Exhibit No.:	
Issue(s):	Callaway Life/ Callaway Reactor Vessel Head/ Various Claims Pertaining to Callaway/ Steam Production Life/ Net Salvage Percents for Distribution & Transmission Accounts/ Display of Callaway Net Salvages/ Conclusion
Witness:	William Dunkel
Type of Exhibit:	Surrebuttal
Sponsoring Party:	Public Counsel
Case No.:	ER-2007-0002
Date Testimony Prepared:	February 27, 2007

SURREBUTTAL TESTIMONY

OF

WILLIAM DUNKEL

Submitted on Behalf of
the Office of the Public Counsel

UNION ELECTRIC COMPANY, D/B/A AMERENUE

Case No. ER-2007-0002

February 27, 2007

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** Tariff No. YE-2007-0007

AFFIDAVIT OF WILLIAM DUNKEL

COUNTY OF SANGAMON)
) ss
STATE OF ILLINOIS)

William Dunkel, of lawful age and being first duly sworn, deposes and states:

1. My name is William Dunkel. I am a Consultant for the Office of the Public Counsel.

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

William Dunkel
Consultant

Subscribed and sworn to me this 26th day of February 2007.

Doris A. Melvin
Notary Public

My commission expires 7-22-2007.

"OFFICIAL SEAL"
DORIS A MELVIN
NOTARY PUBLIC
STATE OF ILLINOIS
MY COMMISSION EXPIRES 7-22-2007

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SURREBUTTAL TESTIMONY

OF

WILLIAM W. DUNKEL

On Behalf of the Office of Public Counsel

Pertaining to AmerenUE

CASE NO. ER-2007-0002

Q. ARE YOU THE SAME WILLIAM W. DUNKEL THAT PREVIOUSLY PREFILED DIRECT TESTIMONY AND REBUTTAL TESTIMONY IN THIS PROCEEDING ON BEHALF OF THE OFFICE OF PUBLIC COUNSEL?

A. Yes.

Q. WHAT IS THE PURPOSE OF THIS SURREBUTTAL TESTIMONY?

A. The primary purpose of this Surrebuttal Testimony is to respond to certain depreciation issues in other parties Rebuttal Testimonies that were filed in this proceeding on or about January 31, 2007.

CALLAWAY LIFE

Q. WHAT IS ONE CLAIM IN THE AMERENUE REBUTTAL PERTAINING TO CALLAWAY?

A. Starting at the bottom of page 15 of his Rebuttal Testimony, Mr. Stout claims:

> "For example, significant additions and retirements occurred in 2004 and 2005 at approximately age 20. As described in the Rebuttal Testimony of Charles Naslund, similar retirements, or even more retirements, will likely occur throughout the remaining life of this facility in order to achieve a total life span of 60 years. These types of retirements are not reflected in the interim survivor curves for the nuclear accounts."

As I will demonstrate below, the fact is that the "significant" retirements in 2004 and 2005 "at approximately age 20" **were** included in the Staff interim survivor curve analysis for the nuclear accounts.

Using the largest nuclear account as the example (Account 322, Reactor Plant Equipment), page B-20 of the AmerenUE Depreciation Study[1] shows the retirement in 2005 was over $80,000,000. There is no other retirement anywhere near $80,000,000 anytime in this account, as can be seen on that page.

The over $80,000,000 annual 2005 retirement amount was included in the analysis that led to the 60-S0 Interim Survivor curve the Staff uses, as can be seen on page A23 of the AmerenUE Depreciation Study.[2] That page shows that in the analysis that resulted in the 60-S0 Interim Survivor curve, over $80,000,000, retiring at age 19.5, is included in that analysis. Attached as Surrebuttal Schedule WWD-20 is the similar page from the Staff workpapers, that shows the Staff included the over $80,000,000 "age 19.5" retirement amount in their workpapers.

The above information demonstrates that the "significant" retirements in 2004 and 2005 "at approximately age 20" **were** included in the Staff interim survivor curve analysis for the nuclear accounts.

