Exhibit No.: Issue(s):

Witness/Type of Exhibit: Sponsoring Party: Case No.: Rate Base/ Depreciation Robinett/Direct Public Counsel GR-2017-0215 GR-2017-0216

DIRECT TESTIMONY

OF

JOHN A. ROBINETT

Submitted on Behalf of the Office of the Public Counsel

LACLEDE GAS COMPANY MISSOURI GAS ENERGY

CASE NO. GR-2017-0215 CASE NO. GR-2017-0216

September 8, 2017

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Laclede Gas Company's Request to Increase Its Revenues for Gas Service)))	Case No. GR-2017-0215
In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to Increase Its Revenues for Gas Service)	Case No. GR-2017-0216

AFFIDAVIT OF JOHN A. ROBINETT

STATE OF MISSOURI)	
)	SS
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 8th day of September 2017.

NOTARY SEAL ST

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

Jerene A. Buckman Notary Public

My Commission expires August 23, 2021.

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DIRECT TESTIMONY OF JOHN A. ROBINETT LACLEDE GAS COMPANY

MISSOURI GAS ENERGY

CASE NO. GR-2017-0215 and GR-2017-0216

1	Q.	Please state your name and business address.
2	A.	John A. Robinett, PO Box 2230, Jefferson City, Missouri 65102.
3	Q.	By whom are you employed and in what capacity?
4 5	Q. A. Q.	I am employed by the Missouri Office of the Public Counsel ("OPC") as a Utility Engineering Specialist.
6 7	Q.	Have you previously provided testimony before the Missouri Public Service Commission?
8	A.	Yes.
9	Q.	Please describe your work and educational background.
10 11	A.	A copy of my work and educational experience is attached to this testimony as Schedule JAR-D-1.
12	Q.	What is the purpose of your direct testimony?
13 14 15 16	A.	The purpose of this testimony is to address the appropriate depreciation rates to be used for purposes of this case for Laclede Gas Company (Laclede) and Missouri Gas Energy (MGE). Additionally, I will address various reserve adjustments to Laclede General Plant. Finally, I will address the issue of replacement of plastic pipe under the Infrastructure Replacement Surcharge (ISRS).
L8	Lacl	ede Depreciation Recommendation
19		What is OPC's position regarding depreciation rates to be used for Laclede?

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OPC has concerns with Laclede's depreciation rate recommendation in this case based on the statements on page 14 of the direct testimony of Laclede witness Glenn Buck where he states:

Q. ARE YOU RECOMMENDING ANY CHANGES IN **DEPRECIATION RATES IN THIS CASE?**

Α. We are currently reviewing the results of the studies but are not recommending any changes at this time."

OPC issued data request number 8500 to obtain a better understanding of Laclede's position related to its depreciation rate recommendation in this case since the studies were completed very shortly before Laclede filed its direct case on April 11, 2017. Attached to this testimony as Schedule JAR-D-2 is Laclede's response to OPC data request number 8500 stating Laclede's position to use current ordered plant depreciation rates "unless another party recommends changes to these rates". OPC does not recommend a change and supports continued use of the current Commission-ordered depreciation rates ordered in Case No. GR-2013-0171 for Laclede attached as Schedule JAR-D-3.

Missouri Gas Energy Depreciation Recommendation

- Q. What is OPC's position regarding depreciation rates to be used Missouri Gas Energy?
- OPC has the same concerns about MGE's depreciation rate recommendation in this case A. based on the statement on page 14 of the direct testimony of Missouri Gas Energy witness Glenn Buck where he states:

Q. ARE YOU RECOMMENDING ANY CHANGES IN **DEPRECIATION RATES IN THIS CASE?**

We are currently reviewing the results of the studies but are not Α. recommending any changes at this time."

