Exhibit No:	
Issue:	Depreciation
Witness:	William W. Dunkel
Type of Exhibit:	Direct Testimony
Case No.:	ER-2008-0318
Date Testimony Prepared:	August 28, 2008

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-2008-0318**

DIRECT TESTIMONY AND SCHEDULES

OF

WILLIAM W DUNKEL

ON BEHALF OF

OFFICE OF THE PUBLIC COUNSEL

OF THE STATE OF MISSOURI

BEFORE THE PUBLIC SERVICE COMMISSION
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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 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.

OFFICIAL SEAL
CHRISTY M. RUTHERFORD
Notary Public - State of Illinois
My Commission Expires Jul 09, 2011

William Dunkel
William Dunkel
Consultant

Subscribed and sworn to me this 27th day of August 2008.

Christy M. Rutherford
Notary Public

My commission expires 7-9-2011.

Q. Please state your name and address.

A. My name is William W. Dunkel. My business address is 8625 Farmington Cemetery Road, Pleasant Plains Illinois, 62677.

Q. What is your present occupation?

A. I am the principal of William Dunkel and Associates, which was established in 1980. Since that time, I have regularly provided consulting services in utility regulatory proceedings throughout the country. I have participated in over 200 state regulatory proceedings before over one-half of the state commissions in the United States. I have participated in utility regulatory proceedings for over 25 years.

Q. Have you prepared an appendix that describes your qualifications?

A. Yes. My qualifications, including a list of Missouri proceedings in which I participated, are shown on Appendix A.

Q. Have you previously testified in Missouri?

A. Yes, the previous Missouri proceedings I have participated in are listed below.

- American Water Company	
Depreciation rates	WR-2008-0311
- Empire District Electric Company	
Depreciation rates	ER-2008-0093
- AmerenUE	
Electric rate proceeding	ER-2007-0002
- Southwestern Bell	
General rate proceeding	TR-79-213
General rate proceeding	TR-80-256
General rate proceeding	TR-82-199
General rate proceeding	TR-86-84
General rate proceeding	TC-89-14, et al.
Alternative Regulation	TC-93-224/TO-93-192
- United Telephone Company	
Depreciation proceeding	TR-93-181

- All telephone companies

Extended Area Service	TO-86-8
EMS investigation	TO-87-131
Cost of Access Proceeding	TR-2001-65

Q. On whose behalf are you providing testimony?

A. I am providing this Testimony on behalf of the Office of the Public Counsel of the State of Missouri (OPC).

Q. What is the purpose of this testimony?

A. I am addressing a major problem with the Callaway Nuclear Production plant depreciation rates that AmerenUE used in its filing.

Q. Can you summarize your testimony?

A. Yes. I recommend the depreciation rates shown on page 2 of Schedule WWD-1. These depreciation rates properly use the actual book reserve amounts that were accumulated from the actual past depreciation rates. The Nuclear Production depreciation rates that AmerenUE is using are based on the lower, fictional "theoretical" reserve amounts. The Nuclear Production depreciation rates that AmerenUE filed will result in over-recovery, because the fictional "theoretical" reserve amounts understate the amount of the Callaway investment that has already actually been recovered from customers.

Q. Can you illustrate what is wrong with using the "theoretical" reserve instead of the actual reserve amount?

A. Yes. To illustrate the principle, assume that for the past decade, you have had a 20 year mortgage, and have actually paid off $50,000 of the principle on your house. You now refinance to a 30 year mortgage. The lender calculates that if you would have had a 30

year mortgage for the past decade, you would theoretically have only paid off $30,000. In calculating what remains for you to pay off in the future, the lender only gives you credit for the $30,000 "theoretical" amount, not the $50,000 that you have actually paid off. Such behavior by the lender would be outrageous, but that is exactly what AmerenUE is doing to the customers by using the "theoretical" depreciation reserve amount instead of the actual book reserve. The Commission should not let this happen.

Q. The depreciation rates AmerenUE is using in its filing are the depreciation rates determined in the prior AmerenUE general rate increase[1] Case No. ER-2007-0002. Has there been a major change since that prior case that significantly impacts Callaway?

A. Yes. In that prior general rate case, AmerenUE proposed Callaway depreciation rates that were calculated using a 40 year life-to-final-retirement for Callaway, based on the year 2024 expiration of the original Callaway nuclear operating license. I, as an OPC witness, and Staff testified that it was more likely than not that AmerenUE would file for a 20 year extension of the Callaway plant's nuclear operating license, to the year 2044. [2] Whether or not AmerenUE would file for a Callaway license extension was the major area of disagreement in the prior case pertaining to Callaway depreciation.

However, since that prior case, AmerenUE has announced that it <u>will be</u> filing for the 20 year extension of the Callaway plant's nuclear operating license, to the year 2044. As AmerenUE states on page 123.58 of its FERC Form 1, filed in 2008 (for the year 2007):

[1] 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
[2] Pages 85-88, Report and Order, Issued May 22, 2007, Case No. ER-2007-0002.

> "UE intends to submit a license extension application with the NRC to extend its Callaway nuclear plant's operating license to 2044."

The referenced page of that FERC Form 1 is attached hereto as Schedule WWD-2.

Also, on page 10 of his of the Direct Testimony in this current proceeding, Gary S. Weiss states:

> "In addition, the Company is preparing a filing for the Callaway 1 License Extension."

In addition, AmerenUE is even including in this filing $369,000 of expense for the Callaway 1 license extension.[3]

When the current Callaway depreciation rates were set, whether or not AmerenUE would file for a 20 year extension of the Callaway plant's nuclear operating license was the major area of dispute pertaining to Callaway depreciation. However AmerenUE has now made it very clear that it <u>will file</u> for the Callaway 1 license extension. Knowing AmerenUE will file for the Callaway license extension is a major change from the prior case, when that filing was a disputed issue.

Q. Has the Nuclear Regulatory Commission (NRC) ever rejected a request for the license extension for a commercial nuclear reactor?

A. No. The NRC has required companies to correct problems. However, the NRC has never refused to renew a commercial nuclear power reactor's initial license for the additional twenty years.[4]

[3] Page 10 of the Direct Testimony of Gary S. Weiss.

Q. What is the impact of the Callaway "life" issue no longer being in contention?

A. We can now focus attention on the other major problem with the Callaway depreciation rates, which is the use of the "theoretical" reserve instead of the actual "book" reserve. In the prior case the OPC and other parties properly concentrated on the largest Callaway issue, which was the "life" issue. In the prior case, the difference between a 40 year and a 60 year life-to-final-retirement had an annual impact of over $28 million, so the OPC and other parties concentrated on that issue.[5] It is now clear that AmerenUE will file for a license extension, so in this case we can focus attention on the remaining major problem in the Callaway depreciation rates. That remaining problem is that the Callaway depreciation rates effectively use fictional depreciation reserve amounts, called the "theoretical reserve," instead of using the actual book reserve amounts.

Q. Why do the Callaway depreciation rates approved in the prior proceeding use the fictional "theoretical reserve" amounts instead of the actual book reserve amounts?

A. One reason is that in the prior case parties did not focus on this "theoretical" reserve issue, because they were properly concentrating on the more significant Callaway "life" issue. The fact that the parties did not significantly address this "theoretical reserve" issue is clear from pages 94-95 of the Commission May 22, 2007 Order in Case No. ER-2007-0002:

[4] Of the 24 applications received prior to March 2005, including the Palisades application received March, 2005, all 24 have been issued a renewal license (some applications involving more than one plant, and/or plants with more than one unit). http://www.nrc.gov/reading-rm/doc-collections/fact-sheets/license-renewal-bg.pdf visited on 8/12/2008.

[5] $88.9 million if retires in 2024 - $60.4 million if retires in 2044 = $28.5 million annual difference. See Attachment 1, "Nonunanimous Stipulation and Agreement Regarding Certain Depreciation Issues" dated March 19, 2007 in Case No. ER-2007-0002.

"**G. Is There a Difference between Actual Book Accumulated and Theoretical Accrued Depreciation?**

Discussion:

In her direct testimony for Staff, Jolie Mathis indicated AmerenUE's theoretical reserve has become imbalanced with actual book accumulated depreciation. At the time Mathis filed her testimony, Staff did not recommend any adjustment to correct that imbalance, but noted the imbalance would need to be monitored in future depreciation studies (citation omitted).