A similar analysis of the other nuclear accounts also shows the Staff included the 2004 and 2005 retirements.[3]

Q. DOES THE INTERIM SURVIVOR CURVE USED BY THE STAFF ALSO INCORPORATE SIGNIFICANT FUTURE INTERIM RETIREMENTS?

A. Yes. As shown on Rebuttal Schedule WWD-14-2, which was attached to my Rebuttal Testimony, under the Iowa 60-S0 curve used by the Staff, over $353 million of the existing investment in account

[1] Schedule JFW-E1.
[2] Schedule JFW-E1.
[3] In addition, the Staff workpapers used to calculate the Staff proposed depreciation rates also clearly show that the 2004 and 2005 additions were included in the Staff calculations. (Source: Staff Mathis workpapers provided 1/3/07, file name "PSCDeprate.prn".)

322 will retire as interim retirements between 12/31/2005 and 10/2044 (10/2044 is the final retirement date in the Staff proposal).

In short, the interim survivor curves used by the Staff for the nuclear accounts (1) do include the retirements that occurred in 2004 and 2005; and (2) do incorporate significant future interim retirements.

Q. DOES AMERENUE ADMIT THAT UNDER THE INTERIM SURVIVOR CURVE USED BY STAFF, OVER $350 MILLION IS EXPECTED TO RETIRE AS INTERIM RETIREMENTS IN THIS ACCOUNT?

A. Yes. Our request and AmerenUE's response are shown below:

> OPC 5065
>
> (a) Does AmerenUE admit that the mathematics of the Iowa 60-S0 curve are such that over $350 million would be expected to retire in account 322 as interim retirements between 12/31/2005 and the final retirement used in the Staff filing of 10/2044?
>
> AmerenUE response:
>
> (a) Admitted.

Q. AMERENUE WITNESSES POINT OUT THAT USING THE STAFF PROPOSED FINAL RETIREMENT DATE OF 10/2044, VARIOUS PARTS OF THE CALLAWAY PLANT WILL HAVE TO BE RETIRED PRIOR TO THE FINAL RETIREMENT DATE. DOES THE FACT THAT SOME INVESTMENTS WILL BE RETIRED PRIOR TO 10/2044 REBUT THE STAFF POSITION?

A. No. As discussed above, the Iowa 60-S0 curve used by the Staff for account 322 (Reactor Equipment) expects that over $350 million of the existing investment in that Callaway account will be

retired as interim retirements prior to the final retirement in 10/2044. For all Callaway accounts, the interim retirement curves used by the Staff expected that over $670 million will be retired as interim retirements prior to the final retirement in 10/2044.[4]

The fact that some Callaway investments will be retired prior to 10/2044 is not contrary to the Staff position. Substantial future interim retirements are included in the Staff proposal for Callaway.

CALLAWAY REACTOR VESSEL HEAD

Q. IN HIS REBUTTAL MR. NASLUND[5] STATES THAT THE REACTOR VESSEL HEAD "WILL HAVE TO BE REPLACED TO ALLOW A LICENSE EXTENSION." IS AMERENUE PLANNING TO REPLACE THE REACTOR VESSEL HEAD?

A. Yes. In response to discovery, AmerenUE stated:

> "As noted in the response to 5057 there are funds budgeted in 2013 for Reactor Vessel head replacement."[6]

VARIOUS CLAIMS PERTAINING TO CALLAWAY

Q. MR. NASLUND ESTIMATES IT WILL COST AMERENUE "AT LEAST $20 MILLION" FOR THE APPLICATION AND NRC REVIEW OF A 20 YEAR

[4] Rebuttal Schedule WWD 14-2.
[5] Page 3, lines 14-16, Naslund Rebuttal Testimony.
[6] AmerenUE response to OPC request 5058. Similar statements are also in the AmerenUE response to 5057.

LICENSE EXTENSION.[7] HOW DOES THIS AMOUNT COMPARE TO THE INVESTMENT IN CALLAWAY?

