#### Office of the Public Counsel Missouri American Water Company Case No WR-2007-0216

#### TRADITIONAL REGULATION WITH CWIP

					REVENUE REQUIREMENT COMPONENTS							
							044				Accumulated	Accumulated
			Accumulated		ROE	ROE	Cost of Debt		Property	Annual Revenue	Revenue Requirement	Revenue Requirement
	Year	Plant-In Servie	Depreciation	Rate Base	Component	Revenue	Component	Depreciation		Requirement	Traditional	Joplin Surcharge
1	2008	<del>.</del>	-	<del>.</del>	<del>.</del>		<del>.</del>		<u>-</u>	<u>-</u>	<del>.</del>	2,369,653
2	2009 2010	33,925,962 33,925,962	913,533	33,925,962 33,012,429	1,811,646 1,762,864	2,974,343 2,894,252	1,078,846 1,049,795	913,533 913,533	172,556 172,556	5,139,277 5,030,136	5,139,277 10,169,414	7,246,180 12,019,159
4	2010	33,925,962	1,827,066	32,098,896	1,714,081	2,814,161	1,049,795	913,533	172,556	4,920,995	15,090,409	16,688,587
5	2012	33,925,962	2,740,599	31,185,363	1,665,298	2,734,070	991,695	913,533	172,556	4,811,854	19,902,263	21,254,467
6	2013	33,925,962	3,654,132	30,271,830	1,616,516	2,653,979	962,644	913,533	172,556	4,702,713	24,604,975	25,716,796
7 8	2014 2015	33,925,962 33,925,962	4,567,665 5,481,198	29,358,297 28,444,764	1,567,733 1,518,950	2,573,888 2,493,798	933,594 904,543	913,533 913,533	172,556 172,556	4,593,571 4,484,430	29,198,546 33,682,976	30,075,577 34,330,808
9	2016	33,925,962	6,394,731	27,531,231	1,470,168	2,413,707	875,493	913,533	172,556	4,375,289	38,058,265	38,482,489
10	2017	33,925,962	7,308,264	26,617,698	1,421,385	2,333,616	846,443	913,533	172,556	4,266,148	42,324,413	42,530,621
11 12	2018 2019	33,925,962 33,925,962	8,221,797 9,135,330	25,704,165 24,790,632	1,372,602 1,323,820	2,253,525 2,173,434	817,392 788,342	913,533 913,533	172,556 172,556	4,157,006 4,047,865	46,481,419 50,529,284	46,475,203 50,316,236
13	2020	33,925,962	10,048,863	23,877,099	1,275,037	2,093,343	759,292	913,533	172,556	3,938,724	54,468,008	54,053,720
14	2021	33,925,962	10,962,396	22,963,566	1,226,254	2,013,252	730,241	913,533	172,556	3,829,583	58,297,591	57,687,653
15	2022	33,925,962	11,875,929	22,050,033	1,177,472	1,933,161	701,191	913,533	172,556	3,720,441	62,018,032	61,218,038
16 17	2023 2024	33,925,962 33,925,962	12,789,462 13,702,995	21,136,500 20,222,967	1,128,689 1,079,906	1,853,070 1,772,980	672,141 643,090	913,533 913,533	172,556 172,556	3,611,300 3,502,159	65,629,332 69,131,491	64,644,873 67,968,158
18	2025	33,925,962	14,616,528	19,309,434	1,031,124	1,692,889	614,040	913,533	172,556	3,393,018	72,524,509	71,187,894
19	2026	33,925,962	15,530,061	18,395,901	982,341	1,612,798	584,990	913,533	172,556	3,283,876	75,808,386	74,304,081
20 21	2027 2028	33,925,962 33,925,962	16,443,594 17,357,127	17,482,368 16,568,835	933,558 884,776	1,532,707 1,452,616	555,939 526,889	913,533 913,533	172,556 172,556	3,174,735 3,065,594	78,983,121 82,048,715	77,316,718 80,225,805
22	2028	33,925,962	18,270,660	15,655,302	835,993	1,372,525	497,839	913,533	172,556	2,956,453	85,005,168	83,031,343
23	2030	33,925,962	19,184,193	14,741,769	787,210	1,292,434	468,788	913,533	172,556	2,847,312	87,852,479	85,733,332