No other party responded to that statement in testimony, but in the nonunanimous stipulation and agreement regarding certain stipulation issues, AmerenUE and Staff agreed as follows:

> e. AmerenUE shall not seek to recover from its customers the difference between the book reserve balance and the theoretical reserve balance reserve for any account. AmerenUE shall transfer $82,067,828 of the accumulated depreciation reserve from the Distributed Plant accounts to the General Plant accounts.

Conclusions of Law:

Although two parties objected to other aspects of the depreciation stipulation and agreement, no party objected to this provision. The provision can be taken as an expression of the positions of the signatory parties.

Findings of Fact:

This stipulated position of Staff and AmerenUE is necessary to correct an imbalance between depreciation accounts and will have no impact on depreciation rates. It is not opposed by any party.

Decision:

The stipulated position of Staff and AmerenUE is accepted."

It should be noted that the above "Findings of Fact" appears to be discussing the transfer of $82,067,828 of the accumulated depreciation reserve from the Distribution Plant accounts to the General Plant accounts. The use of the theoretical reserve instead of the book reserve to calculate the depreciation rates for the Callaway facility does have a significant "impact on depreciation rates," as can be seen on page 1 of Schedule WWD-1.

As can be seen in the above quotation from the Commission Order, the two things the Commission relied on in the prior decision on this "theoretical reserve" issue are (1) the Nonunanimous Stipulation and Agreement entered into by the Staff and AmerenUE in that prior case, and (2) the fact that no party objected.

Q. In this current case, does the OPC object to using the theoretical reserve balance instead of the book reserve balance to calculate the Callaway depreciation rates?

A. Yes. In this case OPC does hereby object to using the theoretical reserve balance instead of the book reserve balance to calculate the Callaway depreciation rates. Therefore the statement that no party objected to the use of the theoretical reserve does not apply to this current case.[6]

Q. Does the fact that in the prior general rate case, AmerenUE and Staff in the "Nonunanimous Stipulation and Agreement Regarding Certain Depreciation Issues" agreed to use the theoretical reserve balance instead of the book reserve balance establish a precedent that must be followed in this case?

A. On advice of attorney, no. This is a different general rate proceeding. That Nonunanimous Stipulation and Agreement was in the prior general rate proceeding. In fact paragraph 4 of that Nonunanimous Stipulation and Agreement specifically says it was <u>not</u> creating a precedent:

> "4. This Agreement is being entered into for the purpose of disposing of the issues that are specifically addressed in this Agreement. In presenting this Agreement, none of the Signatories to this Agreement shall be deemed

[6] OPC is not objecting to the transfer of $82,067,828 of the accumulated depreciation reserve from the Distribution Plant accounts to the General Plant accounts. That transfer has no impact on the Nuclear Production accounts, which is what I am addressing in this testimony.

> to have approved, accepted, agreed, consented or acquiesced to any ratemaking principle or procedural principle, including, without limitation, any method of cost or revenue determination or cost allocation or revenue related methodology or any depreciation procedure, method or technique; and none of the Signatories shall be prejudiced or bound in any manner by the terms of this Agreement (whether this Agreement is approved or not) in this or any other proceeding, other than a proceeding limited to enforce the terms of this Agreement, except as otherwise expressly specified herein."

The two factors on which the Commission decision on this "theoretical reserve" issue was based upon in the prior case, (1) the Nonunanimous Stipulation entered into by the Staff and AmerenUE and (2) "no party objected," do not exist in this case.

Q. As previously quoted, page 94 of the Commission Order in the prior case, Case No. ER-2007-0002 stated:

> **"Staff did not recommend any adjustment to correct that imbalance, but noted the imbalance would need to be monitored"**

For Callaway, has the "imbalance" between the actual and theoretical reserve grown drastically since the data used in the prior case?

A. Yes. The depreciation study in the prior case used reserve amounts as of December 31, 2005. At that time the actual Callaway book reserve was $145 million above the theoretical reserve.[7] However, the higher depreciation rates based on a 40 year life-to-final-retirement continued to be collected and added to the reserve for another 18 months, until June 1, 2007.[8] By December 31, 2007 the actual book reserve has grown to be over $250 million more than the theoretical reserve, as shown on Schedule WWD-5.[9] The

[7] $144,621,539 from Schedule JLM-3 attached to the Direct Testimony of Staff Witness Jolie L. Mathis in Case No. ER-2007-0002. This theoretical reserve used the 60 year life (final retirement at 2044).
[8] The new depreciation rates that for the first time use 60 years to final retirement went into effect 06/01/2007 (page 336, AmerenUE FERC Form 1 for End of 2007/Q4).
[9] This theoretical reserve uses the 60 year life (final retirement at 2044).

"imbalance" between the Callaway actual and theoretical reserve is now much larger than the "imbalance" in the data that was used in the prior case. An "imbalance" of over $250 million cannot properly be ignored.

Q. Is the use of the actual book reserve necessary in order to properly depreciate the investment over the service life?

A. Yes. In fact in the prior case in which the current depreciation rates were established, Case No. ER-2007-0002, AmerenUE originally filed using the whole life depreciation technique that included the adjustment to the actual book reserve amounts. As previously discussed, the outcome of that case instead used the "theoretical" reserve, not adjusted for the book reserve, but that is not what AmerenUE proposed in its Direct Testimony. In its Direct Testimony, the AmerenUE depreciation witness stated that the depreciation rates should be adjusted to reflect the book accumulated depreciation reserve "to insure complete recovery of capital over the life of the property."[10]

In that AmerenUE proceeding, AmerenUE witness Wiedmayer stated "The reserve variance amortization developed in this study is based on the variance between the book accumulated depreciation and the calculated accrued depreciation using an amortization period equal to the composite remaining life for each property group."[11] (Note that "calculated accrued depreciation" is another term for "theoretical reserve".) He stated

[10] Page II-31, Schedule JFW-E1, AmerenUE Depreciation Study at December 31, 2005, attached to the Direct Testimony of John F. Wiedmayer, Case No. ER-2007-0002. See Schedule WWD-4

[11] Page II-31, Schedule JFW-E1, AmerenUE Depreciation Study at December 31, 2005, attached to the Direct Testimony of John F. Wiedmayer, Case No. ER-2007-0002. See Schedule WWD-4

that using the "book" accumulated depreciation reserve amount was "to insure complete recovery of capital over the life of the property."[12]

Attached as Schedule WWD-4 are the pages from the Direct Testimony of AmerenUE witness Wiedmayer in which he makes the above statements. Pages 5 and 6 of this Schedule WWD-4 is Mr. Wiedmayer's Schedule from his Direct testimony in that prior case in which he adjusts the Callaway depreciation rates to use the book accumulated depreciation reserve amounts.

Q. Do you agree with Mr. Wiedmayer that the use of the book accumulated depreciation reserve amounts in the calculation of the depreciation rates is needed "to insure complete recovery of capital over the life of the property?"[13]

A. Yes. In this proceeding for Callaway as shown on Schedule WWD-3, I am making the same calculations that AmerenUE witness Mr. Wiedmayer recommended and did in his Direct Testimony in Case No. ER-2007-0002. As he did, I am recovering the "variance between the book accumulated depreciation and the calculated accrued depreciation using an amortization period equal to the composite remaining life for each property group." As Mr. Wiedmayer said, use of the book accumulated depreciation reserve amounts in the calculation of the depreciation rates is needed "to insure complete recovery of capital over the life of the property."

[12] Page II-31, Schedule JFW-E1, AmerenUE Depreciation Study at December 31, 2005, attached to the Direct Testimony of John F. Wiedmayer, Case No. ER-2007-0002. See Schedule WWD-4

[13] Page II-31, Schedule JFW-E1, AmerenUE Depreciation Study at December 31, 2005, attached to the Direct Testimony of John F. Wiedmayer, Case No. ER-2007-0002. See Schedule WWD-4

Q. Does the Uniform System of Accounts (USOA), which is the standard that applies to cases such as this, require that the service value of the property be recovered over the service life of the property?

A. Yes. Recovering the investment and other service value over the service life of the property is part of proper depreciation rates. The FERC Uniform System of Accounts (USOA) requires:

> "22. *Depreciation Accounting.*
> A. *Method.* Utilities must use a method of depreciation that allocates in a systematic and rational manner the service value of depreciable property **over the service life of the property**.
> B. *Service lives.* Estimated useful service lives of depreciable property must be supported by engineering, economic, or other depreciation studies.
> C. *Rate.* Utilities must use percentage rates of depreciation that are based on a method of depreciation that allocates in a systematic and rational manner the service value of depreciable property to **the service life of the property.** Where composite depreciation rates are used, they should be based on the weighted average estimated useful service lives of the depreciable property comprising the composite group."[14] (Emphasis added).