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OPC issued data request number 8500 to obtain a better understanding of MGE's position related to its depreciation rate recommendation in this case since the studies were completed very shortly before MGE filed its direct case on April 11, 2017. Attached to this testimony as Schedule JAR-D-2 is MGE's response to OPC data request number 8500 stating MGE's position to use current ordered plant depreciation rates "unless another party recommends changes to these rates". OPC does not recommend a change and supports continued use of the current Commission-ordered depreciation rates ordered in Case No. GR-2014-0007 for MGE attached as Schedule JAR-D-4.

Laclede General Plant Negative Reserve

- Q. What is the issue with the existence of negative accumulated depreciation reserve balances in general plant accounts for Laclede?
- A. OPC has observed negative reserve account balances in Laclede's updated response to Staff Data Request No. 0030. OPC's review of this data request identified seven accounts with negative reserve balances. Laclede's response to Staff Data Request No. 0030 identifies negative reserve balances in the following accounts:
 - 371 Other Equipment- Transmission plant,
 - 376.2 Mains-Cast Iron,
 - 391 Office Furniture and Equipment,
 - 391.1 Data Processing Equipment- non-depreciable,
 - 391.2 Mechanical Office Equipment,
 - 391.4 Data Processing Equipment, and
 - 398 Miscellaneous Equipment
 - OPC submitted additional data requests to identify causes of the negative reserve and to learn when reserve accounts transitioned from a positive balance to a negative balance.
- Q. What does OPC recommend to address Laclede's negative reserves balances in its general plant accounts?

A. OPC submitted additional data requests to identify causes of the negative reserve and to learn when reserve accounts transitioned from a positive balance to a negative balance.

Once OPC determines the reason and cause of the negative reserve in the seven Laclede plan accounts, OPC will provide a recommendation of treatment of negative reserves in rebuttal testimony.

MGE New Blue Conversion Costs

- Q. How should the ratemaking treatment of MGE's cost to convert to Laclede's Enterprise Information Management System ("New Blue") be reflected in this rate case?
- A. The Commission addressed this issue in Attachment 1, Transaction and Transition Costs, to its Order Approving Stipulation and Agreement in Case No. GM-2013-0254. No cost for this computer/software conversion should be reflected in customer rates in this case until the Commission determines that the rate recovery test it ordered in Attachment 1 is met by Laclede. Attachment 1 to the Stipulation and Agreement in case No. GM-2013-0254 states:

In no event will any portion of such Regulatory Asset amortization be included in customer rates without a showing that the amount of amortization is exceeded by the Net Synergies net of other amortized transition costs included in the case.

- Q. Was OPC was a signatory to the Stipulation and Agreement in the merger Case No. GM-2013-0254?
- 22 A. Yes.

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Q. Does OPC's Chief Accountant, Mr. Charles Hyneman, address the issue of rate recovery of acquisition costs in his direct testimony??

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1 A. Yes. In addition, OPC intends to address this issue in rebuttal testimony after reviewing the results of the acquisition synergy audit performed by Staff's rate case auditors.

Laclede Account 376.2 – Mains - Cast Iron

- Q. Why is OPC concerned about the Cast Iron Mains account for Laclede Gas Company?
- A. Since Case No. GR-2010-0171 the plant account balance for Account 376.2 Mains Cast Iron has continued to increase. In Schedule 3 of Staff's Accounting Schedules in Case No. GR-2010-0171 the Staff reflected the plant in service balance for Account 376.2 Mains Cast Iron at \$ 14,241,880, but Laclede's filed Schedule C attached to Mr. Michael Noack's testimony in the present case indicates Account 376.2 Mains Cast Iron plant in service balance is \$ 21,555,524. OPC has serious concerns why the exact type of plant that is being removed from plant in service under Laclede Infrastructure System Replacement Surcharge ("ISRS") is actually growing in amount on Laclede's balance sheet. 4 CSR 240- 40.030 (15)(D) describes the replacement program to be developed by each operator. Specifically 4 CSR 240- 40.030 (15)(D)2 states:

A long-term, organized replacement program and schedule shall also be established for cast iron pipelines not identified by the operator as being high priority.