24	2031	33,925,962	20,097,726	13,828,236	738,428	1,212,343	439,738	913,533	172,556	2,738,170	90,590,649	88,331,771
25 26	2032 2033	33,925,962 33,925,962	21,011,259 21,924,792	12,914,703 12,001,170	689,645 640,862	1,132,252 1,052,162	410,688 381,637	913,533 913,533	172,556 172,556	2,629,029 2,519,888	93,219,678 95,739,566	90,826,660 93,218,000
27	2034	33,925,962	22,838,325	11,087,637	592,080	972,071	352,587	913,533	172,556	2,410,747	98,150,313	95,505,791
28	2035	33,925,962	23,751,858	10,174,104	543,297	891,980	323,537	913,533	172,556	2,301,605	100,451,918	97,690,032
29 30	2036 2037	33,925,962 33,925,962	24,665,391 25,578,924	9,260,571 8,347,038	494,514 445,732	811,889	294,486 265,436	913,533	172,556	2,192,464 2,083,323	102,644,382	99,770,724
31	2037	33,925,962	26,492,457	7,433,505	396,949	731,798 651,707	236,385	913,533 913,533	172,556 172,556	1,974,182	104,727,705 106,701,887	101,747,866 103,621,458
32	2039	33,925,962	27,405,990	6,519,972	348,167	571,616	207,335	913,533	172,556	1,865,040	108,566,927	105,391,502
33	2040	33,925,962	28,319,523	5,606,439	299,384	491,525	178,285	913,533	172,556	1,755,899	110,322,826	107,057,995
34 35	2041 2042	33,925,962 33,925,962	29,233,056 30,146,589	4,692,906 3,779,373	250,601 201,819	411,435 331,344	149,234 120,184	913,533 913,533	172,556 172,556	1,646,758 1,537,617	111,969,584 113,507,201	108,620,939 110,080,334
36	2042	33,925,962	31,060,122	2,865,840	153,036	251,253	91,134	913,533	172,556	1,428,475	114,935,676	111,436,179
37	2044	33,925,962	31,973,655	1,952,307	104,253	171,162	62,083	913,533	172,556	1,319,334	116,255,011	112,688,475
38 39	2045 2046	33,925,962	32,887,188	1,038,774	55,471	91,071	33,033	913,533	172,556 172,556	1,210,193	117,465,204	113,837,221
40	2040	33,925,962 33,925,962	33,800,721 34,714,254	125,241 (788,292)	6,688 (42,095)	10,980 (69,111)	3,983 (25,068)	913,533 913,533	172,556	1,101,052 991,911	118,566,255 119,558,166	114,882,418 115,824,065
		,,	. , , -	(, - ,	( ,,	(,	( -,,	,	,		.,,	
41									NIDV ( 4.0	CWIP		Joplin Surcharge
42 43									NPV 10 NPV 11	\$26,827,315 \$28,518,430		\$27,639,586 \$29,244,284
44									NPV 12	\$30,035,859		\$30,684,179
45									NPV 13	\$31,396,453		\$31,975,255
46 47									NPV 14 NPV 15	\$32,615,483 \$33,706,792		\$33,132,007 \$34,167,567
48									NPV 16	\$34,682,920		\$35,093,835
49									NPV 17	\$35,555,228		\$35,921,589
50									NPV 18	\$36,333,999		\$36,660,588
51 52									NPV 19 NPV 20	\$37,028,545 \$37,647,290		\$37,319,667 \$37,906,820
53									NPV 21	\$38,197,856		\$38,429,278
54									NPV 22	\$38,687,134		\$38,893,580
55 56									NPV 23 NPV 24	\$39,121,354 \$39,506,145		\$39,305,638 \$39,670,794
57									NPV 25	\$39,846,593		\$39,993,871
58									NPV 26	\$40,147,289		\$40,279,227
59 60									NPV 27 NPV 28	\$40,412,375 \$40,645,590		\$40,530,793 \$40,752,116
61									NPV 28 NPV 29	\$40,850,305		\$40,752,116 \$40,946,394
62									NPV 30	\$41,029,557		\$41,116,510
63									NPV 31	\$41,186,082		\$41,265,060 \$41,204,381