Q. Can you demonstrate why using the existing book accumulated depreciation reserve amount is necessary in order to recover the service value "over the service life of the property"?

A. Yes. The investment is not depreciated "over the service life" if there is no recognition of the actual book depreciation reserve amount. For example, assume an investment of $1,000 with an average service life of 10 years. Also assume this investment is not new. It has already been in service several years, and has only 4 years before it retires.[15]

[14] General Instruction number 22 of FERC USOA 18 C.F.R. 101
[15] For simplicity, this example also assumes 0% net salvage and no "interim" retirements.

Under "unadjusted" whole life depreciation, the annual depreciation expense would be $100 ($1,000/10 years = $100 per year). Since there are only 4 years remaining before the investment retires, $400 will be collected under the new rates and added to the depreciation reserve amount.[16] However, $1,000 is needed when the investment retires, so the "unadjusted" whole life calculation effectively assumes that there is already $600 in the depreciation reserve account. This assumed $600 is called the "theoretical" reserve amount.[17] However, if there is only $500 in the actual book depreciation reserve account, collecting an additional $400 in future depreciation accruals would mean that only $900 ($500 in depreciation reserve plus $400 in future accruals) will be collected over the service life of the property. This causes an under collection of $100.[18] On the other hand if there is $700 in the actual book depreciation reserve account, collecting an additional $400 in future depreciation accruals would cause a total collection of $1,100 ($700 in depreciation reserve plus $400 future accruals) and result in an over collection of $100.[19]

Without an adjustment for the actual booked depreciation reserve, the "unadjusted" whole life rate will not recover the value of the investment over the service life, except in the rare instance in which the book depreciation reserve amount happens to equal the "theoretical" reserve amount.

[16] $100 per year in each of the remaining four years = $400.
[17] 4 years * $100 per year = $400 depreciation expense accrued in the future. $600 already in the depreciation reserve account + $400 additional depreciation expense = $1,000.
[18] 4 years * $100 per year = $400 depreciation expense accrued in the future. $500 already in the depreciation reserve account + $400 additional depreciation expense = $900. $900 depreciation accruals collected - $1,000 amount retired = $100 under recovered.
[19] 4 years * $100 per year = $400 depreciation expense accrued in the future. $700 already in the depreciation reserve account + $400 additional depreciation expense = $1,100. $1,100 depreciation accruals collected - $1,000 amount retired = $100 over recovered.

Q. Is it difficult to include the existing book accumulated depreciation reserve amounts in a whole life depreciation study?

A. No. This is a very simple calculation, and all of the numbers required for that calculation are developed for other parts of the depreciation calculation. For example, if the difference between the book reserve and the theoretical reserve for an account is $100, and the average remaining life is 4 years, the adjustment is just the reserve difference (of $100) divided by remaining life (4 years), for an adjustment of $25 per year ($100/4 years = $25). All of the input numbers are readily available in the standard computer programs used for depreciation studies.

Attached as Schedule WWD-4 are pages from the Direct Testimony of AmerenUE witness Mr. Wiedmayer in Case No. ER-2007-0002. Pages 5 and 6 show how simple this calculation to include the book accumulated depreciation reserve amount in the depreciation rate calculation is. In this proceeding for Callaway, I make the similar calculations to use the book accumulated depreciation reserve amount in the depreciation rate calculations, as shown on Schedule WWD-3.

Q. AmerenUE is using the "theoretical" depreciation reserve amount, not the actual book reserve amount. What is the "theoretical" reserve?

A. The "Theoretical Depreciation Reserve" is: "The calculated balance that would be in the accumulated depreciation account at a point in time using the current depreciation parameters, such as average service life and net salvage."[20]

[20] Page 325, Glossary, Public Utility Depreciation Practices, Published by the National Association of Regulatory Utility Commissioners (NARUC), August 1996.

When the depreciation rates were determined in Case No. ER-2007-0002, the Commission had ordered the use of the 60 year life-to-final-retirement for Callaway. So the "theoretical" depreciation reserve was the "calculated balance that would be in the accumulated depreciation account" if the past depreciation rates had been based on the 60 year life-to-final-retirement. But the actual past depreciation rates were not based on a 60 year life, the actual past depreciation rates were the higher depreciation rates that were based on a 40 year life-to-final-retirement. For over two decades, customer rates have been supporting Callaway depreciation expenses that assumed a 40 year life-to-final-retirement. Depreciation rates that assume a 40 year life are higher than depreciation rates that assume a 60 year life.

Under USOA requirements, an amount equal to the depreciation expense is credited into the depreciation reserve (Accumulated Provision for Depreciation, Account 108).[21] Therefore the high level of Callaway depreciation rates that customers have supported for over two decades (based on a 40 year life) have resulted in an actual book depreciation reserve that is much higher than the "theoretical" reserve that assumes the 60 year life had always been used to calculate the past depreciation rates.

For example, in Callaway account 321, Structure and Improvements, the actual book depreciation reserve (Account 108, Accumulated Provision for Depreciation) as of 12/31/2007 was $482,970,249. This actual reserve amount was accumulated from the past actual depreciation expenses that were recovered in customer rates. Up until

[21] Account 108- "Accumulated provision for depreciation of electric utility plant" in the FERC USOA for Public Utilities (18CFR101 "Uniform System of Accounts Prescribed for Public Utilities and Licensees Subject to the Provisions of the Federal Power Act")

6/01/2007 those actual past depreciation rates were the higher rates that were based on a 40 year life-to-final-retirement.[22] However the "theoretical" reserve, which assumes the 60 year life-to-final-retirement had been used in the past depreciation rates, is only $321,793,642, as shown on Schedule WWD-5. For this one account, the use of the "theoretical" reserve amount ignores $161,176,607 of actual dollars that have been accumulated from the past actual depreciation rates supported in the past by customers.[23] When all of the Callaway accounts are considered, using the "theoretical" reserve amounts instead of the actual book reserve amounts ignores $252,426,136 of actual dollars that have been accumulated in the actual book reserve from the past depreciation rates, supported in the past by customers, as shown on Schedule WWD-5.

Q. Does using the "theoretical" reserve result in improperly high depreciation rates for Callaway?

A. Yes. The use of the "theoretical" reserve means the Callaway depreciation rates are designed to actually over-recover, which is an improper depreciation practice. $933,629,748 should be recovered over the service life in Callaway account 321, Structure and Improvements. This includes recovering the investment and recovering the net salvage, as shown on Schedule WWD-6. As shown on Schedule WWD-6, the 1.97% depreciation rate AmerenUE is using is designed to collect $609,126,771 in the future for this investment. The actual book reserve is $482,970,249. So at the 1.97% depreciation rate, AmerenUE will collect a total of $1,092,097,020 ($482,970,249 already in the Reserve plus $609,126,771 future depreciation expense = $1,092, 097,020). Over the life

[22] The new depreciation rates that for the first time use 60 years to final retirement went into effect 6/01/2007 (page 336, AmerenUE FERC Form 1 for End of 2007/Q4)
[23] $482,970,249 book reserve - $321,824,910 "theoretical" reserve = $161,145,339.

of the investment, the 1.97% rate will over-collect by $158,467,272 ($933,629,748 - $1,092,097,020) on this one Callaway account.

Q. What do you propose for this account?

A. I propose that the depreciation rate not be designed to either over or under recover. As the AmerenUE witness Mr. Wiedmayer did in his Direct Testimony in Case No. ER-2007-0002, I calculate the depreciation rate using the actual book reserve amount.[24] This produces a depreciation rate of 1.46% for this account, account no. 321. The 1.46% depreciation rate is designed to collect $451,410,887[25] in the future for this investment. This, along with the $482,970,249 that is already in the depreciation reserve, fully recovers the desired $933,629,748[26] investment and net salvage.

In my recommendation I used the actual book reserves and investments as of 12/31/2007. All other parameters (dispersion (curves), net salvage factors, and year 2044 final retirement date) used in these calculations are the same parameters as adopted by the Commission in Case No. ER-2007-0002.

[24] To do this I recover the difference between the book accumulated depreciation and the theoretical reserve over an amortization period equal to the average remaining life of the account.
[25] $13,233,975 annual accrual from page 3 of Schedule WWD-3 times 34.11 years average remaining life = $451,410,887 recovered over remaining life.
[26] The calculated amount recovered is slightly larger than $933,629,748 due to rounding of the depreciation rate.

