Missouri Public Service Commission

Exhibit No.: 074

Issues: Depreciation

Witness:

John F. Wiedmayer Union Electric Company Sponsoring Party: Type of Exhibit: Surrebuttal Testimony

ER-2007-0002 Case No.:

Date Testimony Prepared:

February 27, 2007

## MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2007-0002

SURREBUTTAL TESTIMONY

OF

JOHN F. WIEDMAYER C.D.P.

ON

BEHALF OF

UNION ELECTRIC COMPANY d/b/a AmerenUE

> St. Louis, Missouri February, 2007

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1		SURREBUTTAL TESTIMONY
2		OF
3		JOHN F. WIEDMAYER
4		I. <u>INTRODUCTION</u>
5	Q.	Please state your name and address.
6	A.	John F. Wiedmayer. My business address is 1010 Adams Avenue, Audubon,
7	Pennsylvan	ia 19403.
8	Q.	Have you previously submitted testimony in this proceeding?
9	A.	Yes. My Direct Testimony was submitted in July 2006 and my Rebuttal
10	Testimony	was submitted in January 2007.
11	Q.	What is the purpose of your Surrebuttal Testimony?
12	A.	My testimony responds to the Rebuttal Testimony of Missouri Public Service
13	Commissio	n Staff (Staff) witness Guy C. Gilbert, the Rebuttal Testimony of Missouri
14	Industrial E	Energy Consumers (MIEC) witness James T. Selecky, and the Rebuttal Testimony
15	of Office of	f the Public Counsel (OPC) witness William Dunkel .
16	Q.	What are the subjects of your Surrebuttal Testimony?
17	A.	The subjects of my Surrebuttal Testimony are the net salvage estimates for the
18	Callaway N	Nuclear Plant, the remaining lives for the Callaway Nuclear Plant determined by
19	Mr. Seleck	y, and the calculation of the portion of the depreciation accrual related to net
20	salvage.	
21	п.	NET SALVAGE ESTIMATES FOR CALLAWAY NUCLEAR PLANT
22	Q.	Have you reviewed the Rebuttal Testimony of OPC Witness Dunkel?
23	А	Ves I have

	-	
1	Q.	Has he proposed any adjustments regarding the net salvage estimates for
2	the Callaway	Nuclear Plant?
3	A.	Yes. Mr. Dunkel has proposed reducing Staff's negative net salvage estimates
4	which have the	ne effect of lowering the depreciation accrual rates that he and Staff have
5	proposed.	
6	Q.	Please describe his proposed adjustments regarding the net salvage
7	estimates for	· Callaway?
8	A.	Mr. Dunkel has correctly determined that the depreciation rates should only
9	reflect interin	n net salvage. Mr. Dunkel has adjusted his and Staff's proposed depreciation
10	rates for Call	away to reflect an accrual for interim net salvage at Callaway. Interim net
11	salvage refer	s to the net salvage related to assets that are retired throughout a power plant's
12	life, excludin	g final retirement which occurs at the end of the nuclear plant's operation.
13	Since the Cor	mpany already has a separate cost recovery mechanism for final net salvage in
14	the form of a	nuclear decommissioning cost trust fund, no depreciation accruals for final net
15	salvage are n	ecessary at a nuclear plant.
16		Mr. Dunkel has determined the amount of interim retirements that will occur
17	based on Stat	ff's proposed interim survivor curve estimate and 10/2044 final retirement date.
18	Using Accou	nt 322, Reactor Plant Equipment as an example to illustrate his proposed
19	adjustment, M	Mr. Dunkel has determined that approximately 37 percent of the December 31,
20	2005 plant ba	alance will be retired prior to the end of the nuclear plant's operation. Also,
21	Staff has proj	posed negative 37% as the net salvage estimate for Account 322. Mr. Dunkel

states that Staff's net salvage estimate relates to interim retirements and therefore only a

Yes, I have.

A.

1	portion of the plant balance and not the entire plant balance. Mr. Dunkel applies Staff's 37%
2	net salvage estimate to 37% of the balance that will be retired in the interim and the resultant
3	net salvage estimate that he uses is 14 percent (37% x 37%). Mr. Dunkel proposes similar
4	adjustments for the other four Nuclear Plant Accounts which also reduce Staff's proposed
5	accrual rates.
6	Q. What is the impact of Mr. Dunkel's adjustment on depreciation in
7	comparison with Staff's proposed rates and amounts as shown in the Direct Testimony
8	of Staff Witness Mathis?
9	A. The annual depreciation expense for Nuclear Production Plant is \$5,963,450
10	less than proposed in the original Staff Direct Testimony.
11	Q. Do you agree with the adjustments made by Mr. Dunkel regarding the
12	net salvage estimates for the Callaway Nuclear Plant?
13	A. Yes, I agree with the method used by Mr. Dunkel in determining a net salvage
14	percent estimate for Nuclear Production Plant accounts. The adjustment that Mr. Dunkel
15	made to the net salvage estimate proposed by Staff for Nuclear Production Plant accounts is
16	appropriate. AmerenUE supports the net salvage estimate calculated by OPC witness
17	Dunkel.
18	III. <u>CALLAWAY COMPOSITE REMAINING LIVES</u>
19	Q. Have you reviewed the Rebuttal Testimony of MIEC Witness Selecky?

