Exhibit No.: Issue(s): Witness/Type of Exhibit: Sponsoring Party: Case No.:

Depreciation Robinett/Direct Public Counsel WR-2017-0285

DIRECT TESTIMONY

OF

JOHN A. ROBINETT

Submitted on Behalf of the Office of the Public Counsel

MISSOURI-AMERICAN WATER COMPANY

CASE NO. WR-2017-0285

November 30, 2017

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Missouri-American Water Company's Request for Authority to Implement General Rate Increase for Water and Sewer Service Provided in Missouri Service Areas.

Case No. WR-2017-0285

AFFIDAVIT OF JOHN A. ROBINETT

)

STATE OF MISSOURI)

) COUNTY OF COLE)

John A. Robinett, of lawful age and being first duly sworn, deposes and states:

1. My name is John A. Robinett. I am a Utility Engineering Specialist for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my direct testimony.

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

John A. Robinett Utility Engineering Specialist

Subscribed and sworn to me this 30th day of November 2017.

SS



JERENE A. BUCKMAN My Commission Expires August 23, 2021 Cole County Commission #13754037

Jerene A. Buckman Notary Public

My Commission expires August 23, 2021.

DIRECT TESTIMONY OF JOHN A. ROBINETT MISSOURI AMERICAN WATER COMPANY

CASE NO. WR-2017-0285

1	Q.	Please state your name and business address.				
2 3 4 5 6 7 8 9	А.	John A. Robinett, PO Box 2230, Jefferson City, Missouri 65102.				
3	Q.	By whom are you employed and in what capacity?				
4	A.	I am employed by the Missouri Office of the Public Counsel ("OPC") as a Utility Engineering				
5		Specialist.				
6	Q.	Have you previously provided testimony before the Missouri Public Service				
7		Commission?				
8	А.	Yes.				
		Please describe your work and educational background.				
10	A.	A copy of my work and educational experience is attached to this testimony as Schedule				
10 11		JAR-D-1.				
12	Q.	What is the purpose of your direct testimony?				
13	A.	The purpose of this testimony is to address the appropriate depreciation rates to be used for				
13 14		purposes of this case for Missouri American Water Company (MAWC).				
15	MAW	VC Depreciation Recommendation				
16	Q.	What is OPC's position regarding depreciation rates to be used for MAWC?				
17	А.	OPC recommends MAWC's continued use of the current depreciation rates for water and				
18		waste-water systems ordered in Case No. WR-2015-0301. One exception is that OPC is				
19		recommending a change to the waste-water depreciation schedule due to the fact that				
20		MAWC has added leasehold equipment in a waste-water account since its last rate case.				

In the prior case, the depreciation rate for account 390.9 Structures and Improvements -1 Leasehold was set to zero since MAWC did not have any plant booked to the account at 2 3 that time. Now that MAWC has booked equipment to that account, the Commission should order a depreciation rate. OPC is recommending a 5% depreciation rate be used for account 4 390.9 Structures and Improvements - Leasehold. This recommended depreciation rate is 5 consistent with the ordered rate for that MAWC waste-water account in Case No. WR-6 7 2011-0337. OPC depreciation rate recommendations are attached as Schedule JAR-D-2 for water and Schedule JAR-D-3 for wastewater. 8

9 Q. Does this conclude your direct testimony?

10 A. Yes, it does.

John A. Robinett

I am employed as a Utility Engineering Specialist for The Missouri Office of the Public Counsel (OPC). I began employment with OPC in August of 2016. In May of 2008, I graduated from the University of Missouri-Rolla (now Missouri University of Science and Technology) with a Bachelor of Science degree in Mechanical Engineering.