Once the cast iron replacement program was implemented by the utility, the cast iron mains sub-account should have been considered a holding account in which little to no additions would be expected. When a utility begins replacing and retiring the cast iron mains, the associated plant in service balances should be decreasing with every retirement that occurs.

Q. Is the ISRS working at removing cast iron pipe from Laclede's system?

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A. According to the Pipeline and Hazardous Material Safety Administration (PHMSA) data I reviewed, Laclede has removed approximately 300 miles of cast iron main since 2004. The following table was created from data available on the PHMSA website, specifically the Gas Distribution Annual Data.

YR	NAME	CIM_1	CIM_2	CIM_3	CIM_4	CIM_5	CIM_6	CIMT
2004	LACLEDE GAS COMPANY	0	0	298	393	138	61	890
2005	LACLEDE GAS COMPANY	0	0	296	391	138	61	886
2006	LACLEDE GAS COMPANY	0	0	293	388	138	61	880
2007	LACLEDE GAS COMPANY	0	0	288	384	138	61	871
2008	LACLEDE GAS COMPANY	0	0	285	381	137	61	864
2009	LACLEDE GAS COMPANY	0	0	281	375	137	61	854
2010	LACLEDE GAS COMPANY	0	0	275	371	137	61	844
2011	LACLEDE GAS COMPANY	0	0	269	364	136	60	829
2012	LACLEDE GAS COMPANY	0	0	234	340	138	57	769
2013	LACLEDE GAS COMPANY	0	0	218.61	324.88	135.02	56.44	734.95
2014	LACLEDE GAS COMPANY	0	0.507	208.673	306.811	130.138	57.242	703.371
2015	LACLEDE GAS COMPANY	0	0	183.46	265.14	119.7	53.54	621.84
2016	LACLEDE GAS COMPANY	0	0	174.7	244.17	116.39	52.01	587.27

This table shows the remaining miles of cast iron mains reported by Laclede to PHMSA.

However, while cast iron pipe is being reported to PHMSA as being removed, plant in

service balances continues to increase for Account 376.2 Mains - Cast Iron. Since Case

No. GR-2010-0171, plant in service for Account 376.2 Mains - Cast Iron has increased

by approximately seven million dollars. OPC has issued additional data requests to better

understand why and how plant in service is increasing as Laclede has ramped up their

cast iron replacement program. If the reasons provided by Laclede to not satisfactorily

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ISRS Plastic Retirements

Q. What is OPC position regarding the depreciation treatment of plastic pipe being replaced as part of ISRS projects?

resolve OPC's concerns, OPC will be addressing this issue in rebuttal testimony.

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A. OPC requests that the Commission order Laclede and MGE to record the early retirements of plastic pipe being replaced under Laclede and MGE's ISRS as transaction code 7 "outlier retirements" for purposes of the depreciation study data base.

Q. Why is this recommendation important?

A. Laclede and MGE's new practice that began in 2011 is to replace and abandon large amounts of plastic pipe before the useful life of those pipes has ended. Many of the replaced pipes were in the ground only a few years before being abandoned. Over time these multiple short lived asset retirements will cumulatively decrease the overall estimated average service life of plastic pipe installed in the entire system. This distortion in the average service life on this plant by continuous early retirements may result in a skewed and abnormal relationship between the plant and reserve balance. This skewed and abnormal relationship, if not noted and removed from the depreciation study, will likely indicate an increase in depreciation rates when no increase is actually needed. This potential increase in depreciation rates will increase Laclede and MGE's cost of service artificially and unnecessarily.

Q. How to you propose Laclede and MGE address this concern?

A. OPC requests that the Commission order Laclede and MGE to record the early retirements of plastic pipe being replaced under Laclede and MGE's ISRS as transaction code 7 "outlier retirements" for purposes of the depreciation study data base. By recording early retirements in this manner, the early retirements will not skew future depreciation studies.

Q. Does this conclude your direct testimony?

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.