1	Q.	What does Mr. Selecky have to say about the depreciation rates proposed
2	by Staff for th	he Nuclear Production Plant accounts at Callaway?
3	A.	Mr. Selecky believes the Staff's proposed depreciation rates for Callaway are
4	excessive and	should be rejected.
5	Q.	What are his reasons for his assertion that Staff's proposed rates are
6	excessive?	
7	A.	Mr. Selecky provides several reasons to support his position. First, he
8	calculates the	remaining lives for the Nuclear Production Plant accounts and claims that the
9	Staff's remain	ning lives are too short based on an estimated final retirement date of October,
10	2044. I disag	ree with this assertion and his calculation of the remaining lives for Callaway
11	using Staff's p	proposed parameters. Second, he states that the net salvage estimates for
12	Nuclear Produ	action accounts should only be applied to a portion of Callaway's plant balance
13	representing i	nterim retirements. This is similar to Mr. Dunkel's comments that I agree with
14	and have addr	ressed above. Lastly, he believes the Staff's net salvage estimates are
15	inappropriate	since they are based on an analysis of the most recent five year period. I also
16	agree with Mi	r. Selecky on this issue. The net salvage analyses for most accounts should
17	consider more	e than just the most recent 5 year period.
18	Q.	Do you have any comments regarding Mr. Selecky's assertion that the
19	Staff's propo	sed accrual rates for Callaway are excessive?
20	A.	While the Company supports the use of remaining lives for purposes of
21	calculating ac	crual rates, the specific remaining lives listed on Table 1 and 3, page 4 of
22	Mr. Selecky's	Rebuttal Testimony are calculated incorrectly. On Table 1, page 4 of

Mr. Selecky's Rebuttal Testimony he lists his calculation of the average remaining lives for 1 2 Callaway by plant account based on the Staff's proposed depreciation parameters. On 3 Table 2, page 4 of his Rebuttal Testimony, Mr. Selecky lists the average remaining lives calculated by AmerenUE based on their proposed depreciation parameters. The primary 4 5 reason for the difference in remaining lives between Staff and the Company is the estimated 6 final retirement date. The Staff's proposes a 10/2044 retirement date while the Company 7 proposes a 10/2024 retirement date which coincides with the end of the plant's operating 8 license issued by the Nuclear Regulatory Commission. On Table 3, page 4 of Mr. Selecky's 9 Rebuttal Testimony, he compares his calculation of the remaining lives based on Staff's 10 proposed depreciation parameters with the Company's remaining lives by plant account for 11 Callaway and incorrectly concludes that Staff's calculations are wrong since the difference in 12 remaining lives is roughly 10 years and not the approximate 20 years as he expected. 13 Staff has not presented a remaining life calculation in their testimony nor do 14 they list remaining lives for Callaway in their testimony. Staff has presented a whole life 15 calculation. Mr. Selecky has calculated remaining lives using the Staff's proposed 16 parameters and has labeled his calculation of the remaining lives as Staff's remaining lives in 17 Tables 1 and 3. 18 Q. How should Mr. Selecky have determined the composite remaining lives 19 at Callaway? 20 A. To determine the average remaining life for each plant account, you start with 21 the plant balance and subtract future net salvage and the calculated accrued depreciation,

- 1 a.k.a., theoretical reserve. Next, divide the resultant sum by the calculated annual
- 2 depreciation accrual.

- Q. Is this the process that Mr. Selecky followed?
- 4 A. Yes, I believe so. However, he used the wrong amounts. The problem with
- 5 Mr. Selecky's remaining life calculation for Callaway is that he used the theoretical reserve
- 6 as calculated by the Company based on a 10/2024 estimated final retirement date and used
- 7 the annual accrual determined by the Staff which is based on a 10/2044 retirement. This
- 8 mixing of the amounts from different calculations that utilized different parameters leads to
- 9 an error in Mr. Selecky's remaining life calculation. This miscalculation is easily corrected
- and when corrected Mr. Selecky will find the difference in remaining lives to be much closer
- to 20 years than the 10 years he calculated. In summary, the Staff's calculation of the
- 12 depreciation accrual rates are correct based on the proposed estimates as listed in Witness
- 13 Mathis' Direct Testimony.
- 14 IV. NET SALVAGE ACCRUAL
- Q. What is the purpose of addressing this topic and for your submission of Schedules JFW-E3 and JFW-E4?
- 17 A. The purpose of submitting the schedules is to calculate the portion of the
- depreciation accruals related to net salvage using both the Company's and Staff's proposed
- 19 depreciation parameters. The amounts determined and the testimony that I have prepared on
- 20 this topic are in support of the Surrebuttal Testimony of Company witness Charles A.
- 21 Mannix

