

**Missouri-American Water Company**  
**ISRS Revenue Requirements Calculation**  
 St. Louis District

<u>ISRS Activity:</u>	<b>Total for ISRS-13 Filing</b>
<b><u>Water Utility Plant Projects--Replacement Mains, and Associated Valves and Hydrants (RM) RSMo 393.1000 (8a):</u></b>	
<u>Task Orders Placed in Service (TOPS):</u>	
STLC-Replacement Mains and Associated Valves and Hydrants	\$ 31,258,421
Net Contributions in Aid of Construction	1,573
Deferred Taxes	(2,351,233)
Accumulated Depreciation	(177,195)
<b>Total Net 393.1000 (8a)</b>	<b>28,731,566</b>
<b><u>Water Utility Plant Projects--Main Cleanings and Relinings (RM) RSMo 393.1000 (8b):</u></b>	
<u>Task Orders Placed in Service (TOPS):</u>	
STLC-Main Cleanings and Relinings	0
Net Contributions in Aid of Construction	0
Deferred Taxes	0
Accumulated Depreciation	0
<b>Total Net 393.1000 (8a)</b>	<b>0</b>
<b><u>Water Utility Plant Projects--Facilities Relocations (FR) RSMo 393.1000 (8c):</u></b>	
<u>Task Orders Placed in Service (TOPS):</u>	
STLC-Relocated Facilities	333,803
Net Contributions in Aid of Construction	(233,304)
Deferred Taxes	29,269
Accumulated Depreciation	(1,678)
<b>Total Net 393.1000 (8c)</b>	<b>128,090</b>
<b><u>Accumulated Depreciation and Deferred Taxes on Investment in Current ISRS</u></b>	
Depreciation for ISRS-10 Case No. WO-2012-0401	(443,186)
Deferred Taxes ISRS-10 Case No. WO-2012-0401	(897,976)
Depreciation for ISRS-11 Case No. WO-2013-0406	(284,668)
Deferred Taxes ISRS-11 Case No. WO-2013-0406	(738,267)
Depreciation for ISRS-12 Case No. WO-2014-0055	(131,046)
Deferred Taxes ISRS-12 Case No. WO-2014-0055	(203,586)
<b>Total</b>	<b>(2,698,729)</b>
<b>Total ISRS Rate Base</b>	<b>26,160,927</b>
<b>Overall Rate Of Return per Last Order</b>	<b>8.17%</b>
<b>UOI Required</b>	<b>2,137,348</b>
<b>Income Tax Conversion Factor</b>	<b>1.623077</b>
<b>Revenue Req. Before Interest Deductibility</b>	<b>3,469,080</b>
<b>Total ISRS Rate Base</b>	<b>26,160,927</b>
<b>Embedded Cost of Debt per Last Order</b>	<b>3.090%</b>
<b>Interest Expense Deduction</b>	<b>808,373</b>
<b>Combined Federal and State Income Tax Rate</b>	<b>38.388630%</b>
<b>Income Tax Reduction due to Interest</b>	<b>310,323</b>
<b>Tax Conversion Factor</b>	<b>1.623077</b>
<b>Revenue Req Impact - Interest Deductibility</b>	<b>503,678</b>
<b>Total Revenue Requirement on Capital</b>	<b>2,965,402</b>
<b>Depreciation Expense</b>	<b>432,941</b>
<b>Property Taxes ISRS 11 WO-2013-0406</b>	<b>66,908</b>
<b>Property Taxes ISRS 12 WO-2014-0055</b>	<b>144,298</b>
<b>Property Taxes ISRS 13</b>	<b>76,786</b>
<b>Add Under Collection from Previous ISRS</b>	<b>0</b>
<b>Total ISRS Revenues</b>	<b>\$ 3,686,335</b>
<b>Allocation of Revenue by Class</b>	
<b>Mains less than or equal to 12"</b>	<b>Rate A &amp; Oth \$ 3,536,080</b>
<b>Mains greater than 12"</b>	<b>Rate A &amp; Oth 135,335</b>
	<b>Total Rate A &amp; Oth 3,671,414</b>
	<b>Rate J 8,595</b>
	<b>Rate B 6,326</b>
<b>Grand Total Revenues Collected in Proposed ISRS</b>	<b>\$ 3,686,335</b>