JOHN A. ROBINETT SUMMARY OF CASE PARTICIPATION

Listed below are the cases in which I have supplied depreciation rates accompanied by a signed affidavit.

Company	Case Number	Issue	Party
Empire District Electric Company	EO-2017-0065	Direct, Rebuttal, Surrebuttal, and Live Testimony FAC Prudence Review Heat Rate	Office of Public Counsel (OPC)
Ameren Missouri	ER-2016-0179	Direct, Rebuttal, Testimony Heat Rate Testing &Depreciation	OPC
Kansas City Power & Light Company	ER-2016-0156 ER-2016-0156 ER-2016-0156 ER-2016-0156 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)
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 Midland Water Company, Inc. Moore Bend Water Utility, LLC Riverfork Water Company Taney County Water, LLC Valley Woods Utility, LLC(Water) Valley Woods Utility, LLC(Sewer) Consolidated into Ozark International, Inc.	WR-2015-0192 WR-2015-0193 WR-2015-0194 WR-2015-0195 WR-2015-0196 WR-2015-0197 SR-2015-0198 Consolidated into WR-2015-0192	*filed depreciation rates not accompanied by signed affidavit	MOPSC

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JOHN A. ROBINETT SUMMARY OF CASE PARTICIPATION

Company	Case Number	Issue	Party
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	SM-2015-0014 Depreciation Rate Adoption	
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
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

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JOHN A. ROBINETT SUMMARY OF CASE PARTICIPATION

Company	Case Number	Issue	Party
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
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

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Laclede Gas Company / Missouri Gas Energy GR-2017-0215 / GR-2017-0216

Response to OPC Data Request 8500

Question:

As discussed in Mr. Buck's testimony MGE and Laclede are still reviewing the depreciation study submitted in this case. When will MGE/Laclede make a determination of depreciation rate recommendations if they differ from previously ordered depreciation rates?

Response:

Based on its review, neither MGE nor LAC currently plan to propose changes to their existing depreciation rates in these proceedings. Both MGE and LAC, however, reserve the right to propose depreciation rate changes or alternatives in response to any depreciation-related changes that may be recommended by other parties to these proceedings.

Signed by: Glenn Buck

Attachment 4 Laclede Gas Company - GR-2013-0171 Depreciation Rates

A 4	Depreciation	lates					
Account Number	Account Description	Depreciation Rate	Service Life	Net Salvage			
				-			
	Manufactured Gas Plant - LPG						
305	Structures and improvements	1.67%	60	0%			
307	Other power equipment	3.50%	30	-5%			
311	Equipment	3.71%	35	-30%			
311.1	Storage caverns	1.11%	90	0%			
	Underground Storage Plant						
351.2	Compressor station structures	3.33%	45	-50%			
351.4	Other structures	2.18%	55	-20%			
352	Wells - underground storage	1.22%	90	-10%			
352.2	Reservoirs	1.22%	90	-10%			
352.3	Non-recoverable gas	1.11%	90	0%			
352.4	Wells - oil and vent gas	1.22%	90	-10%			
353	Lines	1.17%	90	-5%			
354	Compressor station equipment	1.17%	90	-10%			
355	Measuring and regulating equipment	1.79%	56	0%			
356	Purification equipment	2.38%	42	0%			
356 357	Other equipment	2.36% 4.55%	20	0%			
337	Other equipment	4.5576	20	0 78			
	Transmission Plant						
367.7	Mains - Monat	1.44%	80	15%			
371.7	Other equipment - Monat	2.33%	45	-5%			
	Distribution Plant	0.000/		0.50/			
375.1	Structures and improvements	3.00%	45	-35%			
375.2	Service centers	3.00%	45	-35%			
375.3	Garage	3.00%	45	-35%			
375.4	Other small structures	3.00%	45	-35%			
376.1	Mains - steel	1.44%	80	-15%			
376.2	Mains - cast iron	3.31%	80	-165%			
376.3	Mains - plastic and copper	1.57%	70	-10%			
378.1	Measuring and regulating station equip. (general)	3.71%	35	-30%			
379.1	Measuring and regulating station equip. (CGCS)	3.71%	35	-30%			
380.1	Services - steel	5.23%	44	-130%			
380.2	Services - plastic and copper	3.75%	44	-65%			
381.1	Meters	2.37%	38	10%			
383.1	House regulators	2.00%	50	0%			
385.1	Industrial meas. and regulating equipment	3.25%	40	-30%			
386.1	Other property on customers' premises	7.14%	14	0%			
387.1	Other equipment	2.78%	36	0%			
	General Plant						
390.1	Structures and improvements	3.00%	35	-5%			
391.0	Office furniture and equipment	3.33%	30	0%			
391.1	Data processing systems	20.00%	5	0%			
391.2	Mechanical office equipment	10.00%	10	0%			
391.3*	Data processing software	20.00%	5	0%			
391.4	Data processing equipment	10.00%	10	0%			
391.5	Enterprise Information Management System	7.00%	15	-5%			
392.1	Transportation Equipment - automobiles	14.17%	6	15%			
392.2	Transportation Equipment - trucks	8.18%	11	10%			
392.7	Transportation Equipment - automobiles - Monat	14.17%	6	15%			
392.71	Transportation Equipment - trucks - Monat	8.18%	11	10%			
393.1	Stores equipment	2.22%	45	0%			
394.1	Tools, shop and garage equipment	2.63%	38	0%			
395.1	Laboratory equipment	3.57%	28	0%			
396.1	Power operated equipment	6.92%	13	10%			
397.1	Communication equipment	5.00%	20	0%			
398.1	Miscellaneous equipment	3.45%	29	0%			
	* Account 391.3 will be amortized rather than depreciated						

