# AmerenUE ST. LOUIS, MISSOURI

# DEPRECIATION STUDY

# CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AT DECEMBER 31, 2008



Harrisburg, Pennsylvania

Calgary, Alberta

Valley Forge, Pennsylvania

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St. Louis, Missouri

## DEPRECIATION STUDY

# CALCULATED ANNUAL DEPRECIATION ACCRUALS RELATED TO GAS PLANT AT DECEMBER 31, 2008

GANNETT FLEMING, INC. - VALUATION AND RATE DIVISION

Harrisburg, Pennsylvania

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May 14, 2010

Ameren Corporation 1901 Choteau Avenue St. Louis, MO 63103

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Attention Mr. Thomas Byrne Associate General Counsel

Ladies & Gentlemen:

Pursuant to your request, we have conducted a depreciation study related to the gas plant of AmerenUE as of December 31, 2008. The attached report presents a description of the methods used in the estimation of depreciation, the summary of annual and accrued depreciation, the statistical support for the service life and net salvage estimates and the detailed tabulations of annual and accrued depreciation.

We gratefully acknowledge the assistance of Ameren Services personnel in the conduct of the study.

Respectfully submitted,

GANNETT FLEMING, INC.

John F. Kredmayer

JOHN F. WIEDMAYER Project Manager, Depreciation Valuation and Rate Division

JFW:krm

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## PART III. RESULTS OF STUDY

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## PART III. RESULTS OF STUDY

## QUALIFICATION OF RESULTS

The calculated annual and accrued depreciation are the principal results of the study. Continued surveillance and periodic revisions are normally required to maintain continued use of appropriate annual depreciation accrual rates. An assumption that accrual rates can remain unchanged over a long period of time implies a disregard for the inherent variability in service lives and salvage and for the change of the composition of property in service. The annual accrual rates were calculated in accordance with the straight line remaining life method of depreciation using the average service life procedure based on estimates which reflect considerations of current historical evidence and expected future conditions.

The annual depreciation accrual rates are applicable specifically to the utility plant in service as of December 31, 2008. For most plant accounts, the application of such rates to future balances that reflect additions subsequent to December 31, 2008, is reasonable for a period of three to five years.

## DESCRIPTION OF STATISTICAL SUPPORT

The service life and salvage estimates were based on judgment which incorporated statistical analyses of retirement data, discussions with management and consideration of estimates made for other gas utility companies. The results of the statistical analyses of service life are presented in Appendix A of the report.

The estimated survivor curves for each account are presented in graphical form. The charts depict the estimated smooth survivor curve and original survivor curve(s), when applicable, related to each specific group. For groups where the original survivor curve was plotted, the calculation of the original life table is also presented.

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The analyses of salvage data are presented in Appendix B, titled "Net Salvage Statistics". The tabulations present annual cost of removal and salvage data, three-year moving averages and the most recent five-year average. Data are shown in dollars and as percentages of original costs retired.

## DESCRIPTION OF DEPRECIATION TABULATIONS

A summaries of the results of the study, as applied to the original cost of utility plant at December 31, 2008, are presented in Schedules 1 to 3 on pages III-4 through III-9 of this report. Schedule 1 on pages III-4 and III-5 sets forth the estimated survivor curve and net salvage percent, original cost, calculated accrued depreciation and the annual depreciation accrual amounts and rates based on the straight line method and the average service life procedure for each account. Schedule 2 on pages III-6 and III-7 compares the calculated accrued depreciation with the book depreciation reserve and calculates amortization amounts that correct the variance. Schedule 3 on pages III-8 and III-9 sets forth the total annual depreciation accrual amounts and rates related to utility plant as of December 31, 2008, consisting of the whole life accrual from Schedule 1 and the amortization amounts from Schedule 2. The total annual accrual rate for each account is the total annual accrual amount divided by the original cost expressed as a percent.

The tables of the calculated annual depreciation accruals are presented in account sequence in the Appendix C titled "Depreciation Calculations." The tables indicate the estimated survivor curve, net salvage percent and annual accrual rate for the account and set forth for each installation year the original cost, the average life, annual accrual rate and amount, the life expectancy, the calculated accrued factor and calculated accrued depreciation amount.