## Q. What do you mean by the term net salvage accrual?

that is related to the prospective recovery of future net salvage. That is, how much of the depreciation accrual is related to the recovery of the asset's original cost and how much of the depreciation accrual is related to future net salvage? Net salvage, by definition, is gross salvage less cost of removal. Certain plant accounts experience removal costs including disposal when they are retired. Typically, the removal cost exceeds any residual gross salvage received for the retired asset. The net salvage estimate typically is expressed as a percent of the asset's original cost for depreciation purposes. The depreciation accrual rate formula using the straight line method, average service life broad group procedure and the whole life technique is: (1-Net Salvage %) / ASL, where ASL stands for Average Service Life. For plant accounts in which the net salvage estimate is negative, a portion of the depreciation accrual relates to the prospective recovery of future net salvage during the asset's useful life on a pro-rata basis.

# Q. Have you calculated the portion of the depreciation accrual that is related to the prospective recovery of future net salvage?

A. Yes I have. Schedule JFW-E3 presents the amount of net salvage embedded in the total depreciation accrual by plant account using the Company's proposed depreciation parameters, i.e., survivor curve, terminal dates, and net salvage estimates. The portion of the depreciation accrual related to net salvage is \$63.8 million and the amounts by account are set forth in column 8. Schedule JFW-E4 presents the amount of net salvage embedded in the total depreciation accrual by plant account using the Staff's proposed depreciation

- parameters. The Company proposed accrual rates listed in Schedule JFW-E2 of my Rebuttal
- 2 Testimony were used to calculate the amounts shown on Schedule JFW-E3. Similarly, the
- 3 Staff's proposed accrual rates listed in the Direct Testimony of Ms. Jolie Mathis were used to
- 4 calculate the amounts shown on Schedule JFW-E4. Using Staff's depreciation parameters,
- 5 the portion of the depreciation accrual related to net salvage is \$71.2 million and it is set forth
- 6 in column 8.

8

- Q. Please describe how you determined the portion of the depreciation accruals that relates to net salvage.
- 9 A. For accounts with a negative net salvage percent estimate, I determined the portion of the depreciation accruals related to net salvage using the following formula:
- 11 (1-NS%) 1/(1-NS%), where NS is defined as net salvage.
- This formula produces a ratio set forth in column 7 of Schedule JFW-E3 and
- 13 Schedule JFW-E4 showing the percentage of the depreciation accruals related to net salvage.
- 14 The next step is to multiply the ratio listed in column 7 by the total depreciation accruals
- presented in column 6. The product is the net salvage accrual or the portion of the
- depreciation accrual related to net salvage. The net salvage accrual totals \$63.8 million using
- the Company's proposed parameters and \$71.2 million using the Staff's proposed
- 18 parameters.
- 19 Q. Does this complete your Surrebuttal Testimony?
- A. Yes, it does.