Q. Above you discussed just one Callaway account, account no. 321. When all Callaway accounts are included, how much do the depreciation rates AmerenUE is using over-depreciate over the life of the investments?

A. When all Callaway accounts are included, the depreciation rates AmerenUE is using will over-depreciate by $242,736,877 over the life of the investments, as shown on Schedule WWD-6.

Q. What is the impact on the annual depreciation expense that results from using the actual book reserve, instead of the theoretical reserve amounts for Callaway?

A. Using the actual book reserve amounts for all the Callaway accounts results in an annual depreciation expense that is $7,063,093 less per year than results from the depreciation rates AmerenUE is using, as shown on Schedule WWD-1.

Q. You have discussed the Nuclear Production (Callaway) accounts. What about the other, non-nuclear accounts, which are the Distribution, Transmission, General Plant, Steam Production, Hydraulic Production and Other Production accounts?

A. I am limiting the issues the Commission must address in this case by only addressing the most significant, largest dollar, depreciation issue that I have discovered to date. In this case I have properly focused on the Nuclear Production (Callaway) category because it is the largest problem and there has been a major change that impacts Callaway.

Since the prior case, there has been a major change of circumstances for Callaway. Whether or not AmerenUE would file for a Callaway license extension was the major area of disagreement in the prior case. However, since that prior case, AmerenUE has

announced that it will be filing for the 20 year extension of the Callaway plant's nuclear operating license, to the year 2044.

For Nuclear Production there is a huge difference of over $250 million between the theoretical and actual reserve, primarily because for Nuclear Production the past depreciation rates that put money in the actual book reserve were based on a 40 year life-to-final-retirement, but the "theoretical" reserve amount is calculated assuming a 60 year life-to-final-retirement was always used for the past depreciation rates. This difference impacts only the Nuclear Production accounts.

I did discovery seeking depreciation information for all accounts, but AmerenUE objected to those requests. In spite of their objections, AmerenUE did provide usable information for the Callaway/Nuclear Production accounts, but did not provide usable information for the Steam Production, Hydraulic Production, Distribution or General Plant accounts.[27]

At some point the actual book reserve amounts, not the theoretical reserve amounts, should be used in calculating the proposed depreciation rates for all accounts. If the Commission chooses to order that the depreciation rates in all the accounts be adjusted to use actual reserve using the parameters as established in the prior Case No. ER-2007-

[27] These requests that AmerenUE objected to were OPC 5026 and 5027. AmerenUE has provided no data in response to OPC 5026, and the data they provided in response to OPC 5027 was usable for Nuclear accounts, but was not usable for Steam Production, Hydraulic Production, Distribution or General Plant accounts. For example, in depreciation the different Steam Production plants (Meramec, Sioux, Labadie and Rush Island) much each be analyzed separately because they have different expected retirement dates. The OPC requested the Steam Production information broken down by production plant, but AmerenUE did not provide the Steam Production information broken down by production plant. This problem does not impact the Callaway Nuclear Production plant, because Callaway is the only nuclear plant, and therefore the Nuclear Production Plant amounts provided by AmerenUE are the Callaway amounts.

0002 I would have no objection to that, but AmerenUE did not provide the needed data for the other accounts; and the Commission should expect that would produce a lower depreciation expense overall for the non-nuclear account than produced by the current rates.[28]

Q. What do you recommend?

A. I recommend the OPC depreciation rates shown on Schedule WWD-1. These depreciation rates properly use the actual book reserve amounts that were accumulated from the actual past depreciation rates that were supported by the customers. The Nuclear Production depreciation rates that AmerenUE is using are based on the lower, fictional "theoretical" reserve amounts. The Nuclear Production depreciation rates that AmerenUE is using will result in over-recovery, because the fictional "theoretical" reserve amounts understate the amount of the investment that has already actually been recovered from the customers.

Q. Does this conclude your testimony?

A. Yes.

[28] Based on data from the prior case, for the non-nuclear accounts in total, using the parameters adopted by the Commission in Case No. ER-2007-0002, and using the actual reserves instead of the theoretical reserves would most likely result in a lower total depreciation expense for the non-nuclear accounts than results from the current rates, so not adjusting the non-nuclear accounts in this case is conservative, and very likely is beneficial to AmerenUE.

William Dunkel, Consultant
8625 Farmington Cemetery Road
Pleasant Plains, Illinois 62677

Qualifications

The Consultant is a consulting engineer specializing in utility regulatory proceedings. He has participated in over 200 state regulatory proceedings as listed on the attached Relevant Work Experience.

The Consultant has provided cost analysis, rate design, jurisdictional separations, depreciation, expert testimony and other related services to state agencies throughout the country in numerous state regulatory proceedings.

The Consultant made a presentation pertaining to Video Dial Tone at the NASUCA 1993 Mid-Year Meeting held in St. Louis.

In addition, the Consultant also made a presentation to the NARUC Subcommittee on Economics and Finance at the NARUC Summer Meetings held in July, 1992. That presentation was entitled "The Reason the Industry Wants to Eliminate Cost Based Regulation--Telecommunications is a Declining Cost Industry."

The Consultant provides services almost exclusively to public agencies, including the Public Utilities Commission, the Public Counsel, or the State Department of Administration in various states.

William Dunkel currently provides, or in the past has provided, services in state utility regulatory proceedings to the following clients:

The Public Utility Commission or the Staffs in the States of:

Arkansas	Maryland
Arizona	Mississippi
Delaware	Missouri
D.C.	New Mexico
Georgia	Utah
Guam	Virginia
Illinois	Washington
Kansas	U.S. Virgin Islands

The Office of the Public Advocate, or its equivalent, in the States of:

Alaska	Maine
California	Maryland
Colorado	Missouri
District of Columbia	New Jersey
Georgia	New Mexico
Hawaii	Ohio
Illinois	Pennsylvania
Indiana	Utah
Iowa	Washington

The Department of Administration in the States of:

Illinois	South Dakota
Minnesota	Wisconsin

The Consultant graduated from the University of Illinois in February, 1970 with a Bachelor of Science Degree in Engineering Physics with emphasis on economics and other business-related subjects. The Consultant has taken several post-graduate courses since graduation.

From 1970 to 1974, the Consultant was a design engineer for Sangamo Electric Company (Sangamo was later purchased by Schlumberger) designing electric watt-hour meters used in the electric utility industry. The Consultant was granted patent No. 3822400 for a solid state meter pulse initiator which was used in metering.

In April, 1974, the Consultant was employed by the Illinois Commerce Commission in the Electric Section as a Utility Engineer. In November of 1975, he transferred to the Telephone Section of the Illinois Commerce Commission and from that time until July, 1980, he participated in essentially all telephone rate cases and other telephone rate matters that were set for hearing in the State of Illinois. During that period, he testified as an expert witness in numerous rate design cases and tariff filings in the areas of rate design, cost studies and separations. During the period 1975-1980, he was the Separations and Settlements expert for the Staff of the Illinois Commerce Commission.

From July, 1977 until July, 1980, he was a Staff member of the FCC-State Joint Board on Separations, concerning the "Impact of Customer Provision of Terminal Equipment on Jurisdictional Separations" in FCC Docket No. 20981 on behalf of the Illinois Commerce Commission. The FCC-State Joint Board is the national board that specifies the rules for separations in the telephone industry.

The Consultant has taken the AT&T separations school which is normally provided to the AT&T personnel.

The Consultant has taken the General Telephone separations school which is normally provided for training of the General Telephone Company personnel in separations.

The Consultant has completed an advanced depreciation program entitled "Forecasting Life and Salvage" offered by Depreciation Programs, Inc.

Mr. Dunkel is a senior member of the Society of Depreciation Professionals.

Since July 1980 he has been regularly employed as an independent consultant in state utility regulatory proceedings across the nation.

He has testified before the Illinois House of Representatives Subcommittee on Communications, as well as participated in numerous other schools and conferences pertaining to the utility industry.