64 65									NPV 32 NPV 33	\$41,322,344 \$41,440,560		\$41,394,381 \$41,506,578
66									NPV 34	\$41,542,724		\$41,603,542
67									NPV 35	\$41,630,627		\$41,686,974
68 69			ROE (weighted	1)	5.34%				NPV 36 NPV 37	\$41,705,879 \$41,769,926		\$41,758,400 \$41,819,192
70			Tax Multiplier	-,	1.64179				NPV 38	\$41,824,061		\$41,870,579
71			Cost of Debt (w		3.18%				NPV 39	\$41,869,448		\$41,913,663
72			Property Taxes	5	172,556				NPV 40	\$41,907,125		\$41,949,431

#### Office of Public Counsel Missouri American Water Company Case No. WR-2007-0216

#### JOPLIN SURCHARGE

					REVENUE REQUIREMENT COMPONENTS						
					Cost of					Annual	Accumulated Revenue
Line			Accumulated		ROE	ROE	Debt		Property	Revenue	Requirement
No.	Year	Plant-In Servie	Depreciation	Rate Base	Component	Revenue	Component I	Depreciation		Requirement	Traditional
1 2	2008	- 22 102 456	-	- 32,192,456	- 1,719,077	- 2,822,364	- 1,023,720	966 720	162.715	2,369,653 4,876,528	2,369,653
3	2009 2010	32,192,456 32,192,456	866,729	31,325,727	1,672,794	2,746,376	996,158	866,729 866,729	163,715 163,715	4,772,978	7,246,180 12,019,159
4	2011	32,192,456	1,733,458	30,458,998	1,626,510	2,670,389	968,596	866,729	163,715	4,669,429	16,688,587
5	2012	32,192,456	2,600,187	29,592,269	1,580,227	2,594,401	941,034	866,729	163,715	4,565,879	21,254,467
6 7	2013	32,192,456	3,466,916 4,333,645	28,725,540 27,858,811	1,533,944 1,487,661	2,518,414 2,442,426	913,472	866,729	163,715 163,715	4,462,330 4,358,780	25,716,796
8	2014 2015	32,192,456 32,192,456	5,200,374	26,992,082	1,441,377	2,366,439	885,910 858,348	866,729 866,729	163,715	4,356,760	30,075,577 34,330,808
9	2016	32,192,456	6,067,103	26,125,353	1,395,094	2,290,451	830,786	866,729	163,715	4,151,681	38,482,489
10	2017	32,192,456	6,933,832	25,258,624	1,348,811	2,214,464	803,224	866,729	163,715	4,048,132	42,530,621
11	2018	32,192,456	7,800,561	24,391,895	1,302,527	2,138,476 2,062,489	775,662	866,729	163,715	3,944,582	46,475,203
12 13	2019 2020	32,192,456 32,192,456	8,667,290 9,534,019	23,525,166 22,658,437	1,256,244 1,209,961	1,986,501	748,100 720,538	866,729 866,729	163,715 163,715	3,841,033 3,737,483	50,316,236 54,053,720
14	2021	32,192,456	10,400,748	21,791,708	1,163,677	1,910,514	692,976	866,729	163,715	3,633,934	57,687,653
15	2022	32,192,456	11,267,477	20,924,979	1,117,394	1,834,526	665,414	866,729	163,715	3,530,384	61,218,038
16	2023	32,192,456	12,134,206	20,058,250	1,071,111	1,758,539	637,852	866,729	163,715	3,426,835	64,644,873
17 18	2024 2025	32,192,456 32,192,456	13,000,935 13,867,664	19,191,521 18,324,792	1,024,827 978,544	1,682,551 1,606,564	610,290 582,728	866,729 866,729	163,715 163,715	3,323,285 3,219,736	67,968,158 71,187,894
19	2026	32,192,456	14,734,393	17,458,063	932,261	1,530,576	555,166	866,729	163,715	3,116,186	74,304,081
20	2027	32,192,456	15,601,122	16,591,334	885,977	1,454,589	527,604	866,729	163,715	3,012,637	77,316,718
21	2028	32,192,456	16,467,851	15,724,605	839,694	1,378,601	500,042	866,729	163,715	2,909,087	80,225,805