A. $20 million is less than 1% of the investment in Callaway. According to AmerenUE's own filing, the AmerenUE investment in Callaway is $2,724,498,833.[8] $20 million is 0.7% of that investment.[9]

Q. MR. NASLUND ALLEGES THERE MAY BE A "LACK OF ADEQUATE WATER SUPPLIES IN THE MISSOURI RIVER TO COOL THE PLANT"[10] COULD MR. NASLUND PROVIDE ANY SUPPORT FOR THIS CLAIM?

A. No. In a discovery request we asked Mr. Naslund to:

> "Provide copies of any documents that support the claim that there may be a 'lack of adequate water supplies in the Missouri river to cool the plant' prior to 2044."

The AmerenUE response was:

> "None exist."[11]

Q. MR. NASLUND POINTS OUT THAT NONE OF "THE INDIVIDUALS PROVIDING TESTIMONY ON EXTENDING CALLAWAY'S LICENSE HAVE PARTICIPATED IN THE LICENSE EXTENSION PROCESS FOR A NUCLEAR PLANT"[12] HAS MR. NASLUND "PARTICIPATED IN THE LICENSE EXTENSION PROCESS FOR A NUCLEAR PLANT"?

A. No. In discovery we asked:

[7] Page 4, lines 12-16, Naslund Rebuttal Testimony.
[8] Page III-5, Schedule JFW-E1.
[9] $20,000,000/$2,724,498,833=0.0073=0.73%
[10] Page 2, lines 16-19, Naslund Rebuttal Testimony.
[11] AmerenUE response to OPC Request 5056(c)
[12] Page 2, lines 9-12, Naslund Rebuttal.

Has Mr. Naslund "participated in the license extension process for a nuclear plant"?

The AmerenUE response was:

"No"[13]

Q. IN HIS REBUTTAL, MR. NASLUND ACKNOWLEDGES SOME OF THE EVIDENCES PARTIES HAVE PRESENTED PERTAINING TO THE LICENSE EXTENSION, BUT THEN CLAIMS "OTHER THAN THIS SUPPOSITION, NO TECHNICAL STUDIES, ECONOMIC STUDIES OR ANY OTHER EVIDENCE HAS BEEN PROVIDED BY ANY OF THESE WITNESSES TO SUPPORT THEIR POSITION ON THIS ISSUE."[14] DOES MR. NASLUND HAVE "TECHNICAL STUDIES" OR "ECONOMIC STUDIES" WHICH SUPPORT THE POSITION USED IN THE AMERENUE DEPRECIATION CALCULATIONS THAT CALLAWAY WILL RETIRE IN 2024, AT THE END OF 40 YEARS OF LIFE?

A. No. On page 3 of his Rebuttal he admits:

> "Q. What studies has AmerenUE completed to investigate technical and economic issues that would need to be evaluated to allow extension of Callaway's license?
>
> A. No studies have been completed to investigate the technical issues or economic issues that would need to be evaluated to make a prudent decision on license extension."

Q. CAN THE COMMISSION WAIT SEVERAL YEARS BEFORE DECIDING WHAT LIFE TO USE FOR CALLAWAY IN THIS PROCEEDING?

A. No. For purposes of this case, Commission must decide whether to use a 2024 or 2044 final retirement date in the Callaway depreciation calculations. AmerenUE has presented no valid

[13] AmerenUE response to OPC Request 5055(a).

evidence that the 2024 retirement date is more probable than the 2044 retirement date. The evidence in the case demonstrates that it is more "probable than not" that 2044 will be the final retirement date as opposed to 2024, as shown by the six reasons summarized on page 10 of my Direct Testimony, as well as other reasons presented in this and other testimonies. In fact, regarding extending the Callaway operating license, AmerenUE witness Mr. Stout admitted "this may well occur".[15] The Commission should use the final retirement date of 10/2044.