RELEVANT WORK EXPERIENCE OF
WILLIAM DUNKEL

ALASKA

- AWWU	Docket No. U-08-004
- Enstar Natural Gas Company	Docket No. U-07-174
- ML&P	Docket No. U-06-006
- ACS of Anchorage	Docket No. U-01-34
- ACS	
General rate case	Docket Nos. U-01-83, U-01-85, U-01-87
AFOR proceeding	Docket No. R-03-003
- All Companies	
Access charge proceeding	Docket No. R-01-001
- Interior Telephone Company	Docket No. U-07-75
- OTZ Telephone Cooperative	Docket No. U-03-85

ARIZONA

- U.S. West Communications (Qwest)	Cost of Service Study
Wholesale cost/UNE case	Docket No. T-00000A-00-0194
General rate case	Docket No. E-1051-93-183
Depreciation case	Docket No. T-01051B-97-0689
General rate case/AFOR proceeding	Docket No. T-01051B-99-0105
AFOR proceeding	Docket No. T-01051B-03-0454

ARKANSAS

- Southwestern Bell Telephone Company	Docket No. 83-045-U

CALIFORNIA

(on behalf of the Office of Ratepayer Advocates (ORA))

- Kerman Telephone General Rate Case	A.02-01-004

(on behalf of the California Cable Television Association)

- General Telephone of California	I.87-11-033
- Pacific Bell	
Fiber Beyond the Feeder Pre-Approval Requirement	

COLORADO

- Mountain Bell Telephone Company	
General Rate Case	Docket No. 96A-218T et al.
Call Trace Case	Docket No. 92S-040T
Caller ID Case	Docket No. 91A-462T

General Rate Case	Docket No. 90S-544T
Local Calling Area Case	Docket No. 1766
General Rate Case	Docket No. 1720
General Rate Case	Docket No. 1700
General Rate Case	Docket No. 1655
General Rate Case	Docket No. 1575
Measured Services Case	Docket No. 1620
- Independent Telephone Companies	
Cost Allocation Methods Case	Docket No. 89R-608T

DELAWARE

- Diamond State Telephone Company	
General Rate Case	PSC Docket No. 82-32
General Rate Case	PSC Docket No. 84-33
Report on Small Centrex	PSC Docket No. 85-32T
General Rate Case	PSC Docket No. 86-20
Centrex Cost Proceeding	PSC Docket No. 86-34

DISTRICT OF COLUMBIA

- C&P Telephone Company of D.C.	
Depreciation issues	Formal Case No. 926

FCC

- Review of jurisdictional separations	FCC Docket No. 96-45
- Developing a Unified Intercarrier Compensation Regime	CC Docket No. 01-92

FLORIDA

- BellSouth, GTE, and Sprint	
Fair and reasonable rates	Undocketed Special Project

GEORGIA

- Southern Bell Telephone & Telegraph Co.	
General Rate Proceeding	Docket No. 3231-U
General Rate Proceeding	Docket No. 3465-U
General Rate Proceeding	Docket No. 3286-U
General Rate Proceeding	Docket No. 3393-U

HAWAII

- GTE Hawaiian Telephone Company	
Depreciation/separations issues	Docket No. 94-0298
Resale case	Docket No. 7702

ILLINOIS

- Commonwealth Edison Company	
General Rate Proceeding	Docket No. 80-0546
General Rate Proceeding	Docket No. 82-0026
Section 50	Docket No. 59008
Section 55	Docket No. 59064
Section 50	Docket No. 59314
Section 55	Docket No. 59704
- Central Illinois Public Service	
Section 55	Docket No. 58953
Section 55	Docket No. 58999
Section 55	Docket No. 59000
Exchange of Facilities (Illinois Power)	Docket No. 59497
General Rate Increase	Docket No. 59784
Section 55	Docket No. 59677
- South Beloit	
General Rate Case	Docket No. 59078
- Illinois Power	
Section 55	Docket No. 59281
Interconnection	Docket No. 59435
- Verizon North Inc. and Verizon South Inc.	Docket No. 02-0560
DSL Waiver Petition Proceeding	
- Geneseo Telephone Company	
EAS case	Docket No. 99-0412
- Central Telephone Company	
(Staunton merger)	Docket No. 78-0595
- General Telephone & Electronics Co.	
Usage sensitive service case	Docket Nos. 98-0200/98-0537
General rate case (on behalf of CUB)	Docket No. 93-0301
(Usage sensitive rates)	Docket No. 79-0141
(Data Service)	Docket No. 79-0310
(Certificate)	Docket No. 79-0499
(Certificate)	Docket No. 79-0500
- General Telephone Co.	Docket No. 80-0389
- SBC	
Imputation Requirement	Docket No. 04-0461
Implement UNE Law	Docket No. 03-0323
UNE Rate Case	Docket No. 02-0864
Alternative Regulation Review	Docket No. 98-0252
- Ameritech (Illinois Bell Telephone Company)	
Area code split case	Docket No. 94-0315

General Rate Case	Docket No. 83-0005
(Centrex filing)	Docket No. 84-0111
General Rate Proceeding	Docket No. 81-0478
(Call Lamp Indicator)	Docket No. 77-0755
(Com Key 1434)	Docket No. 77-0756
(Card dialers)	Docket No. 77-0757
(Concentration Identifier)	Docket No. 78-0005
(Voice of the People)	Docket No. 78-0028
(General rate increase)	Docket No. 78-0034
(Dimension)	Docket No. 78-0086
(Customer controlled Centrex)	Docket No. 78-0243
(TAS)	Docket No. 78-0031
(Ill. Consolidated Lease)	Docket No. 78-0473
(EAS Inquiry)	Docket No. 78-0531
(Dispute with GTE)	Docket No. 78-0576
(WUI vs. Continental Tel.)	Docket No. 79-0041
(Carle Clinic)	Docket No. 79-0132
(Private line rates)	Docket No. 79-0143
(Toll data)	Docket No. 79-0234
(Dataphone)	Docket No. 79-0237
(Com Key 718)	Docket No. 79-0365
(Complaint - switchboard)	Docket No. 79-0380
(Porta printer)	Docket No. 79-0381
(General rate case)	Docket No. 79-0438
(Certificate)	Docket No. 79-0501
(General rate case)	Docket No. 80-0010
(Other minor proceedings)	Docket No. various
- Home Telephone Company	Docket No. 80-0220
- Northwestern Telephone Company	
Local and EAS rates	Docket No. 79-0142
EAS	Docket No. 79-0519

INDIANA

- Indiana Michigan Power Company (I&M)	Cause No. 42959
- Public Service of Indiana (PSI)	
Depreciation issues	Cause No. 39584
- Indianapolis Power and Light Company	
Depreciation issues	Cause No. 39938

IOWA

- U S West Communications, Inc.	
Local Exchange Competition	Docket No. RMU-95-5

Local Network Interconnection	Docket No. RPU-95-10
General Rate Case	Docket No. RPU-95-11

KANSAS

- Westar Energy, Inc.	
General rate proceeding	Docket No. 08-WSEE-1041-RTS
- Midwest Energy, Inc.	
General rate proceeding	Docket No. 08-MDWE-594-RTS
- Atmos Energy Corporation	
General rate proceeding	Docket No. 08-ATMG-280-RTS
- Sunflower Electric Power Corporation	
Depreciation rate study	Docket No. 08-SEPE-257-DRS
- Southwestern Bell Telephone Company	
Commission Investigation of the KUSF	Docket No. 98-SWBT-677-GIT
- Rural Telephone Service Company	
Audit and General rate proceeding	Docket No. 00-RRLT-083-AUD
Request for supplemental KUSF	Docket No. 00-RRLT-518-KSF
- Southern Kansas Telephone Company	
Audit and General rate proceeding	Docket No. 01-SNKT-544-AUD
- Pioneer Telephone Company	
Audit and General rate proceeding	Docket No. 01-PNRT-929-AUD
- Craw-Kan Telephone Cooperative, Inc.	
Audit and General rate proceeding	Docket No. 01-CRKT-713-AUD
- Sunflower Telephone Company, Inc.	
Audit and General rate proceeding	Docket No. 01-SFLT-879-AUD
- Bluestem Telephone Company, Inc.	
Audit and General rate proceeding	Docket No. 01-BSST-878-AUD
- Home Telephone Company, Inc.	
Audit and General rate proceeding	Docket No. 02-HOMT-209-AUD
- Wilson Telephone Company, Inc.	
Audit and General rate proceeding	Docket No. 02-WLST-210-AUD
- S&T Telephone Cooperative Association, Inc.	
Audit and General rate proceeding	Docket No. 02-S&TT-390-AUD
- Blue Valley Telephone Company, Inc.	
Audit and General rate proceeding	Docket No. 02-BLVT-377-AUD
- JBN Telephone Company	
Audit and General rate proceeding	Docket No. 02-JBNT-846-AUD
- S&A Telephone Company	
Audit and General rate proceeding	Docket No. 03-S&AT-160-AUD
- Wheat State Telephone Company, Inc.	
Audit and General rate proceeding	Docket No. 03-WHST-503-AUD
- Haviland Telephone Company, Inc.	