**Missouri-American Water Company  
Tariff Rates  
ISRS # 13 Filing  
St. Louis District**

	<b>ISRS Recovery Revenue Requirement</b>	<b>2010 Bill Analysis Sales (CCF) (1)</b>	<b>Rate per CCF</b>	<b>Rate per 100 Gal.</b>
Rate A & Oth	3,671,414	48,622,466	\$ 0.0755	\$ 0.01009
Rate B	6,326	2,365,075	\$ 0.0027	\$ 0.00036
Rate J	8,595	5,752,615	\$ 0.0015	\$ 0.00020
	3,686,335			

(1) Per billing determinants approved in determining rates per Commission order in Case WR 2011-0337

	<b>Current Rate</b>	<b>Adjustment to Current Rate (1)</b>	<b>Proposed Rate Use on Tariff</b>
<b>Rate Per CCF</b>			
Rate A & Oth	\$ 0.2726	\$ 0.0755	\$ 0.3481
Rate B	\$ 0.0214	\$ 0.0027	\$ 0.0241
Rate J	\$ 0.0119	\$ 0.0015	\$ 0.0134
<b>Rate Per 100 Gal</b>			
Rate A & Oth	\$ 0.03640	\$ 0.01009	\$ 0.04649
Rate B	\$ 0.00289	\$ 0.00036	\$ 0.00325
Rate J	\$ 0.00156	\$ 0.00020	\$ 0.00176

(1) Calculated per above

**Missouri-American Water Company**  
**Property Tax Calculation**  
**ISRS # 13 Filing**  
**St. Louis District**

	<u>October 2013 - December 2013</u>
Total Investment	12,305,689
Less: Retirements	(402,534)
Net Change in Property Base	11,903,155
Property Tax Rate	0.006451
Property Tax Expense	76,786

<u>Description</u>	<u>St Louis</u>
Total Tax Payments @ 12/31/2013	7,702,954
2013 Assessed Tax is based on 2012 Year End Property Value	
Utility Plant in Service @ 12/31/12	1,165,362,249
Materials & Supplies @ 12/31/12	3,699,323
Actual Property Tax Base @12/31/12	1,169,061,572
Allocate Corporate balance:	
Allocation Factor	68.69%
Allocation	<u>25,028,017</u>
Allocated Property Tax Base at 12/31/12	<u>1,194,089,589</u>
Tax per \$1 of Taxable Property	0.006451

**Missouri-American Water Company  
Property Tax Calculation  
ISRS # 11 Filing  
St. Louis District**

	<u>Aug 2012 - Dec 2012</u>	<u>Jan-Mar 2013</u>
Total Investment	40,933,381	11,216,151
Less: Retirements	(1,644,296)	(844,277)
Net Change in Property Base	39,289,085	10,371,874
Property Tax Rate	0.005568	0.006451
Property Tax Expense	218,759	66,908

Note: 2012 property tax was allowed in ISRS #11 filing

<u>Description</u>	<u>2012 St Louis</u>	<u>2013 St Louis</u>
Total Tax Payments	6,062,287	7,702,954
Utility Plant in Service @ Prior Year End	1,077,343,513	1,165,362,249
Materials & Supplies @ Prior Year End	2,828,535	3,699,323
Actual Property Tax Base @Prior Year End	1,080,172,049	1,169,061,572
Allocate Corporate balance:		
Allocation Factor	69.82%	68.69%
Allocation	8,613,628	25,028,017
Allocated Property Tax Base @ Prior Year End	<u>1,088,785,677</u>	<u>1,194,089,589</u>
2012 Tax per \$1 of Taxable Property	0.005568	0.006451

**Missouri-American Water Company**  
**Property Tax Calculation**  
**ISRS # 12 Filing**  
**St. Louis District**

	<u>Apr 2013 - Sep 2013</u>
Total Investment	24,314,361
Less: Retirements	(1,945,656)
Net Change in Property Base	22,368,705
Property Tax Rate	0.006451
Property Tax Expense	144,298

<u>Description</u>	<u>St Louis</u>
Total Tax Payments @ 12/31/2013	7,702,954
2013 Assessed Tax is based on 2012 Year End Property Value	
Utility Plant in Service @ 12/31/12	1,165,362,249
Materials & Supplies @ 12/31/12	3,699,323
Actual Property Tax Base @12/31/12	1,169,061,572
Allocate Corporate balance:	
Allocation Factor	68.69%
Allocation	25,028,017
Allocated Property Tax Base at 12/31/12	<u>1,194,089,589</u>
Tax per \$1 of Taxable Property	0.006451