STEAM PRODUCTION LIFE[16]

Q. WHAT IS ONE CLAIM THAT MR. BIRK MADE PERTAINING TO STEAM PRODUCTION PLANT LIVES?

A. Regarding the fossil fueled Steam production plants, Mr. Birk stated:

> "The third is the finite life associated with thick-walled components such as boiler drums and headers. The aging mechanisms of most concern involve creep in the high temperature headers and fatigue cracking in the drums, and thus some replacement of these heavy wall components can reasonably be expected if unit lives of greater than 60 years are going to be obtained."[17]

Q. DO THE COMPANY RESPONSES INDICATE THAT "HEADERS" LAST 60 YEARS AND THEN HAVE TO BE REPLACED?

A. No. According to an AmerenUE discovery response:

[14] Page 2, lines 1-8, Naslund Rebuttal Testimony.
[15] Page 15, lines 19-20, Rebuttal Testimony of Mr. Stout.
[16] It should be noted that my areas of testimony pertaining to Steam Production and Hydraulic Production are very limited. I have not sponsored specific lives, terminal net salvage, or depreciation rate recommendations for Steam Production or Hydraulic Production.
[17] Starting on page 1, line 22, Birk Rebuttal.

> "Replacement of other heavy wall, high temperature components such as reheat outlet headers and superheat outlet will occur as their expected life is between 30 and 40 years."[18]

Another AmerenUE responses states:

> "Superheat outlet headers have been replaced on Meramec units 1, 2 and 4 as well as on Sioux unit 1 and 2. Economizer inlet headers have been replaced on Meramec units 1 and 4; Labadie units 1, 2, 3 and 4 as well as Sioux units 1 and 2."[19]

Q. IS THERE AN EVEN MORE IMPORTANT CONSIDERATION?

A. Yes, the survivor curves used by the Staff do allow for future retirements. So pointing out that

> "some replacement of these heavy wall components can reasonably be expected if unit lives of greater than 60 years are going to be obtained."

is not inconsistent with the Staff recommendation.

Q. THE REBUTTAL TESTIMONY OF STOUT[20] SHOWS A HYPOTHETICAL IN WHICH THE DEPRECIATION EXPENSE FOR A STEAM PRODUCTION PLANT WOULD ALLEGEDLY HAVE TO INCREASE BY OVER $10 MILLION PER YEAR IN THE LAST 5 YEARS OF PLANT LIFE, IF DEPRECIATION IS CALCULATED AS PROPOSED BY THE STAFF, AND AS ADOPTED BY THE COMMISSION IN PRIOR PROCEEDINGS. THE VENICE II PLANT RECENTLY RETIRED. DID THE DEPRECIATION EXPENSE ACTUALLY INCREASED IN MISSOURI DURING THE LAST FEW YEARS OF THIS STEAM PRODUCTION PLANT'S LIFE?

[18] From AmerenUE response to OPC 5053(b). The AmerenUE response also indicates that "drums" have long lives.
[19] From AmerenUE response to OPC 5053(a).
[20] Pages 4-6 of the Stout Rebuttal Testimony, and Schedule WMS-R1.

A. No. AmerenUE retired the Venice II steam production plant in 2002, but there was no increase in the depreciation rates in the last few years of that plant's life. In fact there was a $20 million annual reduction in the AmerenUE depreciation expense in the last few years of that plant's life. Attached as Schedule WWD-21 is a copy of AmerenUE's response to OPC request 5060, which verifies all of the above statements.

Q. SCHEDULE 4 ATTACHED TO THE REBUTTAL TESTIMONY OF WEIDMAYER CONTAINS AMERENUE'S RECOMMENDED TERMINAL NET SALVAGE VALUES FOR STEAM PRODUCTION PLANTS. PAGES 8 AND 10 OF MR. STOUTS REBUTTAL ADVOCATES THE RECOVERY OF THE AMERENUE ESTIMATED FUTURE COSTS OF DEMOLISHING THE STEAM PRODUCTION PLANTS. IN THE PAST HAS AMERENUE ALWAYS DEMOLISHED ITS RETIRED STEAM PRODUCTION PLANTS?[21]

A. No. AmerenUE did not demolish the retired Cahokia Steam Production Plant. As AmerenUE stated in response to discovery:

> "The Cahokia building and grounds were sold by the company over 25 years ago and the building remains standing today across the river from downtown St. Louis."[22]

Another AmerenUE responses states:

> "The Cahokia site is in Illinois across the river from down town St. Louis. The plant still stands and is recognizable by the six stacks on top."