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#### SCHEDULE 1. ESTIMATED SURVIVOR CURVES, ORIGINAL COST, CALCULATED ANNUAL DEPRECIATION ACCRUALS AND CALCULATED ACCRUED DEPRECIATION RELATED TO UTILITY PLANT AT DECEMBER 31, 2008

	Depreciable Group	Probable Retirement Date	Survivor Curve	Net Salvage, %	Original Cost at December 31, 2008	t Accrued A		ated Accrual Rate
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)=(7)/(5)
Depreci	able Plant							
305 311	<b>Production Plant</b> <i>Cape Girardeau Plant</i> Structures and Improvements Liquified Petroleum Gas Equipment	06-2020 06-2020	60 - L0.5 * 55 - L1 *	(5) 5	\$	\$    234,707 777,153	\$	6.18 3.14
	Total Production Plant				1,904,612.24	1,011,860	79,429	4.17
366 367 369	Transmission Plant Structures and Improvements Mains Measuring and Regulating Stations Total Transmission Plant		40 - R2 50 - R3 45 - R1.5	0 0 0	5,816.58 5,398,166.67 <u>43,733.10</u> 5,447,716.35	455 1,312,066 <u>17,179</u> 1,329,700	145 107,963 <u>971</u> 109,079	2.49 2.00 2.22 2.00
375 376 378 379 380 381 383 383 385	Distribution Plant Structures and Improvements Gas Mains Measuring and Regulating Station Equipment - General Measuring and Regulating Station Equipment - City Gate Services Meters House Regulators Industrial Measuring and Regulating Equipment		40 - R2 50 - R3 45 - R1.5 45 - R1.5 37 - R2.5 35 - R1.5 45 - R3 30 - R1	0 (10) (3) 0 (10) 0 (5) 0	31,016.21 187,768,018.44 3,774,250.25 436,077.59 102,195,318.92 18,958,477.88 10,767,337.01 1,191,400.92	$\begin{array}{c} 13,091\\ 48,678,906\\ 1,116,092\\ 94,093\\ 32,924,084\\ 4,663,026\\ 3,118,986\\ 289,060\\ \end{array}$	775 4,130,889 86,302 9,681 3,033,340 542,212 250,986 39,674	2.50 2.20 2.29 2.22 2.97 2.86 2.33 3.33
	Total Distribution Plant				325,121,897.22	90,897,338	8,093,859	2.49

#### SCHEDULE 1. ESTIMATED SURVIVOR CURVES, ORIGINAL COST, CALCULATED ANNUAL DEPRECIATION ACCRUALS AND CALCULATED ACCRUED DEPRECIATION RELATED TO UTILITY PLANT AT DECEMBER 31, 2008

		Probable Retirement	Survivor	Net	Original Cost at	Calculated Accrued	Calcula Annual A	ccrual
	Depreciable Group	Date	Curve	Salvage, %	December 31, 2008	Depreciation	Amount	Rate
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)=(7)/(5)
	General Plant							
390	Structures and Improvements		50 - R3	(5)	1,059,946.14	368,134	22,259	2.10
391	Office Furniture and Equipment		15 - SQ	0	101,576.85	82,889	5,136	5.06
391.2	Personal Computers		5 - SQ	0	259,021.25	200,202	19,434	7.50
392	Transportation Equipment		11 - R1	10	5,427,356.98	1,850,104	441,692	8.14
393	Stores Equipment		20 - SQ	0	27,268.29	24,704	1,026	3.76
394	Tools, Shop, and Garage Equipment		20 - SQ	0	2,356,542.97	1,439,206	105,001	4.46
395	Laboratory Equipment		20 - SQ	0	124,259.50	69,821	3,836	3.09
396	Power Operated Equipment		18 - S3	10	2,437,647.46	831,632	121,980	5.00
397	Communications Equipment		15 - SQ	0	723,869.26	471,804	40,854	5.64
	Total General Plant				344,991,714.51	98,577,394	9,043,585	2.62
Total De	epreciable Plant				\$ 344,991,714.51	\$ 98,577,394	\$ 9,043,585	
Accoun	ts Not Studied							
	Cape Girardeau Plant - Land				32,420.76			
365.1	Land and Land Rights				1,282.00			
365.2	Rights-of-Way				118,250.00			
374	Land and Land Rights				294,031.00			
387	Miscellaneous Equipment				-			
389	Land and Land Rights				2,174,140.00			
003					2,174,140.00			
Total A	ccounts Not Studied				2,620,123.76			
Total G	as Plant				\$ 347,611,838.27			

\* Curve shown is interim survivor curve.