During my time as an undergraduate, I was employed as an engineering intern for the Missouri Department of Transportation (MoDOT) in their Central Laboratory located in Jefferson City, Missouri for three consecutive summers. During my time with MoDOT, I performed various qualification tests on materials for the Soil, Aggregate, and General Materials sections. A list of duties and tests performed are below:

- Compressive strength testing of 4" and 6" concrete cylinders and fracture analysis
- Graduations of soil, aggregate, and reflective glass beads
- Sample preparations of soil, aggregate, concrete, and steel
- Flat and elongated testing of aggregate
- Micro-deval and LA testing of aggregate
- Bend testing of welded wire and rebar
- Tensile testing of welded, braided cable, and rebar
- Hardness testing of fasteners (plain black and galvanized washers, nuts, and bolts)
- Proof loading and tensile testing of bolts
- Sample collection from active road constructions sites
- Set up and performed the initial testing on a new piece of equipment called a Linear Traverse / Image Analysis
- Wrote operators manual for the Linear Traverse / Image Analysis Machine
- Trained a fulltime employee on how to operate the machine prior to my return to school
- Assisted in batching concrete mixes for testing, mixing the concrete, slump cone testing, percent air testing, and specimen molding of cylinders and beams

Upon graduation, I accepted a position as an Engineer I in the Product Evaluation Group for Hughes Christensen Company, a division of Baker Hughes, Inc. (Baker), an oil field service company. During my employment with Baker, I performed failure analysis on oil field drill bits as well as composed findings reports which were forwarded to the field engineers in order for them to report to the company the conclusions of the failure causes.

I previously was employed as a Utility Engineering Specialist I, II, III for the Missouri Public Service Commission (Commission). My employment with the Commission spanned from April of 2010 to August of 2016. My duties involved analyzing deprecation rates and studies for utility companies and presenting expert testimony in rate cases before the Commission.

Listed below are the cases in which I have supplied testimony, comments, and/or depreciation rates accompanied by a signed affidavit.

Company	Case Number	Issue	Party
Indian Hills Utility Operating Company, Inc.	WR-2017-0259	Direct, Rebuttal, Surrebuttal, and Live Testimony Rate Base (extension of electric service, leak repairs)	Office of Public Counsel (OPC)
Laclede Gas Company Missouri Gas Energy	GR-2017-0215 GR-2017-0216	Direct, Rebuttal, Surrebuttal Testimony depreciation, retirement work in progress, combined heat and power, ISRS	OPC
Empire District Electric Company	EO-2018-0048	IRP Special issues	OPC
Kansas City Power & Light Company	EO-2018-0046	IRP Special issues	OPC
Kansas City Power & Light Company Greater Missouri Operations	EO-2018-0045	IRP Special issues	OPC
Kansas City Power & Light Company Greater Missouri Operations	EO-2017-0230	2017 IRP annual update comments	OPC
Empire District Electric Company	EO-2017-0065	Direct, Rebuttal, Surrebuttal, and Live Testimony FAC Prudence Review Heat Rate	OPC
Ameren Missouri	ER-2016-0179	Direct, Rebuttal, Testimony Heat Rate Testing &Depreciation	OPC
Kansas City Power & Light Company	ER-2016-0156	Direct, Rebuttal , Surrebuttal, and Live Testimony Heat Rate Testing &Depreciation	OPC
Empire District Electric Company Merger with Liberty	EM-2016-0213	Rebuttal Testimony	Missouri Public Service Commission (MOPSC)

Company	Case Number	Issue	Party
Empire District Electric Company	ER-2016-0023	Depreciation Study, Direct, Rebuttal, and Surrebuttal Testimony	MOPSC
Hillcrest Utility Operating Company, Inc.	SR-2016-0065	Depreciation Review	MOPSC
Hillcrest Utility Operating Company, Inc.	WR-2016-0064	Depreciation Review	MOPSC
Missouri American Water Company	WR-2015-0301	Depreciation Study, Direct, Rebuttal, and Surrebuttal Testimony	MOPSC
Bilyeu Ridge Water Company, LLC	WR-2015-0192		
Midland Water Company, Inc.	WR-2015-0193		
Moore Bend Water Utility, LLC Riverfork Water Company	WR-2015-0194 WR-2015-0195	Depreciation Review	
Taney County Water, LLC Valley Woods Utility, LLC(Water) Valley Woods Utility, LLC(Sewer) Consolidated into Ozark International, Inc.	WR-2015-0196 WR-2015-0197 SR-2015-0198 Consolidated into WR-2015-0192	*filed depreciation rates not accompanied by signed affidavit	MOPSC
I. H. Utilities, Inc. sale to Indian Hills Utility Operating Company, Inc.	WO-2016-0045	Depreciation Rate Adoption CCN	MOPSC
Missouri American Water Company CCN City of Arnold	SA-2015-0150	Depreciation Rate Adoption CCN	MOPSC
Empire District Electric Company	ER-2014-0351	Direct, Rebuttal, and Surrebuttal Testimony	MOPSC
West 16th Street Sewer Company, W.P.C. Sewer Company, Village Water and Sewer Company, Inc. and Raccoon Creek Utility Operating Company, Inc.	SM-2015-0014	Depreciation Rate Adoption	MOPSC
Brandco Investments LLC and Hillcrest Utility Operating Company, Inc.	WO-2014-0340	Depreciation Rate Adoption, Rebuttal Testimony	MOPSC
Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities	GR-2014-0152	Direct, Rebuttal, Surrebuttal and Live Testimony	MOPSC
Summit Natural Gas of Missouri, Inc.	GR-2014-0086	Depreciation Study, Direct and Rebuttal Testimony	MOPSC
P.C.B., Inc.	SR-2014-0068	Depreciation Review	MOPSC