[21] It should be noted that my areas of testimony pertaining to Steam Production and Hydraulic Production are very limited. I have not sponsored specific lives, terminal net salvage, or depreciation rate recommendations for Steam Production or Hydraulic Production.
[22] From AmerenUE response to OPC 5011(f).

NET SALVAGE PERCENTS FOR DISTRIBUTION AND TRANSMISSION ACCOUNTS

Q. IN HIS REBUTTAL TESTIMONY DOES MR. STOUT ESSENTIALLY AGREE WITH YOUR AND MR. SELECKY'S TESTIMONIES THAT INFLATION WAS VERY HIGH IN THE 1970S AND 1980S, THAT INFLATION IN THE FUTURE IS EXPECTED TO BE LOWER, AND THE HIGH PAST INFLATION IMPACTS THE CALCULATION OF THE HISTORIC NET SALVAGE PERCENT?

A. Yes. On page 11 of his Rebuttal he summarizes our position, and essentially agrees with all of the above. He states:

> "Messrs. Selecky and Dunkel and others have an expectation that future rates of inflation will be less than they have been over the past 30 or 40 years given the high levels of inflation during the 1970's and early 1980's. Based on this expectation, they have considered the amount of inflation reflected in the historical percents as compared to the amount of inflation that they expect to occur prior to future retirements. This is an appropriate exercise."

Q. IF HE DOES NOT DISPUTE THE DIFFERENCE BETWEEN PAST AND FUTURE INFLATION RATES, HOW DOES MR. STOUT RESPOND TO YOUR TESTIMONY?

A. Mr. Stout responds to this issue by misstating my testimony. He claims:

> "For example, the average age of retirements in Account 364, Poles and Fixtures, during the period 1961 to 2005 was not 43 years as used by Mr. Dunkel, but rather 26.3 years"[23]

[23] Page 12, lines 13-15, of the Rebuttal of Stout

However, my testimony on this issue specifically addressed "the poles that have retired in the last ten years," as shown on lines 1 and 2 of page 24 of my Direct Testimony. By claiming I was addressing the average age of retirement of the investments that retired "during the period 1961 to 2005" Mr. Stout misstated the period during which retirements were being examined. His misstatement of the retirement time period greatly altered the data. The workpapers he provided do show that the "average age of retirement" is 26.3 years for retirements in the 1961 through 2005 time period,[24] but that same data shows the "average age of retirement" was almost 40 years[25] for the retirements during the 1996-2005 time period used in my Direct Testimony. Mr. Stout's response is based on misstating my testimony.

Q. ARE THE RETIREMENTS DURING THE 1961 THROUGH 2005 TIME PERIOD THAT MR. STOUT USES IN HIS NET SALVAGE DISCUSSION RESPONSIVE TO THE STAFF POSITION, TO YOUR REBUTTAL TESTIMONY, OR TO THE TESTIMONY OF MR. SELECKY?

A. No. For net salvage calculations, the Staff used the data pertaining to the retirements that occurred during the past 5 years (2001-2005). In my Rebuttal I responded to Staff, and in that response I used the retirements during the same period Staff used, which is 2001-2005.[26] Mr. Selecky makes no mention of the 1961-2005 period.

Q. WHAT IS THE AVERAGE AGE OF RETIREMENT IN ACCOUNT 364 FOR THE RETIREMENTS IN THE PERIOD 2001-2005 (WHICH IS THE PERIOD STAFF USED AND THAT YOU USED IN YOUR REBUTTAL)?

[24] AmerenUE response to OPC 5062.
[25] 38.1 years average age of retirement for account 364, for retirements in the years 1996 through 2005, inclusive.
[26] Rebuttal Schedule WWD 16-1.

A. The "average age of retirement" for investments retiring during the years 2001-2005 was 41 years. This number is calculated from the same workpapers Mr. Stout provided that show the "average age of retirement" is 26.3 years for retirements in the 1961 through 2005 time period.[27] By misstating the time period of the retirements being examined, Mr. Stout has greatly misstated the data.