#### SCHEDULE 2. COMPARISON OF CALCULATED ACCRUED DEPRECIATION AND BOOK DEPRECIATION RESERVE AT DECEMBER 31, 2008 AND CALCULATION OF ANNUAL AMORTIZATION OF THE RESERVE VARIANCE BASED ON A COMPOSITE REMAINING LIFE PERIOD

	Depreciable Group (1)	Dec	Original Cost at ember 31, 2008 (2)	F	Book Reserve (3)	1	alculated Accrued preciation (4)	V	eserve ariance = (4) - (3)	Remaining Life (6)	Am	Annual oortization Frue Up = (5) / (6)
Deprec	iable Plant											
305 311	<b>Production Plant</b> <i>Cape Girardeau Plant</i> Structures and Improvements Liquified Petroleum Gas Equipment	\$	644,985.72 1,259,626.52	\$	61,363 404,165	\$	234,707 777,153	\$	173,344 372,988	11.1 10.6	\$	15,631 35,154
	Total Production Plant		1,904,612.24		465,528		1,011,860		546,332			50,785
366 367 369	Transmission Plant Structures and Improvements Mains Measuring and Regulating Stations Total Transmission Plant		5,816.58 5,398,166.67 43,733.10 5,447,716.35		528 1,785,177 25,577 1,811,282		455 1,312,066 17,179 1,329,700		(73) (473,111) (8,398) (481,582)	37.0 37.9 27.4		(2) (12,500) (307) (12,809)
375 376 378 379 380 381 383 385	Distribution Plant Structures and Improvements Gas Mains Measuring and Regulating Station Equipment - General Measuring and Regulating Station Equipment - City Gate Services Meters House Regulators Industrial Measuring and Regulating Equipment		31,016.21 187,768,018.44 3,774,250.25 436,077.59 102,195,318.92 18,958,477.88 10,767,337.01 1,191,400.92		1,558 47,897,067 1,143,347 117,275 49,246,365 2,595,117 3,163,345 276,107	3	13,091 48,678,906 1,116,092 94,093 32,924,084 4,663,026 3,118,986 289,060	•	11,533 781,839 (27,255) (23,182) 6,322,281) 2,067,909 (44,359) 12,953	23.1 38.2 32.1 35.3 26.2 26.4 32.6 22.7		499 20,456 (849) (656) (622,750) 78,419 (1,360) 570
	Total Distribution Plant		325,121,897.22	10	04,440,181	ç	90,897,338	(1	3,542,843)			(525,671)

#### SCHEDULE 2. COMPARISON OF CALCULATED ACCRUED DEPRECIATION AND BOOK DEPRECIATION RESERVE AT DECEMBER 31, 2008 AND CALCULATION OF ANNUAL AMORTIZATION OF THE RESERVE VARIANCE BASED ON A COMPOSITE REMAINING LIFE PERIOD

	Depreciable Group (1)	Original Cost at December 31, 2008 (2)	Book Reserve (3)	Calculated Accrued Depreciation (4)	Reserve Variance (5) = (4) - (3)	Remaining Life (6)	Annual Amortization True Up (7) = (5) / (6)
390 391 391.2 392 393 394 395	General Plant Structures and Improvements Office Furniture and Equipment Personal Computers Transportation Equipment Stores Equipment Tools, Shop, and Garage Equipment Laboratory Equipment	1,059,946.14 101,576.85 259,021.25 5,427,356.98 27,268.29 2,356,542.97 124,259.50	372,768 7,786 124,257 2,602,307 11,073 1,157,762 42,186	368,134 82,889 200,202 1,850,104 24,704 1,439,206 69,821	(4,634) 75,103 75,945 (752,203) 13,631 281,444 27,635	33.5 3.6 3.0 6.9 2.5 8.7 14.2	(139) 20,633 25,065 (109,491) 5,453 32,202 1,948
396 397	Power Operated Equipment Communications Equipment Total General Plant	2,437,647.46 723,869.26 12,517,488.70	944,859 424,044 5,687,042	831,632 471,804 5,338,496	(113,227) 47,760 (348,546)	11.2 6.2	(10,137) 7,741 (26,725)
Total D	epreciable Plant	<u>\$ 344,991,714.51</u>	\$ 112,404,033	\$ 98,577,394	\$ (13,826,639)		\$ (514,420)
Accour 365.1 365.2 374 387 389	nts Not Studied Cape Girardeau Plant - Land Land and Land Rights Rights-of-Way Land and Land Rights Miscellaneous Equipment Land and Land Rights	32,420.76 1,282.00 118,250.00 294,031.00 - 2,174,140.00	- - 161 -				
	ccounts Not Studied	2,620,123.76 <b>\$ 347,611,838.27</b>	161 <b>\$ 112,404,194</b>				