Company	Case Number	Issue	Party
M.P.B., Inc.	SR-2014-0067	Depreciation Review	MOPSC
Roy-L Utilities	WR-2013-0543	Depreciation Review	MOPSC
Roy-L Utilities	SR-2013-0544	Depreciation Review	MOPSC
Missouri Gas Energy Division of Laclede Gas Company	GR-2014-0007	Depreciation Study, Direct and Rebuttal Testimony	MOPSC
Central Rivers Wastewater Utility, Inc.	SA-2014-00005	Depreciation Rate Adoption	MOPSC
Empire District Electric Company	ER-2012-0345	Depreciation Study, Direct, Rebuttal, and Surrebuttal Testimony	MOPSC
Empire District Electric Company	WR-2012-0300	Depreciation Review	MOPSC
Laclede Gas Company	GO-2012-0363	Depreciation Authority Order Rebuttal, Surrebuttal and Live Testimony	MOPSC
Moore Bend Water Company, Inc. sale to Moore Bend Water Utility, LLC (Water)	WM-2012-0335	Depreciation Rate Adoption	MOPSC
Oakbrier Water Company, Inc.	WR-2012-0267	Depreciation Review	MOPSC
Lakeland Heights Water Co., Inc.	WR-2012-0266	Depreciation Review	MOPSC
R.D. Sewer Co., L.L.C.	SR-2012-0263	Depreciation Review	MOPSC
Canyon Treatment Facility, LLC	SA-2010-0219	Depreciation Rate Adoption- CCN	MOPSC
Taney County Water, LLC	WR-2012-0163	Depreciation Review	MOPSC
Sale of Saddlebrooke Water and Sewer Infrastructure, LLC to Missouri American Water Company (Sewer)	SA-2012-0067	Rebuttal Testimony	MOPSC
Sale of Saddlebrooke Water and Sewer Infrastructure, LLC to Missouri American Water Company (Water)	WA-2012-0066	Rebuttal Testimony	MOPSC
Midland Water Company, Inc.	WR-2012-0031	Depreciation Review	MOPSC
Sale of KMB Utility Corporation to Algonquin Water Resources of Missouri, LLC, d/b/a Liberty Water (Sewer)	SO-2011-0351	Depreciation Rate Adoption	MOPSC

Company	Case Number	Issue	Party
Sale of KMB Utility Corporation to Algonquin Water Resources of Missouri, LLC, d/b/a Liberty Water (Water)	WO-2011-0350	Depreciation Rate Adoption	MOPSC
Sale of Noel Water Company, Inc. to Algonquin Water Resources of Missouri, LLC, d/b/a Liberty Water (Water)	WO-2011-0328	Depreciation Rate Adoption	MOPSC
Sale of Taney County Utilities Corporation to Taney County Water, LLC (Water)	WM-2011-0143	Depreciation Rate Adoption	MOPSC
Empire District Electric Company	ER-2011-0004	Depreciation Study, Direct, Rebuttal, and Surrebuttal Testimony	MOPSC
Rex Deffenderfer Enterprises, Inc.	WR-2011-0056	Depreciation Review	MOPSC
Tri-States Utility, Inc.	WR-2011-0037	Depreciation Review	MOPSC
Southern Missouri Gas Company, L.P.	GE-2011-0096	Depreciation Study Waiver	MOPSC
Southern Missouri Gas Company, L.P.	GR-2010-0347	Depreciation Review	MOPSC
KMB Utility Corporation (Sewer)	SR-2010-0346	Depreciation Review	MOPSC
KMB Utility Corporation (Water)	WR-2010-0345	Depreciation Review	MOPSC
Middlefork Water Company	WR-2010-0309	Depreciation Review	MOPSC