Q. WHAT DOES MR. STOUT DO WITH HIS NUMBER THAT IS BASED ON THE MISSTATEMENT OF YOUR TESTIMONY?

A. Based on the 26.3 years number that he created based upon his misstatement, he claims to have discovered another adjustment that more than offsets the difference between the past and future annual inflation rates. He claims to have discovered an alleged difference in past "average age of retirement"[28] as compared to the future "average probable life."[29] For example for account 364, Poles and Fixtures, Mr. Stout claims the past "average age of retirement" is 26.3 years,[30] but the future "average probable life" is more than the 43 year average service life.[31] His future "average probable life" number is over 60% larger than his past "average age of retirement" number. According to Mr. Stout, the alleged difference in the past "average age of retirement" as compared to the future "average probable life" more than offsets the difference between the past and future annual inflation rates, resulting in an increase in depreciation rates, according to Mr. Stout.[32]

Q. IS THE NUMBER HE IS USING FOR THE PAST, THE PAST "AVERAGE AGE OF RETIREMENT" COMPARABLE TO THE NUMBER HE IS USING FOR THE FUTURE, THE FUTURE "AVERAGE PROBABLE LIFE"?

[27] AmerenUE response to OPC 5062.
[28] Stout Rebuttal, page 12.
[29] Stout Rebuttal, page 14.
[30] Stout Rebuttal, page 12
[31] Stout Rebuttal, page 14
[32] Stout Rebuttal, page 13, line 18-20.

A. No. This is an "apples to oranges" comparison. The "average probable life" is almost always longer than the average service life, as Mr. Stout acknowledges on page 14, line 7, of his Rebuttal. So by using that for the future, he automatically gets a larger number for the future. However for the past he uses a different number; the "average age at retirement." This is a comparison of apples to oranges.

Q. FOR THIS ACCOUNT 364, IS THE FUTURE AVERAGE LIFE 60% LONGER THAN THE PAST AVERAGE LIFE, WHEN THE PAST AND FUTURE LIVES ARE CALCULATED ON A CONSISTENT BASIS?

A. No. First of all, the "average age of retirements" from retirements in the period used by the Staff, 2001-2005, was 41 years, which is not much different[33] than the 43 year average service life.

In addition, the "Public Utility Depreciation Practices," published by NARUC[34] establishes calculations for the average service life that treat the past consistently with the treatment of the future. In its life analysis, when AmerenUE used the consistent definitions of life for both the past and the future, AmerenUE found that the **past** data indicated an average service life of 43 years for this account 364, as shown on page A-74 of the AmerenUE Depreciation Study (Schedule JFW-E1). In the life analysis, AmerenUE also determined that 43 years was the appropriate average service life for the **future** for this account, as shown on page III-7 of the AmerenUE Depreciation Study (Schedule JFW-E1). When consistent definitions are used, the future average service life in this account is expected to be virtually the same as the past average service life. In other words, even AmerenUE's own life analysis shows nothing happened in this account in or near year 2005 that would make the future average life significantly different than the past average service life. AmerenUE's own life analysis says the future average service life in this account will **not** be 60% longer that the past

[33] 2 years difference/43 years = 5% difference.

average service life, but Mr. Stout alleges a 60% longer future life, by using inconsistent measures of the past and future.

Q. IN RESPONSE TO DISCOVERY, HAS AMERENUE ADMITTED THAT IN THEIR LIFE ANALYSIS THEY GENERALLY ASSUMED THE FUTURE AVERAGE LIFE WOULD BE SIMILAR TO THE PAST AVERAGE LIFE?

A. Yes. As shown by the following:

OPC 5063

> (f) Is it correct that in when determining the future average life as shown in the "Survivor Curve" column of page III-6 of the Company Depreciation Study, (Schedule JFW-E1), AmerenUE did assume that the future average life would generally be similar, or close to, the past average life? If this is not a correct statement, provide the corrected statement.