**Missouri-American Water Company**  
**Deferred Taxes - Rate Base Reduction**  
**ISRS # 13 Filing**  
**St. Louis District**

	<u>Adjusted Tax Basis on Additions</u>		<u>Replacements Relocations</u>	
	<u>Replacements</u>	<u>Relocations</u>	<u>Replacements</u>	<u>Relocations</u>
In Service October-December 2013	12,222,878	82,811		
less Reimbursements	1,580	(234,424)		
Net Additions	<u>12,224,458</u>	<u>(151,613)</u>		
Bonus Depreciation (50%)	<u>6,112,229</u>	<u>(75,807)</u>	6,112,229	(75,807)
Depreciable Balance	6,112,229	(75,807)		
First Year Tax Rate			2.00%	
Second Year Tax Rate			4.00%	
Tax Depreciation On Depreciable Balance			152,806	(1,895)
In Service January-March 2014	19,035,543	250,992		
less Reimbursements	0	0		
Net Additions	<u>19,035,543</u>	<u>250,992</u>		
Bonus Depreciation (50%)	<u>0</u>	<u>0</u>		
Depreciable Balance	19,035,543	250,992		
First Year Tax Rate			2.00%	
Second Year Tax Rate			4.00%	
Tax Depreciation On Depreciable Balance			190,355	2,510
Total Accumulated Tax Depreciation			<u>6,455,390</u>	<u>(75,192)</u>
Total Book Depreciation			\$ 330,575	\$ 1,051
Deferred Taxes			\$ 2,351,233	\$ (29,269)
Effective Tax Rate			0.3838863	0.3838863

**Missouri-American Water Company**  
**Cost of Service / Rate Design**  
**ISRS # 13 Filing**  
**St. Louis District**  
**Cost of Service Allocation for Transmission Costs Per 2011 Case**

	Rate A & Other	Rate J	Rate B
Total Factor for ISRS	90.070%	5.720%	4.210%
<b>Tariff Design</b>			
	Non-ISRS Revenues Per Last Order	ISRS Revenues	Proposed % Increase
Rate A and K Customers	162,828,580	3,671,414	2.25%
Rate J Customers	6,909,444	8,595	0.12%
Rate B Customers	3,232,546	6,326	0.20%
	172,970,570	3,686,335	

**Missouri-American Water Company**  
**Net CIAC Calculation**  
**ISRS # 13 Filing**  
**St. Louis District**

**Mains, Valves and Hydrant Replacements**

Gross Investment - Replacements 31,258,421  
 Depreciation Expense - Replacements 441,362  
 Composite Depreciation Rate: 1.411977%

	Oct-Dec 2013	Jan-Mar 2014	Total	
Reimbursements	1,580	0	0	1,580 (a)
Amortization (1)	2	6		7
Accumulated Amortization	<u>2</u>	<u>6</u>	<u>0</u>	<u>7 (b)</u>
Gross CIAC	1,580 (a)			
Less: Accum Amort. - CIAC	<u>(7) (b)</u>			
Net CIAC	<u><u>1,573</u></u>			

**Relocations**

Gross Investment - Relocations 333,803  
 Depreciation Expense - Relocations 4,787  
 Composite Depreciation Rate: 1.434147%

	Oct-Dec 2013	Jan-Mar 2014	Total	
Reimbursements	<u>(234,424)</u>	0	<u>(234,424)</u>	(c)
Amortization (1)	(280)	(840)		(1,121)
Accumulated Amortization	<u>(280)</u>	<u>(840)</u>	<u>0</u>	<u>(1,121) (d)</u>
Gross CIAC	(234,424) (c)			
Less: Accum Amort. - CIAC	<u>1,121 (d)</u>			
Net CIAC	<u><u>(233,304)</u></u>			



**Missouri-American Water Company  
Depreciation Expense Calculation  
ISRS # 13 Filing  
St. Louis District**

	Replacements	Relocations	Total
Base Depreciation Expense	441,362	4,787	446,149
Reimbursements	1,580	(234,424)	
Composite Depreciation Rate	1.4120%	1.4341%	
Depreciation Expense to be Removed	22	(3,362)	(3,340)
Depreciation Expense Associated with Retirements			(9,868)
Net Depreciation Expense			<u>432,941</u>