### AmerenUE ANNUAL DEPRECIATION RELATED TO NET SALVAGE BASED ON COMPANY'S PROPOSED DEPRECIATION PARAMETERS Company's Proposed Depreciation Parameters Annual Accrual Annual Accrual Plant Due to Net Account Original Cost Net Deprec. Annual Due to Net Title Jun-06 Salvage (%) Rate (%) Accrua! Salvage (%)\*\* Salvage No (1) (2) (3) (5) $(6)=(3)^*(5)$ (7) (8)=(6)\*(7)(4)Steam Production Plant Meramec Steam Production Plant 36 898 059 3.67% 1.352.771 14 53% 196 556 311 Structures & Improvements (17)312 Boiler Plant Equipment 399,232,426 (17)5.37% 21,445,946 14.53% 3,116,078 314 Turbogenerator Units 82,051,879 (17)4.67% 3,831,638 14.53% 556,734 315 Acessory Electric Equipment 36,283,593 (17) 4.53% 1,644,121 14.53% 238,889 316 Misc. Power Plant Equipment 13,708,320 (17) 5.33% 730,374 14.53% 106,123 Sioux Steam Production Plant 25,295,269 (22) 148,035 311 Structures & Improvements 3.25% 820.922 18.03% 312 Boiler Plant Equipment 328,617,174 (22)4.21% 13,844,146 18.03% 2,496,485 314 Turbogenerator Units 91,440,550 (22)4.42% 4,046,107 18.03% 729,626 34,642,484 267,000 315 Acessory Electric Equipment 4.27% 1 480 639 18.03% (22)316 Misc. Power Plant Equipment 4.30% 7,962,301 (22)342,588 18.03% 61,778 Labadie Steam Production Plant 311 Structures & Improvements 61,831,946 (25) 2.83% 1,750,479 20.00% 350,096 3.38% 312 Boiler Plant Equipment 560,572,165 (25)18,919,904 20.00% 3,783,981 312.03 Aluminum Coal Cars 117.686.242 3.18% 3.748.306 0.00% 30 186,232,562 314 Turbogenerator Units (25)3.59% 6,677,444 20.00% 1,335,489 73,167,727 315 Acessory Electric Equipment (25)3.06% 2,240,240 20.00% 448,048 316 Misc. Power Plant Equipment 17,242,739 (25) 3.75% 647,309 20.00% 129,462 Rush Island Steam Production Plant 2.50% 311 Structures & Improvements 52,397,875 (22)1,309,482 18.03% 236,136 312 Boiler Plant Equipment 354,788,784 18.03% (22)3.12% 11,072,128 1 996 613 314 Turbogenerator Units 4,323,070 135,990,789 (22)3.18% 18.03% 779,570 315 Acessory Electric Equipment 32,925,827 2.85% (22)937.310 169,023 18.03% 316 Misc, Power Plant Equipment 10,122,281 (22) 3.47% 351,629 18.03% 63,408 Common Steam Production Plant 311 Structures & Improvements 1.959,206 3.36% 65,904 (5) 4.76% 3,138 312 Boiler Plant Equipment 37,071,156 3.63% 1,344,681 4.76% 64,032 (5) 315 Accessory Electrical Equipment 3,129,975 (5) 3.47% 108,510 4.76% 5,167 316 Misc. Power Plant Equipment 20.843 3.82% (5) 797 4.76% 38 2,701,272,172 Total Steam Production Plant 103,036,443 17,281,506 Nuclear Production Plant 321 Structures and improvements 893,268,025 2.82% 25,177,567 0.00% 322 Reactor Plant Equipment 957,550,064 0 3.38% 32,356,014 0.00% 323 Turbogenerator Units 494,453,935 0 3.18% 15,743,906 0.00% 324 Accessory Electric Equipment 210,754,954 0 2.74% 5,775,691 0.00% 325 Misc. Power Plant Equipment 165,413,219 3.70% 0 6,120,965 0.00% 85,174,143 Total Nuclear Production Plant 2,721,440,197

<sup>\*\*</sup> The annual accrual due to net salvage (%) is calculated for each account as [(1-NS)-1]/(1-NS) when NS < 0 and as 0 when NS≥ 0.

### AmerenUE ANNUAL DEPRECIATION RELATED TO NET SALVAGE BASED ON COMPANY'S PROPOSED DEPRECIATION PARAMETERS Annual Accrual Annual Accrual Plant Company's Proposed Depreciation Parameters Due to Net Account **Original Cost** Net Deprec. Annuai Due to Net Salvage (%)\*\* No. Title Jun-06 Salvage (%) Rate (%) Accrual Salvage (1) (2) (3) (4) (5) (6)=<u>(3)\*(5)</u> (7) (8)=(6)\*(7) Osage Hydraulic Production Plant 1.58% 5,549 3,860,732 (10)61,035 9.09% 331 Structures and Improvements 332 Reservoirs, Dams, and Waterways 25,439,912 (20) 1.50% 381,145 16.67% 63,524 385,727 9.09% 35,066 19.301.223 (10)2.00% 333 Water Wheels, Turbines, and Generator 334 Accessory Electric Equipment 4,112,456 0 2.18% 89,700 0.00% 0 44,229 335 Misc. Power Plant Equipment 1,773,982 2.49% 0.00% 336 Roads, Railroads, and Bridges 77,445 0 1.12% 864 0.00% Keokuk Hydraulic Production Plant 331 Structures and Improvements 4,117,339 (10)2.10% 86.534 9.09% 7,867 12.367.195 247,724 41,287 332 Reservoirs, Dams, and Waterways (20)2.00% 16.67% 59,194,802 3.05% 1,804,184 9.09% 164,017 333 Water Wheels, Turbines, and Generator (10)334 Accessory Electric Equipment 9,167,068 0 2.98% 273,381 0.00% 2,631,559 0 2.98% 78,320 0.00% 335 Misc. Power Plant Equipment 336 Roads, Railroads, and Bridges 114,926 0 1.98% 2,272 0.00% Taum Sauk Hydraulic Production Plant 5,503,349 (10)1.80% 99,188 9.017 331 Structures and Improvements 9.09% 332 Reservoirs, Dams, and Waterways 27,586,615 (20)2.10% 579,487 96,581 942.957 333 Water Wheels, Turbines, and Generator 37,356,989 (10) 2.52% 9.09% 85,723 334 Accessory Electric Equipment 4,188,185 0 2.58% 108,244 0.00% 335 Misc. Power Plant Equipment 1,630,658 0 3.11% 50,647 0.00% 45,570 O 0.00% 336 Roads, Railroads, and Bridges 1.50% 683 Total Hydraulic Production Plant 218,470,005 5.236.323 508,632 Other Production Plant 341 Structures and Improvements 15,382,120 (5) 2.86% 439,596 4.76% 20,933 342 Fuel Holders, Products, and Accessories 12,264,732 (5) 2.97% 364,449 4.76% 17,355 344 Generators 2.96% 17,283,670 823,032 583.616.964 (5) 4.76% 345 Accessory Electric Equipment 26,793,140 2.89% 774,394 4.76% (5) 36,876 346 Misc. Power Plant Equipment 5,665,300 (5) 2.83% 160,184 4.76% 7,628 Total Other Production Plant 643,722,256 19,022,293 905,823 Transmission Plant 352 Structures and Improvements 6,219,706 (5) 1.75% 109.063 4.76% 5,193 353 Station Equipment 181,457,965 0 1.82% 3,302,535 354 Tower and Fixtures 70.903.822 (10)1.69% 1,201,111 9.09% 109,192 355 Poles and Fixtures 113,204,654 (90)3.65% 4,129,657 47.37% 1,956,153 356 Overhead Conductors and Devices 118,782,726