AmerenUE response:

> (f) The statement is generally correct.[35]

DISPLAY OF THE CALLAWAY NET SALVAGES

Q. IS THERE A BETTER WAY TO DISPLAY THE CALLAWAY NET SALVAGE PERCENTS YOU PREVIOUSLY RECOMMENDED?

[34] "Public Utility Depreciation Practices", published by NARUC (1996).
[35] AmerenUE response to OPC 5063(f). In addition AmerenUE makes related statements specifically pertaining to Account 364 in response to OPC 5063(g) and (h).

A. Yes. On pages 2-4 my Rebuttal Testimony, I pointed out that in account 322, Reactor Plant Equipment, the Staff -37% net salvage should only apply to the 36.9% of the investment that would retire as interim retirements, and the Staff agreed with his concept. On my Rebuttal Schedule WWD-14-4, I show the -37% as the Net **Interim** Salvage. That is correct but confusing. The 37% applies to 36.9% of the investment, so it would be less confusing to just show 13.7% (37% times 36.9% of the investment) as the overall Net Salvage for that account. Similar changes are made to the other nuclear accounts as shown on the attached is the Revised Rebuttal Schedule WWD-14-4. This does not significantly change the dollar impact. This is just a different display.

CONCLUSION

Q. WHAT DO YOU RECOMMEND?

A. I recommend:

(1) There is little or no disagreement with the fact that the past inflation was higher than the inflation expected in the future. This lower future inflation means the future net salvage percents will be lower than the historic past net salvage percents, resulting in an annual depreciation expense reduction of $26,735,191 to the Staff proposal, as explained in more detail on pages 4-14 of my Rebuttal and shown on Rebuttal Schedule WWD-14.

Mr. Stout claims that he has discovered a more-than-offsetting adjustment that is based on the future lives allegedly being 60% longer than the past. This alleged difference was calculated by Mr. Stout based on his misstatement of a time period used in my testimony. His claim of a significantly different future life compared to a past average age of retirement figure is not even supported by

AmerenUE's own life analysis. In their life recommendation for account 364, AmerenUE is recommending the future average service life of 43 years, which is identical to the 43 year average service life AmerenUE found in their analysis of the past historic life data. Mr. Stout's alleged more-than-offsetting adjustment is invalid and the $26,735,191 adjustment to the Staff proposal should be made.

(2) For the reasons discussed in this and prior testimonies, it is more-probable-than-not that Callaway will receive a license renewal. I recommend the same Callaway final retirement date that the Staff recommends, which is 10/2044.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes.

PROPOSED DEPRECIATION PARAMETERS

	Current			Company Proposal					Staff Proposal					Corrected Depreciation Rates[1] (Final 0% FNS, Interim Staff FNS%)				
	Life (Yr.)	Net Salvage (%)	Depreciation Rate (%)	Probable Retirement Year	Life (Yr.)	Curve (Iowa)	Net Salvage (%)	Depreciation Rate (%)	Probable Retirement Year	Life (Yr.)	Curve (Iowa)	Net Salvage (%)	Depreciation Rate (%)	Probable Retirement Year	Life (Yr.)	Curve (Iowa)	Net Salvage (%)	Depreciation Rate (%)
Nuclear Production Plant																		
Callaway Nuclear Production Plant																		
321 Structures & Improvements	40	0%	2.60%	10-2024	100	R1	0%	2.82%	10-2044	100	R1	-3%	1.97%	10-2044	100	R1	-0.5%	1.92%
322 Reactor Plant Equipment	40	4%	2.60%	10-2024	60	S0	0%	3.38%	10-2044	60	S0	-37%	3.10%	10-2044	60	S0	-13.7%	2.56%
323 Turbogenerator Units	40	0%	2.60%	10-2024	100	S0	0%	3.18%	10-2044	100	S0	-3%	2.08%	10-2044	100	S0	-0.5%	2.03%
324 Accessory Electrical Equipment	40	1%	2.60%	10-2024	80	R2	0%	2.74%	10-2044	80	R2	-2%	1.91%	10-2044	80	R2	-0.4%	1.88%
325 Miscellaneous Power Plant Equipment	40	2%	2.60%	10-2024	60	O1	0%	3.70%	10-2044	60	O1	-1%	2.49%	10-2044	60	O1	-0.3%	2.47%
Total Nuclear Production Plant																		

Note:
1. Corrected to apply the Staff future net salvage percent (FNS%) to the interim retirements and 0% FNS to the final retirements. See Staff Response to OPC DR#5103.