MISSOURI-AMERICAN WATER COMPANY - Water OPC RECOMMENDED SCHEDULE of DEPRECIATION RATES DIVISIONS: ALL WR-2017-0285

NARUC					
USOA		Remaining Life	AVERAGE		
ACCOUNT		Depreciation	SERVICE LIFE	IOWA	% NET
NUMBER	ACCOUNT DESCRIPTION	Rate %	(YEARS)	CURVES	SALVAGE
	SOURCE OF SUPPLY				
311	Structures & Improvements	1.97%	60	R4	-25%
312	Collecting & Impoundment Reserviors	0.35%	85	R3	0%
313	Lake, River & Other Intakes	3.57%	70	S0.5	-10%
314	Wells & Springs	2.52%	55	R1.5	-5%
315	Infiltration Galleries and Tunnels	1.77%	60	R2.5	0%
316	Supply Mains	1.45%	80	R3	-25%
317	Miscellaneous Source of Supply - Other PUMPING PLANT	4.97%	25	SQ	0%
321	Structures & Improvements	3.95%	75	R2.5	-15%
322	Boiler Plant Equipment	3.05%	37	R3	-5%
323	Power Generation Equipment	3.05%	37	R3	-5%
324	Steam Pumping Equipment	1.89%	47	R1	-10%
325	Electric Pumping Equipment	1.89%	47	R1	-10%
326	Diesel Pumping Equipment	1.89%	47	R1	-10%
327	Hydraulic Pumping Equipment	1.89%	47	R1	-10%
328	Other Pumping Equipment	1.89%	47	R1	-10%
	WATER TREATMENT PLANT				
331	Structures & Improvements	2.34%	80	R2.5	-15%
332	Water Treatment Equipment	2.18%	48	R1.5	-20%
333	Miscellaneous Water Treat, Other	3.33%	30	SQ	0%
	TRANSMISSION & DISTRIBUTION				
341	Structures & Improvements	1.49%	55	R2.5	-20%
341.1	Structures & Improve - Special Crossing	1.49%	55	R2.5	-20%
342	Distribution Reservoirs & Standpipes	1.70%	65	R2.5	-25%
343.0,1,2,3	Transmission & Distribution Mains	1.39%	90	R2.0	-30%
344	Fire Mains	1.56%	85	S1	-30%
345	Customer Services	2.92%	65	R2.0	-100%
346	Customer Meters	2.40%	42	R1.5	-10%
347	Customer Meter Pits & Installation	2.40%	42	R1.5	-10%
348	Fire Hydrants	1.85%	65	R1.5	-30%
349	Misc Trans & Dist - Other	2.96%	50	R3	0%
	GENERAL PLANT				
390	Structures & Improve - Shop & Garage	3.02%	55	R2.5	-20%
390.1	Structures & Improve - Office Builings	2.09%	47	S0	-20%
390.3	Structures & Improve - Miscellaneous	3.72%	55	R2.0	-20%
390.9	Structures & Improve - Leasehold	2.75%	25	R4	0%
391	Office Furniture	3.49%	20	SQ	0%
391.1	Computer & Peripherial Equipment	19.06%	5	SQ	0%
391.2	Computer Hardware & Software	19.06%	5	SQ	0%
391.25	Computer Software	5.00%	20	SQ	0%
391.26	Personal Computer Software	10.00%	10	SQ	0%
391.3	Other Office Equipment	10.46%	15	SQ	0%
391.4	BTS Initial Investment	5.00%	20		0%
392.1	Transportation Equipment - Light trucks	5.57%	9	L1.5	15%
392.2	Transportation Equipment - Heavy trucks	0.00%	10	L1.5	15%
392.3	Transportation Equipment - Autos	0.00%	6	L1.5	15%
392.4	Transportation Equipment - Other	6.15%	15	S3	5%
393	Stores Equipment	3.88%	25	SQ	0%
394	Tools, Shop, Garage Equipment	3.73%	20	SQ	0%
395	Laboratory Equipment	3.90%	15	SQ	0%
396	Power Operated Equipment	3.79%	12	L1	20%
397.1	Communication Equip - Non Telephone	5.76%	15	SQ	0%
397.2	Communication Equip - Telephone	8.94%	10	SQ	0%
398	Miscellaneous Equipment	6.48%	15	SQ	0%
399	Other Tangible Equipment	2.43%	20	SQ	0%