(25)

0

71,788

490,640,661

2.27%

1.20%

2,697,446

11,440,669

858

20.00%

0.00%

359 Roads and Trails

Total Transmission Plant

539,489

2,610,028

<sup>\*\*</sup> The annual accrual due to net salvage (%) is calculated for each account as [(1-NS)-1]/(1-NS) when NS < 0 and as 0 when NS  $\geq$  0.

	ANNUAL DEPRECIATION RE	LATED TO NET SALVA	AmerenUE AGE BASED ON CO	MPANY'S PROPO	SED DEPRECIATION	PARAMETERS	
Account No.	Title	Plant Original Cost Jun-06	Company's Pr Net Salvage (%)	oposed Deprecial Deprec. Rate (%)	ion Parameters Annual Accrual	Annual Accrual Due to Net Salvage (%)**	Annual Accrual Due to Net Salvage
(1)	(2)	(3)	(4)	(5)	(6)=(3)*(5)	(7)	(8)=(6)*(7)
	(2)	(0)	17	(5)	(0) (0) (0)		(9) (0) (.)
······································	Distribution Plant						;
	Constitution -						
361	Structures and Improvements	15,759,384	(5)	1,75%	276,341	4.76%	13,159
362	Station Equipment	531,174,647	0	1.82%	9,667,378	0.00%	-
364	Poles, Towers, and Fixtures	657,866,888	(135)	5.47%	36,017,181	57.45%	20,690,721
365	Overhead Conductors and Devices	725,041,472	(50)	3.19%	23,165,075	33.33%	7,721,692
366	Underground Conduit	172,578,086	(50)	2.31%	3,986,554	33.33%	1,328,851
367	Underground Conductors and Devices	459,391,695	(25)	2.36%	10,853,129	20.00%	2,170,626
368	Line Transformers	353,005,804	0	2.22%	7,836,729	0.00%	-
369.001	Overhead Services	126,844,186	(200)	8.09%	10,258,181	66.67%	6,838,788
369,002	Underground Services	121,695,103	(80)	3.99%	4,857,977	44.44%	2,159,101
370	Meters	103,953,475	0	3.57%	3,710,669	0.00%	-
371	Installations on Customer Premises	164,856	0	3.74%	6,161	0.00%	-
373.00	Street Lighting and Signal Systems	101,695,076	(45)	4.39%	4,467,973	31.03%	1,386,612
	Total Distribution Plant	3,369,170,672			115,103,348		42,309,550
	General Plant						
390.0	Structures and Improvements	171,487,901	(5)	2.33%	3,996,976	4.76%	190,332
391.0	Office Furniture and Equipment	44,289,607	0	4.77%	2,110,938	0.00%	
391.1	Mainframe Computers	422,014	0	0.00%	-	0.00%	
391.2	Personal Computers	1,796,928	0	19.42%	349,006	0.00%	-
392.0	Transportation Equipment	83,429,052	9	8.23%	6,865,401	0.00%	-
393.0	Stores Equipment	2,104,840	0	3.71%	78,149	0.00%	-
394.00	Tools, Shop and Garage Equipment	10,972,846	0	4.34%	476,689	0.00%	
395.00	Laboratory Equipment	6,650,033	0	4.48%	297,976	0.00%	-
396.00	Power Operated Equipment	9,843,387	15	5.67%	558,071	0.00%	-
397.00	Communication Equipment	128,018,518	0	4.80%	6,142,826	0.00%	-
398.00	Miscellaneous Equipment	641,398	0	4.84%	31,058	0.00%	-
				<del></del>	<del></del>		<del></del>