22 23	2029 2030	32,192,456 32,192,456	17,334,580 18,201,309	14,857,876 13,991,147	793,411 747,127	1,302,614 1,226,626	472,480 444,918	866,729 866,729	163,715 163,715	2,805,538 2,701,989	83,031,343 85,733,332
24	2031	32,192,456	19,068,038	13,124,418	700,844	1,150,639	417,356	866,729	163,715	2,598,439	88,331,771
25	2032	32,192,456	19,934,767	12,257,689	654,561	1,074,651	389,795	866,729	163,715	2,494,890	90,826,660
26	2033	32,192,456	20,801,496	11,390,960	608,277	998,664	362,233	866,729	163,715	2,391,340	93,218,000
27 28	2034 2035	32,192,456 32,192,456	21,668,225 22,534,954	10,524,231 9,657,502	561,994 515,711	922,676 846,689	334,671 307,109	866,729 866,729	163,715 163,715	2,287,791 2,184,241	95,505,791 97,690,032
29	2036	32,192,456	23,401,683	8,790,773	469,427	770,701	279,547	866,729	163,715	2,080,692	99,770,724
30	2037	32,192,456	24,268,412	7,924,044	423,144	694,714	251,985	866,729	163,715	1,977,142	101,747,866
31	2038	32,192,456	25,135,141	7,057,315	376,861	618,726	224,423	866,729	163,715	1,873,593	103,621,458
32 33	2039 2040	32,192,456 32,192,456	26,001,870 26,868,599	6,190,586 5,323,857	330,577 284,294	542,738 466,751	196,861 169,299	866,729 866,729	163,715 163,715	1,770,043 1,666,494	105,391,502 107,057,995
34	2040	32,192,456	27,735,328	4,457,128	238,011	390,763	141,737	866,729	163,715	1,562,944	108,620,939
35	2042	32,192,456	28,602,057	3,590,399	191,727	314,776	114,175	866,729	163,715	1,459,395	110,080,334
36	2043	32,192,456	29,468,786	2,723,670	145,444	238,788	86,613	866,729	163,715	1,355,845	111,436,179
37	2044	32,192,456 32,192,456	30,335,515 31,202,244	1,856,941	99,161	162,801	59,051 31,489	866,729	163,715 163,715	1,252,296 1,148,746	112,688,475
38 39	2045 2046	32,192,456	32,068,973	990,212 123,483	52,877 6,594	86,813 10,826	31,469	866,729 866,729	163,715	1,146,746	113,837,221 114,882,418
40	2047	32,192,456	32,935,702	(743,246)		(65,162)	(23,635)	866,729	163,715	941,647	115,824,065
41									J	oplin Surchar	ge
42									NPV 10	\$27,639,586	
43									NPV 11	\$29,244,284 \$30,684,179	
44 45									NPV 12 NPV 13	\$30,664,179	
46									NPV 14	\$33,132,007	
47									NPV 15	\$34,167,567	
48									NPV 16	\$35,093,835	
49 50									NPV 17 NPV 18	\$35,921,589 \$36,660,588	
51									NPV 19	\$37,319,667	
52									NPV 20	\$37,906,820	
53									NPV 21	\$38,429,278	
54 55									NPV 22	\$38,893,580	
56									NPV 23 NPV 24	\$39,305,638 \$39,670,794	
57									NPV 25	\$39,993,871	
58									NPV 26	\$40,279,227	
59									NPV 27	\$40,530,793	
60 61									NPV 28 NPV 29	\$40,752,116 \$40,946,394	
62									NPV 30	\$41,116,510	
63									NPV 31	\$41,265,060	
64									NPV 32	\$41,394,381	
65 66									NPV 33	\$41,506,578 \$41,603,543	
66 67									NPV 34 NPV 35	\$41,603,542 \$41,686,974	
68									NPV 36	\$41,758,400	
69			ROE (weighted	d)	5.34%				NPV 37	\$41,819,192	
70			Tax Multiplier		1.64179				NPV 38	\$41,870,579	
71 72			Cost of Debt (v		3.18% 163,715				NPV 39 NPV 40	\$41,913,663 \$41,949,431	
12			Toperty raxes		100,110				141 V 7U	ψτι,υ <del>τ</del> υ, <del>τ</del> υ Ι	