^{*} Account 391.3 will be amortized rather than depreciated.

Missouri Gas Energy - GR-2014-0007 Staff Recommended Depreciation Rates

	Depreciation	ASL	Net Salvage	Life Only	Net Salvage
Description	Rate	(Years)	(%)	Rate	Rate
<u>Distribution</u>					
Land Rights	2.08%	48.0	0.00%	2.08%	0.00%
Structures and Improvements	2.13%	47.0	0.00%	2.13%	0.00%
Mains	1.78%	50.0	11.00%	2.00%	0.22%
Measuring and Regulating Eq.	2.86%	35.0	0.00%	2.86%	0.00%
Measuring and Regulating EqCity Gate	2.63%	38.0	0.00%	2.63%	0.00%
Services	2.68%	40.0	-7.20%	2.50%	-0.18%
Meters	2.86%	35.0	0.00%	2.86%	0.00%
Meter Installation	2.86%	35.0	0.00%	2.86%	0.00%
House Regulators	2.44%	41.0	0.00%	2.44%	0.00%
Measuring and Regulating EqIndustrial	3.33%	30.0	0.00%	3.33%	0.00%
General (Including Corporate)					
Structures and Improvements	2.13%	47.0	0.00%	2.13%	0.00%
Office Furniture and Eq.	9.09%	11.0	0.00%	9.09%	0.00%
Enterprise Information Management System	7.00%	15.0	-5.00%	6.67%	-0.33%
Transportation Eq. [Cars & Small Trucks]	13.28%	6.0	20.30%	16.67%	3.38%
Transportation Eq. [Large Trucks]	8.06%	10.0	19.40%	10.00%	1.94%
Stores Eq.	3.57%	28.0	0.00%	3.57%	0.00%
Tool, Shop, and Garage Eq.	5.26%	19.0	0.00%	5.26%	0.00%
Power Operated Eq.	10.00%	10.0	0.00%	10.00%	0.00%
Electronic Reading - ERT	5.26%	19.0	0.00%	5.26%	0.00%
Communication Eq.	6.25%	16.0	0.00%	6.25%	0.00%
Miscellaneous Eq.	4.35%	23.0	0.00%	4.35%	0.00%
	Distribution Land Rights Structures and Improvements Mains Measuring and Regulating Eq. Measuring and Regulating EqCity Gate Services Meters Meter Installation House Regulators Measuring and Regulating EqIndustrial General (Including Corporate) Structures and Improvements Office Furniture and Eq. Enterprise Information Management System Transportation Eq. [Cars & Small Trucks] Transportation Eq. [Large Trucks] Stores Eq. Tool, Shop, and Garage Eq. Power Operated Eq. Electronic Reading - ERT Communication Eq.	