TOTAL DEPRECIABLE PLANT 10,604,372,487 359,920,310 63,805,871

20,907,091

459,656,524

Total General Plant

<sup>\*\*</sup> The annual accrual due to net salvage (%) is calculated for each account as [(1-NS)-1]/(1-NS) when NS < 0 and as 0 when NS  $\geq$  0.

Account		Plant Original Cost	Staff's Prop	osed Depreciat Deprec.	ion Parameters Annual	Annual Accrual  Due to Net	Annual Accrual  Due to Net
No.	Title	Jun-06	Salvage (%)	Rate (%)	Accrual	Salvage (%)**	Salvage
(1)	(2)	(3)	(4)	(5)	(6)=(3)*(5)	(7)	(8)=(6)*(7)
	Steam Production Plant						_ <del></del>
	Meramec Steam Production Plant					a	
311	Structures & Improvements	36,898,059	(21)	1.05%	387,430	17.36%	67,24
	Boiler Plant Equipment	399,232,426	(29)	2.15%	8,583,497	22.48%	1,929,62
	Turbogenerator Units	82,051,879	(7)	1.70%	1,394,882	6.54%	91,25
	Acessory Electric Equipment	36,283,593	(9)	1.21%	439,031	8.26%	36,25
316	Misc, Power Plant Equipment	13,708,320	(6)	1.77%	242,637	5.66%	13,73
	Sioux Steam Production Plant						
311	Structures & Improvements	25,295,269	(21)	1.05%	265,600	17.36%	46,09
	Boiler Plant Equipment	328,617,174	(29)	2.15%	7,065,269	22.48%	1,588,31
	Turbogenerator Units	91,440,550	(7)	1.70%	1,554,489	6.54%	101,69
	Acessory Electric Equipment	34,642,484	(9)	1.21%	419,174	8.26%	34,61
	Misc. Power Plant Equipment	7,962,301	(6)	1.77%	140,933	5.66%	7,97
				<del> </del>			
	Labedie Steam Production Plant						
311	Structures & Improvements	61,831,946	(21)	1.05%	649,235	17.36%	112,67
	Boiler Plant Equipment	560,572,165	(29)	2.15%	12,052,302	22.48%	2,709,43
	Aluminum Coal Cars	117,686,242	8	4.19%	4,931,054	0.00%	
	Turbogenerator Units	186,232,562	(7)	1.70%	3,165,954	6.54%	207,11
	Acessory Electric Equipment	73,167,727	(9)	1.21%	885,329	8.26%	73,10
	Misc. Power Plant Equipment	17,242,739	(6)	1.77%	305,196	5.66%	17,27
	Rush Island Steam Production Plant			1			
	Structures & Improvements	52,397,875	(21)	1.05%	550,178	17.36%	95,48
	Boiler Plant Equipment	354,788,784	(29)	2.15%	7,627,959	22.48%	1,714,81
	Turbogenerator Units	135,990,789	(7)	1.70%	2,311,843	6.54%	151,24
	Acessory Electric Equipment Misc. Power Plant Equipment	32,925,827 10,122,281	(9) (6)	1.21%	398,403 179,164	8.26% 5.66%	32,89 10,14
310	I line of the section	10,122,201	(0)	1.17.78	179,10-	3.00%	
	Common Steam Production Plant						
311	Structures & Improvements	1,959,206	(21)	1.05%	20,572	17.36%	3,57
312	Boiler Plant Equipment	37,071,156	(29)	2.15%	797,030	22.48%	179,17
	Accessory Electrical Equipment	3,129,975	(9)	1.21%	37,873	8.26%	3,12
316	Misc. Power Plant Equipment	20,843	(6)	1.77%	369	5.66%	2
	Total Steam Production Plant	2,701,272,172			54,405,403		9,226,87
	Nuclear Production Plant						
	Structures and Improvements	893,268,025	(3)	1.97%	17,597,380	2.91%	512,54
327	2 Reactor Plant Equipment	957,550,064	(37)	3.10%	29,684,052	27.01%	8,016,88
	3 Turbogenerator Units	494,453,935	(3)	2.08%	10,284,642	2.91%	299,55
323	<del></del>	240 254 054	(2)	4 0467	4 005 400	4 0007	70.00
323 324	Accessory Electric Equipment Misc. Power Plant Equipment	210,754,954 165,413,219	(2)	1.91% 2.49%	4,025,420 4,118,789	1,96% 0.99%	78,93 40,78
323 324	Accessory Electric Equipment	210,754,954 165,413,219	(2) (1)	1.91% 2.49%	4,025,420 4,118,789		

<sup>\*\*</sup> The annual accrual due to net salvage (%) is calculated for each account as [(1-NS)-1]/(1-NS) when NS < 0 and as 0 when NS  $\geq$  0.