### SCHEDULE 3. CALCULATION OF TOTAL ANNUAL DEPRECIATION INCLUDING AMORTIZATIONS OF THE RESERVE VARIANCE AT DECEMBER 31, 2008

Depreciable Group (1)		Original Cost at <u>12/31/2008</u> (2)	Annual Accrual <u>Amount</u> (3)	Reserve Variance Amortization (4)	Total Annual Depreciation (5)	Total Annual Depreciation Rate (6) = (5) / (2)
Depre	ciable Plant					
	Production Plant					
	Cape Girardeau Plant					
305	Structures and Improvements	\$ 644,985.72	\$ 39,887	\$ 15,631	\$ 55,518	8.61
311	Liquified Petroleum Gas Equipment	1,259,626.52	39,542	35,154	74,696	5.93
	Total Production Plant	1,904,612.24	79,429	50,785	130,214	6.84
	Transmission Plant					
366	Structures and Improvements	5,816.58	145	(2)	143	2.46
367	Mains	5,398,166.67	107,963	(12,500)	95,463	1.77
369	Measuring and Regulating Stations	43,733.10	971	(307)	664	1.52
	Total Transmission Plant	5,447,716.35	109,079	(12,809)	96,270	1.77
	Distribution Plant					
375	Structures and Improvements	31,016.21	775	499	1,274	4.11
376	Gas Mains	187,768,018.44	4,130,889	20,456	4,151,345	2.21
378	Measuring and Regulating Station Equipment - General	3,774,250.25	86,302	(849)	85,453	2.26
379	Measuring and Regulating Station Equipment - City Gate	436,077.59	9,681	(656)	9,025	2.07
380	Services	102,195,318.92	3,033,340	(622,750)	2,410,590	2.36
381	Meters	18,958,477.88	542,212	78,419	620,631	3.27
383	House Regulators	10,767,337.01	250,986	(1,360)	249,626	2.32
385	Industrial Measuring and Regulating Equipment	1,191,400.92	39,674	570	40,244	3.38
	Total Distribution Plant	325,121,897.22	8,093,859	(525,671)	7,568,188	2.33

### SCHEDULE 3. CALCULATION OF TOTAL ANNUAL DEPRECIATION INCLUDING AMORTIZATIONS OF THE RESERVE VARIANCE AT DECEMBER 31, 2008

Depreciable Group (1)	Original	Annual	Reserve	Total	Total
	Cost at	Accrual	Variance	Annual	Annual
	<u>12/31/2008</u>	<u>Amount</u>	Amortization	Depreciation	Depreciation Rate
	(2)	(3)	(4)	(5)	(6) = (5) / (2)
General Plant390Structures and Improvements391Office Furniture and Equipment391.2Personal Computers392Transportation Equipment393Stores Equipment394Tools, Shop, and Garage Equipment395Laboratory Equipment396Power Operated Equipment	1,059,946.14	22,259	(139)	22,120	2.09
	101,576.85	5,136	20,633	25,769	25.37
	259,021.25	19,434	25,065	44,499	17.18
	5,427,356.98	441,692	(109,491)	332,201	6.12
	27,268.29	1,026	5,453	6,479	23.76
	2,356,542.97	105,001	32,202	137,203	5.82
	124,259.50	3,836	1,948	5,784	4.65
	2,437,647.46	121,980	(10,137)	111,843	4.59
397 Communications Equipment Total General Plant Total Depreciable Plant	723,869.26	40,854	7,741	48,595	6.71
	12,517,488.70	761,218	(26,725)	734,493	5.87
	\$ 344,991,714.51	\$ 9,043,585	\$ (514,420)	\$ 8,529,165	2.47
Accounts Not Studied Cape Girardeau Plant - Land365.1Land and Land Rights365.2Rights-of-Way374Land and Land Rights387Miscellaneous Equipment389Land and Land Rights	32,420.76 1,282.00 118,250.00 294,031.00 - 2,174,140.00		<u> </u>		
Total Accounts Not Studied Total Gas Plant	2,620,123.76 <b>\$ 347,611,838.27</b>				