Audit and General rate proceeding	Docket No. 03-HVDT-664-RTS

MAINE

- New England Telephone Company	
General rate proceeding	Docket No. 92-130
- Verizon	
AFOR investigation	Docket No. 2005-155
- Central Maine Power Company	
General rate proceeding	Docket No. 2007-125

MARYLAND

- Washington Gas Light Company	
Depreciation rate proceeding	Case No. 9103
- Baltimore Gas and Electric Company	
Depreciation rate proceeding	Case No. 9096
- PEPCO	
General rate proceeding	Case No. 9092
- Chesapeake and Potomac Telephone Company	
General rate proceeding	Docket No. 7851
Cost Allocation Manual Case	Case No. 8333
Cost Allocation Issues Case	Case No. 8462
- Verizon Maryland	
PICC rate case	Case No. 8862
USF case	Case No. 8745
- Washington Gas Light Company	
Depreciation Rate Case	Case No. 8960
- Chesapeake Utilities Corporation	
General rate proceeding	Case No. 9062

MINNESOTA

- Access charge (all companies)	Docket No. P-321/CI-83-203
- U. S. West Communications, Inc. (Northwestern Bell Telephone Co.)	
Centrex/Centron proceeding	Docket No. P-421/91-EM-1002
General rate proceeding	Docket No. P-321/M-80-306
Centrex Dockets	MPUC No. P-421/M-83-466
	MPUC No. P-421/M-84-24
	MPUC No. P-421/M-84-25
	MPUC No. P-421/M-84-26
General rate proceeding	MPUC No. P-421/GR-80-911
General rate proceeding	MPUC No. P-421/GR-82-203

General rate case	MPUC No. P-421/GR-83-600
WATS investigation	MPUC No. P-421/CI-84-454
Access charge case	MPUC No. P-421/CI-85-352
Access charge case	MPUC No. P-421/M-86-53
Toll Compensation case	MPUC No. P-999/CI-85-582
Private Line proceeding	Docket No. P-421/M-86-508
- AT&T	
Intrastate Interexchange	Docket No. P-442/M-87-54

MISSISSIPPI

- South Central Bell	
General rate filing	Docket No. U-4415

MISSOURI

- AmerenUE	
Electric rate proceeding	ER-2008-0318
- American Water Company	
General rate proceeding	WR-2008-0311
- Empire District Electric Company	
Depreciation rates	ER-2008-0093
- AmerenUE	
Electric rate proceeding	ER-2007-0002
- Southwestern Bell	
General rate proceeding	TR-79-213
General rate proceeding	TR-80-256
General rate proceeding	TR-82-199
General rate proceeding	TR-86-84
General rate proceeding	TC-89-14, et al.
Alternative Regulation	TC-93-224/TO-93-192
- United Telephone Company	
Depreciation proceeding	TR-93-181
- All companies	
Extended Area Service	TO-86-8
EMS investigation	TO-87-131
Cost of Access Proceeding	TR-2001-65

NEW JERSEY

- New Jersey Bell Telephone Company	
General rate proceeding	Docket No. 802-135
General rate proceeding	BPU No. 815-458 OAL No. 3073-81
Phase I - General rate case	BPU No. 8211-1030

	OAL No. PUC10506-82
General rate case	BPU No. 848-856
	OAL No. PUC06250-84
Division of regulated	BPU No. TO87050398
from competitive services	OAL No. PUC 08557-87
Customer Request Interrupt	Docket No. TT 90060604

NEW MEXICO

- U.S. West Communications, Inc.	
E-911 proceeding	Docket No. 92-79-TC
General rate proceeding	Docket No. 92-227-TC
General rate/depreciation proceeding	Case No. 3008
Subsidy Case	Case No. 3325
USF Case	Case No. 3223
- VALOR Communications	
Subsidy Case	Case No. 3300
Interconnection Arbitration	Case No. 3495

OHIO

- Ohio Bell Telephone Company	
General rate proceeding	Docket No. 79-1184-TP-AIR
General rate increase	Docket No. 81-1433-TP-AIR
General rate increase	Docket No. 83-300-TP-AIR
Access charges	Docket No. 83-464-TP-AIR
- General Telephone of Ohio	
General rate proceeding	Docket No. 81-383-TP-AIR
- United Telephone Company	
General rate proceeding	Docket No. 81-627-TP-AIR

OKLAHOMA

- Public Service of Oklahoma	
Depreciation case	Cause No. 96-0000214

PENNSYLVANIA

- GTE North, Inc.	
Interconnection proceeding	Docket No. A-310125F002
- Bell Telephone Company of Pennsylvania	
Alternative Regulation proceeding	Docket No. P-00930715
Automatic Savings	Docket No. R-953409
Rate Rebalance	Docket No. R-00963550
- Enterprise Telephone Company	
General rate proceeding	Docket No. R-922317

-	All companies	
	InterLATA Toll Service Invest.	Docket No. I-910010
	Joint Petition for Global Resolution of Telecommunications Proceedings	Docket Nos. P-00991649, P-00991648, M-00021596
-	GTE North and United Telephone Company	
	Local Calling Area Case	Docket No. C-902815
-	Verizon	
	Joint Application of Bell Atlantic and GTE for Approval of Agreement and Plan of Merger	Docket Nos. A-310200F0002, A-311350F0002, A-310222F0002, A-310291F0003
	Access Charge Complaint Proceeding	Docket No. C-200271905

SOUTH DAKOTA

-	Northwestern Bell Telephone Company	
	General rate proceeding	Docket No. F-3375

TENNESSEE
(on behalf of Time Warner Communications)

-	BellSouth Telephone Company	
	Avoidable costs case	Docket No. 96-00067

UTAH

-	U.S. West Communications (Mountain Bell Telephone Company)	
	General rate case	Docket No. 84-049-01
	General rate case	Docket No. 88-049-07
	800 Services case	Docket No. 90-049-05
	General rate case/ incentive regulation	Docket No. 90-049-06/90-049-03
	General rate case	Docket No. 92-049-07
	General rate case	Docket No. 95-049-05
	General rate case	Docket No. 97-049-08
	Qwest Price Flexibility-Residence	Docket No. 01-2383-01
	Qwest Price Flexibility-Business	Docket No. 02-049-82
	Qwest Price Flexibility-Residence	Docket No. 03-049-49
	Qwest Price Flexibility-Business	Docket No. 03-049-50
-	Carbon/Emery	
	General rate case/USF eligibility	Docket No. 05-2302-01

VIRGIN ISLANDS, U.S.

-	Virgin Islands Telephone Company	
	General rate case	Docket No. 264
	General rate case	Docket No. 277

General rate case	Docket No. 314
General rate case	Docket No. 316

VIRGINIA

- General Telephone Company of the South

Jurisdictional allocations	Case No. PUC870029
Separations	Case No. PUC950019

WASHINGTON

- US West Communications, Inc.

Interconnection case	Docket No. UT-960369
General rate case	Docket No. UT-950200

- All Companies- Analyzed the local calling areas in the State

WISCONSIN

- Wisconsin Bell Telephone Company

Private line rate proceeding	Docket No. 6720-TR-21
General rate proceeding	Docket No. 6720-TR-34

COMPARISON OF AMERENUE AND OPC PROPOSED DEPRECIATION RATES

		12/31/07 Plant in Service	AmerenUE Proposal Using Fictional "Theoretical" Reserve		OPC Proposal Using Actual Book Reserve		
			Annual Rate	Annual Accrual	Annual Rate	Annual Accrual	Difference
	Nuclear Production Plant	A	B	C=A*B	D	E=A*D	F=E-C
	Callaway Nuclear Production Plant						
321	Structures & Improvements	906,436,649	1.97%	17,856,802	1.46%	13,233,975	(4,622,827)
322	Reactor Plant Equipment	981,328,832	2.46%	24,140,689	2.46%	24,140,689	-
323	Turbogenerator Units	504,699,969	2.08%	10,497,759	1.81%	9,135,069	(1,362,690)
324	Accessory Electrical Equipment	210,995,010	1.91%	4,030,005	1.36%	2,869,532	(1,160,473)
325	Miscellaneous Power Plant Equipment	165,793,435	2.49%	4,128,257	2.54%	4,211,153	82,897
	Total Nuclear Production Plant	2,769,253,894	2.19%	60,653,512	1.94%	53,590,419	(7,063,093)

Note:
All columns use the same 2044 final retirement date, the same curve shapes (dispersions) and same net salvage factors as ordered by the Commission in Case No. ER-2007-0002.