MISSOURI-AMERICAN WATER COMPANY - Sewer OPC RECOMMENDED SCHEDULE of DEPRECIATION RATES DIVISIONS: ALL SR-2017-0286

NARUC					
USOA		Remaining Life	AVERAGE		
ACCOUNT		Depreciation	SERVICE LIFE	IOWA	% NET
NUMBER	ACCOUNT DESCRIPTION	Rate %	(YEARS)	CURVES	SALVAGE
	COLLECTION PLANT				
351	Structures & Improvements	2.03%	50	R3	-5%
352.1	Collection Sewers (Force)	1.64%	60	R2.5	-10%
352.2	Collection Sewers (Gravity)	1.58%	70	R3	-20%
353	Services To Customers	2.87%	55	R2.0	-40%
354	Flow Measuring Devices	3.38%	25	S2.5	0%
356	Other Collection Equipment	3.15%	50		0%
357	Communication Equipment	6.67%	15	SQ	0%
	PUMPING PLANT				
361	Structures & Improvements	2.17%	45	R3	0%
362	Receiving Wells	2.87%	30	L2.5	0%
	Electric Pumping Equip, (Includes				
363	Generators)	4.31%	15	L1.5	-5%
364	Diesel Pumping Equipment	4.31%	15	L1.5	-5%
365	Other Pumping Equipment	4.31%	15	L1.5	-5%
	TREATMENT & DISPOSAL PLANT				
371	Structures & Improvements	1.43%	60	R2.5	-5%
	Treatment & Disposal Equipment, (Includes				
372	pumps, blowers, generators)	3.97%	30	S0.5	-20%
373	Plant Sewers	1.60%	50	R2.5	0%
374	Outfall Sewer Lines	3.04%	35	L2.0	0%
	GENERAL PLANT				
390	Structures & Improve - General	3.11%	35	R2.5	-5%
390.9	Structures & Improve - Leasehold	5.00%	20	R4	0%
391	Office Furniture	5.00%	20	SQ	0%
391.1	Computer & Peripherial Equipment	20.00%	5	SQ	0%
391.2	Computer Hardware & Software	20.00%	5	SQ	0%
391.25	Computer Software	5.00%	20	SQ	0%
391.26	Personal Computer Software	10.00%	10	SQ	0%
391.3	Other Office Equipment	6.67%	15		0%
391.4	BTS Initial Investment	5.00%	20		0%
392	WW Transortation Euipment	3.45%	10	L2.5	5%
392.1	Transportation Equipment - Light trucks	3.45%	10	L2.5	5%
392.2	Transportation Equipment - Heavy trucks	3.45%	10	L2.5	5%
392.3	Transportation Equipment - Autos	3.45%	10	L2.5	5%
392.4	Transportation Equipment - Other	3.45%	10	L2.5	5%
393	Stores Equipment	4.00%	25	SQ	0%
394	Tools, Shop, Garage Equipment	5.00%	20	SQ	0%
395	Laboratory Equipment	6.67%	15	SQ	0%
396	Power Operated Equipment	7.71%	15	L2.5	0%
397.1	Communication Equip - Non Telephone	6.67%	15	SQ	0%
397.2	Communication Equip - Telephone	6.67%	15	SQ	0%
398	Miscellaneous Equip	6.43%	15	SQ	0%
399	Other Tangible Equipment	0.00%	30	R2.0	0%

WR-2015-0301 no plant balance in account 390.9 rate set to 0%. MAWC has added plant to account; OPC recommends a 5% depreciation rate be used going forward this is consistent with depreciation rate that was ordered in Case No. WR-2011-0337 for account 390.9