DescriptionRateDistribution2.08%Land Rights2.13%Structures and Improvements2.13%Mains1.78%Measuring and Regulating Eq.2.86%Measuring and Regulating EqCity Gate2.63%Services2.68%Meters2.86%Meter Installation2.86%House Regulators2.44%Measuring and Regulating EqIndustrial3.33%General (Including Corporate)Structures and Improvements2.13%Office Furniture and Eq.9.09%Enterprise Information Management System7.00%Transportation Eq. [Cars & Small Trucks]13.28%Transportation Eq. [Large Trucks]8.06%Stores Eq.3.57%Tool, Shop, and Garage Eq.5.26%Power Operated Eq.10.00%Electronic Reading - ERT5.26%Communication Eq.6.25%	Distribution Rate (Years) Land Rights 2.08% 48.0 Structures and Improvements 2.13% 47.0 Mains 1.78% 50.0 Measuring and Regulating Eq. 2.86% 35.0 Measuring and Regulating EqCity Gate 2.63% 38.0 Services 2.68% 40.0 Meters 2.86% 35.0 Meter Installation 2.86% 35.0 House Regulators 2.44% 41.0 Measuring and Regulating EqIndustrial 3.33% 30.0 General (Including Corporate) Structures and Improvements 2.13% 47.0 Office Furniture and Eq. 9.09% 11.0 Enterprise Information Management System 7.00% 15.0 Transportation Eq. [Cars & Small Trucks] 13.28% 6.0 Transportation Eq. [Large Trucks] 8.06% 10.0 Stores Eq. 3.57% 28.0 Tool, Shop, and Garage Eq. 5.26% 19.0 Power Operated Eq. 10.00% 10.0	Description Rate (Years) (%) Distribution 2.08% 48.0 0.00% Structures and Improvements 2.13% 47.0 0.00% Mains 1.78% 50.0 11.00% Measuring and Regulating Eq. 2.86% 35.0 0.00% Measuring and Regulating EqCity Gate 2.63% 38.0 0.00% Services 2.68% 40.0 -7.20% Meters 2.86% 35.0 0.00% Meters 2.86% 35.0 0.00% House Regulators 2.44% 41.0 0.00% Measuring and Regulating EqIndustrial 3.33% 30.0 0.00% Measuring and Regulating EqIndustrial 3.33% 30.0 0.00% General (Including Corporate) Structures and Improvements 2.13% 47.0 0.00% Confice Furniture and Eq. 9.09% 11.0 0.00% Confice Furniture and Eq. 9.09% 11.0 0.00% Transpor	Description Rate (Years) (%) Rate Distribution Land Rights 2.08% 48.0 0.00% 2.08% Structures and Improvements 2.13% 47.0 0.00% 2.13% Mains 1.78% 50.0 11.00% 2.00% Measuring and Regulating Eq. 2.86% 35.0 0.00% 2.63% Measuring and Regulating EqCity Gate 2.63% 38.0 0.00% 2.63% Services 2.66% 40.0 -7.20% 2.50% Meters 2.86% 35.0 0.00% 2.86% Meters 2.86% 35.0 0.00% 2.86% Meter Installation 2.86% 35.0 0.00% 2.86% House Regulators 2.44% 41.0 0.00% 2.44% Measuring and Regulating EqIndustrial 3.33% 30.0 0.00% 2.13% Office Furniture and Eq. 9.09% 11.0 0.00% 9.09% Enterprise Information Management System 7.00% 15.0