PROPOSED DEPRECIATION PARAMETERS

		Current					OPC Proposal						
		Probable Retirement Year	Life (Yr.)	Curve (Iowa)	Net Salvage (%)	Depreciation Rate (%)	Probable Retirement Year	Life (Yr.)	Curve (Iowa)	12/31/07 Reserve Percent	Net Salvage (%)	Avg Rem Life (Yr.)	Depreciation Rate (%)
	Nuclear Production Plant	A	B	C	E	G	H	I	J	K	L	M	N
	Callaway Nuclear Production Plant												
321	Structures & Improvements	10-2044	100	R1	-3%	1.97%	10-2044	100	R1	53%	-3%	34.11	1.46%
322	Reactor Plant Equipment	10-2044	60	S0	0.20% [1]	2.46%	10-2044	60	S0	34%	0.20%	30.45	2.46%
323	Turbogenerator Units	10-2044	100	S0	-3%	2.08%	10-2044	100	S0	41%	-3%	34.06	1.81%
324	Accessory Electrical Equipment	10-2044	80	R2	-2%	1.91%	10-2044	80	R2	56%	-2%	33.86	1.36%
325	Miscellaneous Power Plant Equipment	10-2044	60	O1	-1%	2.49%	10-2044	60	O1	24%	-1%	30.33	2.54%

Note:

(1) The Net Salvage rate for Account 322 was set as 0.20% on page 96 in May 22, 2007 Report and Order in Case No. ER-2007-0002. The rate for that account is calculated as follows:
(100% - 34%)/30.45 remaining life + (0.20%) = 2.37%

The Net Salvage percents for Accounts 321, 323, 324, and 325 were set on page 7 of the June 28, 2007 Order in Case No. ER-2007-0002

All columns use the same 2044 final retirement date, the same curve shapes (dispersions) and same net salvage factors as ordered by the Commission in Case No. ER-2007-0002.

FERC FORM NO. 1/3-Q:
REPORT OF MAJOR ELECTRIC UTILITIES, LICENSEES AND OTHER

IDENTIFICATION

01 Exact Legal Name of Respondent UNION ELECTRIC COMPANY	02 Year/Period of Report End of 2007/Q4
03 Previous Name and Date of Change *(if name changed during year)* / /	
04 Address of Principal Office at End of Period *(Street, City, State, Zip Code)* 1901 Chouteau Avenue, St. Louis, MO 63103	
05 Name of Contact Person Martin J. Lyons, Jr.	06 Title of Contact Person Sr VP & Chief Acctng Officer
07 Address of Contact Person *(Street, City, State, Zip Code)* 1901 Chouteau Avenue, St. Louis, MO 63103	

08 Telephone of Contact Person, *Including Area Code* (314) 554-2982	09 This Report Is (1) [X] An Original (2) [ ] A Resubmission	10 Date of Report *(Mo, Da, Yr)* / /

ANNUAL CORPORATE OFFICER CERTIFICATION

The undersigned officer certifies that:

I have examined this report and to the best of my knowledge, information, and belief all statements of fact contained in this report are correct statements of the business affairs of the respondent and the financial statements, and other financial information contained in this report, conform in all material respects to the Uniform System of Accounts.

01 Name Martin J. Lyons, Jr. 02 Title Sr VP and Chief Accounting Officer	03 Signature Martin J. Lyons, Jr.	04 Date Signed *(Mo, Da, Yr)* / /

Title 18, U.S.C. 1001 makes it a crime for any person to knowingly and willingly to make to any Agency or Department of the United States any false, fictitious or fraudulent statements as to any matter within its jurisdiction.

Name of Respondent	This Report is:	Date of Report (Mo, Da, Yr)	Year/Period of Report
UNION ELECTRIC COMPANY	(1) X An Original (2) __ A Resubmission	/ /	2007/Q4

NOTES TO FINANCIAL STATEMENTS (Continued)

Under the Nuclear Waste Policy Act of 1982, the DOE is responsible for the permanent storage and disposal of spent nuclear fuel. The DOE currently charges one mill, or $^{1}/_{10}$ of one cent, per nuclear-generated kilowatthour sold for future disposal of spent fuel. Pursuant to this act, UE collects one mill from its electric customers for each kilowatthour of electricity that it generates and sells from its Callaway nuclear plant. Electric utility rates charged to customers provide for recovery of such costs. The DOE is not expected to have its permanent storage facility for spent fuel available until at least 2017. UE has sufficient installed storage capacity at its Callaway nuclear plant until 2020. It has the capability for additional storage capacity through the licensed life of the plant. The delayed availability of the DOE's disposal facility is not expected to adversely affect the continued operation of the Callaway nuclear plant through its currently licensed life.

Electric utility rates charged to customers provide for the recovery of the Callaway nuclear plant's decommissioning costs, which include decontamination, dismantling, and site restoration costs, over an assumed 40-year life of the plant, ending with the expiration of the plant's operating license in 2024. UE intends to submit a license extension application with the NRC to extend its Callaway nuclear plant's operating license to 2044. It is assumed that the Callaway nuclear plant site will then be decommissioned by immediate dismantlement and removal from service. Ameren and UE have recorded an ARO for the Callaway nuclear plant decommissioning costs at fair value, which represents the present value of estimated future cash outflows. See Note 1 – Summary of Significant Accounting Policies for additional information on asset retirement obligations. Decommissioning costs are charged to the costs of service used to establish electric rates for UE's customers. These costs amounted to $7 million in each of the years 2007, 2006 and 2005. Every three years, the MoPSC requires UE to file an updated cost study for decommissioning its Callaway nuclear plant. Electric rates may be adjusted at such times to reflect changed estimates. The latest study was filed in 2005. Minor tritium contamination was discovered on the Callaway nuclear plant site in the summer of 2006. Existing facts and regulatory requirements indicate that this discovery will not cause any significant increase in the decommissioning cost estimate when the next study is conducted and filed on September 1, 2008. Costs collected from customers are deposited in an external trust fund to provide for the Callaway nuclear plant's decommissioning. If the assumed return on trust assets is not earned, we believe that it is probable that any such earnings deficiency will be recovered in rates. The fair value of the nuclear decommissioning trust fund for UE's Callaway nuclear plant is reported as Nuclear Decommissioning Trust Fund in Ameren's and UE's Consolidated Balance Sheets. This amount is legally restricted. It may be used only to fund the costs of nuclear decommissioning. Changes in the fair value of the trust fund are recorded as an increase or decrease to the nuclear decommissioning trust fund and to a regulatory asset or regulatory liability, as appropriate.

NOTE 15 – FAIR VALUE OF FINANCIAL INSTRUMENTS

The following methods and assumptions were used to estimate the fair value of each class of financial instruments for which such estimates are practicable to estimate that value:

Cash, Temporary Investments, and Short-term Borrowings

The carrying amounts approximate fair value because of the short-term maturity of these instruments.

Marketable Securities

The fair value is based on quoted market prices obtained from dealers or investment managers.

Nuclear Decommissioning Trust Fund

The fair value estimate is based on quoted market prices for securities held in the trust fund.

Long-term Debt

The fair value estimate is based on the quoted market prices for same or similar issues or on the current rates offered to the Ameren Companies for debt of comparable maturities.

Preferred Stock of UE, CIPS, CILCO and IP

The fair value estimate is based on the quoted market prices for the same or similar issues.