332 333 334 335	Title (2)  Oseiĝe Hydraulic Production Plant  Structures and Improvements Reservoirs, Dams, and Waterways	Jun-06 (3)	Salvage (%) (4)	Rate (%)	Accrual	Salvage (%)**	Salvage
331 332 333 334 335	Osege Hydraulic Production Plant Structures and Improvements	(3)	(4)	(5)			
332 333 334 335	Structures and Improvements			(5)	(6)=(3)*(5)	(7)	(8)=(6)*(7)
332 333 334 335	Structures and Improvements	1			-		
332 333 334 335				<del></del>	·	<del></del>	
332 333 334 335		3,860,732	(41)	0.94%	36,291	29.08%	10,553
333 334 335		25,439,912	0	0.56%	142,464	0.00%	-
335	Water Wheels, Turbines, and Generators	19,301,223	(161)	2.09%	403,396	61,69%	248,838
	Accessory Electric Equipment	4,112,456	(9)	1.58%	69,089	8.26%	5,705
336	Misc. Power Plant Equipment	1,773,982	0	1.67%	29,625	0.00%	-
	Roads, Railroads, and Bridges	77,445	0	1.63%	1,262	0.00%	-
	Keokuk Hydraulic Production Plant						
331	Structures and Improvements	4,117,339	(41)	0.94%	38,703	29.08%	11,254
332	Reservoirs, Dams, and Waterways	12,367,195	0	0.56%	69,256	0.00%	
333	Water Wheels, Turbines, and Generators	59,194,802	(161)	2.09%	1,237,171	61.69%	763,159
	Accessory Electric Equipment	9,167,068	(9)	1.68%	154,007	8.26%	12,716
	Misc. Power Plant Equipment	2,631,559	0	1.67%	43,947	0.00%	<del>.</del>
336	Roads, Railroads, and Bridges	114,926	0	1.63%	1,873	0.00%	
<del></del>							
<u>-</u> -	Taum Sauk Hydraulic Production Plant			<del>}</del>	<u> </u>		·
		5.500.040	(44)	2012		20.000/	15.04
	Structures and Improvements	5,503,349	(41)	0.94%	51,731	29.08%	15,042
	Reservoirs, Dams, and Waterways	27,586,615	0 (104)	0.56%	154,485	0.00%	
	Water Wheels, Turbines, and Generators	37,356,989	(161)	2.09%	780,761	61.69%	481,61
	Accessory Electric Equipment	4,188,185 1,630,658	(9)	1.68%	70,362 27,232	8.26% 0.00%	5,81
	Misc. Power Plant Equipment  Roads, Railroads, and Bridges	45,570	0	1.63%	743	0.00%	<del>-</del>
	roads, Rallicads, and bridges	45,570		1.03 /6	743	0.00%	
	Total Hydraulic Production Plant	218,470,005		<del>                                     </del>	3,312,399	<del></del>	1,554,69
		210,410,000		<del>  </del>	0,012,000		1,004,00
	Other Production Plant	19			<del></del>		
			<u></u>	<del>                                     </del>			
341	Structures and Improvements	15,382,120	0	1.67%	256,881	0.00%	
	Fuel Holders, Products, and Accessories	12,264,732	0	2.50%	306,618	0.00%	
	Generators	583,616,964	0	2.22%	12,956,297	0.00%	-
345	Accessory Electric Equipment	26,793,140	0	1.89%	506,390	0.00%	
346	Misc. Power Plant Equipment	5,665,300	0	4.00%	226,612	0.00%	-
							<del>.</del>
	Total Other Production Plant	643,722,256			14,252,799		-
	Transmission Plant						
352	Structures and Improvements	6,219,706	0	1.67%	103,869	0.00%	
353	Station Equipment	181,457,965	(6)	1.56%	2,830,744	5.66%	160,23
354	Tower and Fixtures	70,903,822	(22)	1.88%	1,332,992	18.03%	240,37
355	Poles and Fixtures	113,204,654	(24)	2.38%	2,694,271	19.35%	521,47
	Overhead Conductors and Devices	118,782,726	(2)	1.85%	2,197,480	1.96%	43,08
359	Roads and Trails	71,788	0	0.00%		0.00%	_
		<b></b>				<u> </u>	
	Total Transmission Plant	490,640,661		<u> </u>	9,159,356		965,16

<sup>\*\*</sup> The annual accrual due to net salvage (%) is calculated for each account as [(1-NS)-1]/(1-NS) when NS < 0 and as 0 when NS  $\geq$  0.