12/15/06

AmerenUE - Electric

ACCOUNT 322 REACTOR PLANT EQUIPMENT

ORIGINAL LIFE TABLE

PLACEMENT BAND 1985-2005 EXPERIENCE BAND 1985-2005

AGE AT BEGIN OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS DURING AGE INTERVAL	RETMT RATIO	SURV RATIO	PCT SURV BEGIN OF INTERVAL
0.0	1,065,301,379	186,822	0.0002	0.9998	100.00
0.5	898,449,528	254,847	0.0003	0.9997	99.98
1.5	892,870,201	5,335	0.0000	1.0000	99.95
2.5	876,587,745	54,350	0.0001	0.9999	99.95
3.5	875,878,595	2,279,192	0.0026	0.9974	99.94
4.5	873,581,678	9,385,296	0.0107	0.9893	99.68
5.5	844,015,695	97,995	0.0001	0.9999	98.61
6.5	841,957,471	591,481	0.0007	0.9993	98.60
7.5	836,658,100	2,924,470	0.0035	0.9965	98.53
8.5	833,583,216	224,840	0.0003	0.9997	98.19
9.5	829,955,004	3,554,966	0.0043	0.9957	98.16
10.5	820,091,194	334,681	0.0004	0.9996	97.74
11.5	811,666,943	3,270,349	0.0040	0.9960	97.70
12.5	808,086,115	4,578,331	0.0057	0.9943	97.31
13.5	799,731,686	10,004,920	0.0125	0.9875	96.76
14.5	783,719,597	1,493,814	0.0019	0.9981	95.55
15.5	776,415,842	369,872	0.0005	0.9995	95.37
16.5	771,125,957		0.0000	1.0000	95.32
17.5	768,988,025	4,096,604	0.0053	0.9947	95.32
18.5	783,948,692	3,201,398	0.0041	0.9959	94.81
19.5	776,216,486	81,326,021	0.1048	0.8952	94.42
20.5					84.52

Source: Staff Mathis workpapers provided 1/3/07. File name "PSCRetrate.prn".

Ameren's Response to
OPC Data Request
MPSC Case No. ER-2007-0002
AmerenUE's Tariff Filing to Increase Rates for Electric Service
Provided to Customers in the Company's Missouri Service Area

Requested From: Bill Dunkel

Data Request No. OPC 5060

Pages 4-6 and of the Rebuttal of Stout and Schedule WMS-R1 show a hypothetic in which the depreciation expense for a steam production plant would allegedly have to increase by over $10 million per year in the last 5 years, if depreciation is calculated as proposed by the Staff, and as adopted by the Commission in prior proceedings.

(a) Is it correct that AmerenUE retire the Venice II steam production plant in 2002? If this is not a correct statement, provide the corrected statement.

(b) Is it correct that there was no increase in the AmerenUE depreciation rates in the last five years of life of Venice II? If this is not a correct statement, provide the corrected statement and supporting documents.

(c) Is it correct that during the last few years of life of Venice II, there was actually a $20 million annual reduction in overall AmerenUE depreciation expense (as discussed in Section 8 of the Stipulation and Agreement in Case No. EC-2002-1)? If this is not a correct statement, provide the corrected statement.

Response:

(a) The statement is correct.

(b) The statement is correct, however, in Mr. Stout's opinion, there should have been such an increase in order to complete the recovery of Venice II's service value during its service life.

(c) The statement is correct, however, it should be noted that the decrease did not relate to steam production plant.

Prepared By: Bill Stout
Title: President, Valuation and Rate Division
Gannett Fleming, Inc.
Date: February 19, 2007