AmerenUE								
ANNUAL DEPRECIATION RELATED TO NET SALVAGE BASED ON STAFF'S PROPOSED DEPRECIATION PARAMETERS								
Plant	Staff's Proposed Depreciation Parameters	Annual Accrual						

		Plant	Staff's Prop	ion Parameters	Annual Accrual	Annual Accrual	
Account		Original Cost	Net	Deprec.	Annual	Due to Net	Due to Net
No.	Title	Jun-06	Salvage (%)	Rate (%)	Accrual	Salvage (%)**	Salvage
(1)	(2)	(3)	(4)	(5)	(6)=(3)*(5)	(7)	(8)=(6)*(7)
	Distribution Plant						
	Distribution Plain						
361	Structures and Improvements	15,759,384	0	1.67%	263,182	0.00%	-
362	Station Equipment	531,174,647	(2)	1.62%	8,605,029	1.96%	168,72
	Poles, Towers, and Fixtures	657,866,888	(154)	5.92%	38,945,720	60.63%	23,612,75
365	Overhead Conductors and Devices	725,041,472	(52)	3.30%	23,926,369	34,21%	8,185,33
366	Underground Conduit	172,578,086	0	1.54%	2,657,703	0.00%	-
367	Underground Conductors and Devices	459,391,695	(40)	2.59%	11,898,245	28.57%	3,399,499
368	Line Transformers	353,005,804	(1)	2.40%	8,472,139	0.99%	83,88
369,001	Overhead Services	126,844,186	(303)	10.86%	13,775,279	75.19%	10,357,09
369,002	Underground Services	121,695,103	(98)	4.39%	5,342,415	49,49%	2,644,22
370	Meters	103,953,475	2	3.50%	3,638,372	0.00%	-
371	Installations on Customer Premises	164,856	0	3.55%	5,852	0.00%	
373.00	Street Lighting and Signal Systems	101,695,076	(58)	4.27%	4,342,380	36,71%	1,594,03
	Total Distribution Plant	3,369,170,672			121,872,683		50,045,562
	General Plant						
	GERMAN FIGHT						
390.0	Structures and Improvements	171,487,901	(11)	2.46%	4,218,602	9.91%	418,06
391.0	Office Furniture and Equipment	44,289,607	0	5.00%	2,214,480	0.00%	-
391.1	Mainframe Computers	422,014	0	16.67%	70,350	0.00%	-
391.2	Personal Computers	1,796,928	0	11.11%	199,639	0.00%	-
392.0	Transportation Equipment	83,429,052	7	8.41%	7,016,383	0.00%	=
393.0	Stores Equipment	2,104,840	4	3.84%	80,826	0.00%	
394.00	Tools, Shop and Garage Equipment	10,972,846	4	3.20%	351,131	0.00%	-
395.00	Laboratory Equipment	6,650,033	0	3.85%	256,026	0.00%	
396.00	Power Operated Equipment	9,843,387	13	5.80%	570,916	0.00%	-
397.00	Communication Equipment	128,018,518	0	3.70%	4,736,685	0.00%	-
398.00	Miscellaneous Equipment	641,398	2	4.26%	27,324	0.00%	-
	Total General Plant	459,656,524			19,742,363	,	418,06

Analyzed Totals

Column Totals 10,604,372,487 288,455,286 71,159,026

## BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area.	Case No. ER-2007-0002
AFFIDAVIT OF JOH	IN F. WIEDMAYER
COMMONWEALTH OF PENNSYLVAN	IA )
COUNTY OF MONTGOMERY	) ss )
John F. Wiedmayer, being first duly s	worn on his oath, states:
1. My name is John F. Wiedmaye	er. I work in Audubon, Pennsylvania and I
am a Project Manager with the firm of Ganne	tt Fleming, Inc.
2. Attached hereto and made a pa	rt hereof for all purposes is my Surrebuttal
Testimony on behalf of Union Electric Compa	any d/b/a AmerenUE consisting of
pages and Schedules JFW-E3 and JFW-E4, w	hich has been prepared in written form for
introduction into evidence in the above-refere	nced docket.
3. I hereby swear and affirm that	my answers contained in the attached
testimony to the questions therein propounded	John F. Wiedmayer, T.  John F. Wiedmayer
Subscribed and sworn to before me this 27	day of February, 2007.  Susan J. Wanney  Notary Public
My commission expires: July 5, 200°	COMMONWEALTH OF PENNSYLVANIA  Notarial Seal Susan F. Warner, Notary Public Lower Providence Twp., Montgomery County My Commission Expires July 5, 2008