Derivative Financial Instruments

CALCULATION OF WHOLE LIFE RATE
(THIS IS NOT OPC RECOMMENDED RATE)

		Probable Retirement Year	Survivor Curve	Net Salvage	12/31/07 Plant in Service	12/31/07 Theoretical Reserve	Unadjusted Whole Life Rate Using Theoretical Reserve	
							Amount	Rate
	Nuclear Production Plant							
	Callaway Nuclear Production Plant							
321	Structures & Improvements	10-2044	100-R1	-3%	906,436,649	321,793,642	17,936,227	1.98%
322	Reactor Plant Equipment	10-2044	60-S0	0%	981,328,832	327,286,694	24,309,262	2.48%
323	Turbogenerator Units	10-2044	100-S0	-3%	504,699,969	160,593,634	10,548,653	2.09%
324	Accessory Electrical Equipment	10-2044	80-R2	-2%	210,995,010	78,985,494	4,022,923	1.91%
325	Miscellaneous Power Plant Equipment	10-2044	60-O1	-1%	165,793,435	41,877,393	4,139,907	2.50%
	Total Nuclear Production Plant				2,769,253,894	930,536,857	60,956,971	2.20%

CALCULATION OF ANNUAL AMORTIZATION OF RESERVE VARIANCE

		12/31/07 Plant in Service	12/31/07 Book Depr Reserve	12/31/07 Theoretical Reserve	Reserve Variance	Remaining Life	Annual Amortization True Up
	Nuclear Production Plant						
	Callaway Nuclear Production Plant						
321	Structures & Improvements	906,436,649	482,970,249	321,793,642	(161,176,607)	34.11	(4,724,959)
322	Reactor Plant Equipment	981,328,832	333,271,962	327,286,694	(5,985,268)	30.45	(196,557)
323	Turbogenerator Units	504,699,969	208,558,657	160,593,634	(47,965,023)	34.06	(1,408,407)
324	Accessory Electrical Equipment	210,995,010	118,398,232	78,985,494	(39,412,737)	33.86	(1,163,878)
325	Miscellaneous Power Plant Equipment	165,793,435	39,763,893	41,877,393	2,113,500	30.33	69,678
	Total Nuclear Production Plant	2,769,253,894	1,182,962,992	930,536,857	(252,426,136)		(7,424,123)

CALCULATION OF DEPRECIATION RATE INCLUDING AMORTIZATION OF RESERVE VARIANCE

		12/31/07 Plant in Service	Annual Accrual Amount	Annual Amortization True Up	Total Annual Depreciation Expense	Annual Depreciation Rate
	Nuclear Production Plant					
	Callaway Nuclear Production Plant					
321	Structures & Improvements	906,436,649	17,936,227	(4,724,959)	13,211,269	1.46%
322	Reactor Plant Equipment	981,328,832	24,309,262	(196,557)	24,112,705	2.46%
323	Turbogenerator Units	504,699,969	10,548,653	(1,408,407)	9,140,246	1.81%
324	Accessory Electrical Equipment	210,995,010	4,022,923	(1,163,878)	2,859,045	1.36%
325	Miscellaneous Power Plant Equipment	165,793,435	4,139,907	69,678	4,209,584	2.54%
	Total Nuclear Production Plant	2,769,253,894	60,956,971	(7,424,123)	53,532,849	1.93%

Exhibit No.:	
Issues:	Depreciation
Witness:	John F. Wiedmayer
Sponsoring Party:	Union Electric Company
Type of Exhibit:	Direct Testimony
Case No.:	ER-2007-0002
Date Testimony Prepared:	July 3, 2006

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2007-0002

DIRECT TESTIMONY

OF

JOHN F. WIEDMAYER

ON

BEHALF OF

UNION ELECTRIC COMPANY
d/b/a AmerenUE

St. Louis, Missouri
July, 2006

AmerenUE

ST. LOUIS, MISSOURI

DEPRECIATION STUDY

CALCULATED ANNUAL DEPRECIATION ACCRUALS
RELATED TO UTILITY PLANT
AT DECEMBER 31, 2005

Harrisburg, Pennsylvania Calgary, Alberta Valley Forge, Pennsylvania

Schedule JFW-E1

the attained age, service life and net salvage. The straight line accrued depreciation ratios are calculated as follows for the average service life procedure:

$$\text{Ratio} = \left(1 - \frac{\text{Average Remaining Life}}{\text{Average Service Life}}\right) (1 - \text{Net Salvage, Percent}).$$

MONITORING OF BOOK ACCUMULATED DEPRECIATION

As stated previously, the calculated accrued depreciation or amortization represents that portion of the depreciable cost which will not be allocated to expense through future depreciation accruals, if current forecasts of service life characteristics and net salvage materialize and are used as a basis for depreciation accounting. Thus, the calculated accrued depreciation provides a measure of the book accumulated depreciation. The use of this measure is recommended in the adjustment of book accumulated depreciation variances to insure complete recovery of capital over the life of the property.

The reserve variance amortization developed in this study is based on the variance between the book accumulated depreciation and the calculated accrued depreciation using an amortization period equal to the composite remaining life for each property group.

AmerenUE - Electric

SCHEDULE 1. ESTIMATED SURVIVOR CURVES, NET SALVAGE PERCENTS, ORIGINAL COST, CALCULATED ANNUAL DEPRECIATION ACCRUALS AND CALCULATED ACCRUED DEPRECIATION RELATED TO UTILITY PLANT AT DECEMBER 31, 2005

	Depreciable Group (1)	Probable Retirement Year (3)	Survivor Curve (3)	Net Salvage, % (4)	Original Cost at December 31, 2005 (5)	Calculated Accrued Depreciation (6)	Calculated Annual Accrual Amount (7)	Calculated Annual Accrual Rate (8)=(7)/(5)
	Steam Production Plant, Cont.							
	Common							
311	Structures & Improvements	2026	120 - S0	(5)	1,959,205.74	369,071	83,651	4.27
312	Boiler Plant Equipment	2026	60 - L0.5	(5)	37,071,155.96	6,964,094	1,669,540	4.50
315	Accessory Electrical Equipment	2026	90 - R1	(5)	3,129,974.57	573,594	137,138	4.38
316	Miscellaneous Power Plant Equipment	2026	60 - O1	(5)	20,842.80	3,394	989	4.75
	Total Common				42,181,179.07	7,910,153	1,891,318	4.48
	Total Steam Production Plant				2,694,233,355.78	1,157,639,260	106,774,741	
	Nuclear Production Plant							
	Callaway Nuclear Production Plant							
321	Structures & Improvements	10-2024	100 - R1	0	892,849,631.74	434,654,823	25,165,774	2.82
322	Reactor Plant Equipment	10-2024	60 - S0	0	957,396,834.63	390,891,119	32,350,836	3.38
323	Turbogenerator Units	10-2024	100 - S0	0	498,999,735.95	208,726,905	15,888,649	3.18
324	Accessory Electrical Equipment	10-2024	80 - R2	0	210,733,334.15	105,299,723	5,775,099	2.74
325	Miscellaneous Power Plant Equipment	10-2024	60 - O1	0	164,519,297.02	59,951,889	6,087,886	3.70
	Total Nuclear Production Plant				2,724,498,833.49	1,199,524,459	85,268,244	
	Hydraulic Production Plant							
	Osage Hydraulic Production Plant							
331	Structures & Improvements	2036	150 - R1.5	(10)	3,750,643.60	2,073,800	69,601	1.86
332	Reservoirs, Dams, & Waterways	2036	180 - R3	(20)	25,597,634.77	17,269,889	446,324	1.74
333	Water Wheels, Turbines, & Generators	2036	130 - S0	(10)	19,301,222.57	7,448,926	470,038	2.44
334	Accessory Electrical Equipment	2036	65 - O1	0	4,112,455.94	1,437,896	103,850	2.53
335	Miscellaneous Power Plant Equipment	2036	60 - O1	0	1,699,726.57	384,782	50,398	2.97
336	Roads, Railroads, & Bridges	2036	SQUARE	0	77,445.00	47,805	970	1.25
	Total Osage Hydraulic Production Plant				54,539,128.45	28,663,098	1,141,181	
	Keokuk Hydraulic Production Plant							
331	Structures & Improvements	2036	150 - R1.5	(10)	3,791,126.88	1,811,913	79,678	2.10
332	Reservoirs, Dams, & Waterways	2036	180 - R3	(20)	12,170,522.71	7,238,534	243,785	2.00
333	Water Wheels, Turbines, & Generators	2036	130 - S0	(10)	58,830,125.25	11,553,069	1,793,069	3.05
334	Accessory Electrical Equipment	2036	65 - O1	0	9,161,003.79	1,937,515	273,200	2.98
335	Miscellaneous Power Plant Equipment	2036	60 - O1	0	2,630,626.79	585,968	78,292	2.98
336	Roads, Railroads, & Bridges	2036	SQUARE	0	114,926.08	45,598	2,272	1.98
	Total Keokuk Hydraulic Production Plant				86,698,331.50	23,172,597	2,470,296	2.85

AmerenUE - Electric

SCHEDULE 2. COMPARISON OF CALCULATED ACCRUED DEPRECIATION AND BOOK DEPRECIATION RESERVE
AT DECEMBER 31, 2005 AND CALCULATION OF ANNUAL AMORTIZATION OF THE RESERVE VARIANCE
BASED ON A COMPOSITE REMAINING LIFE PERIOD

	Depreciable Group	Original Cost at December 31, 2005	Book Reserve	Calculated Accrued Depreciation	Reserve Variance	Remaining Life	Annual Amortization True Up
	(1)	(2)	(3)	(4)	(5) = (4) - (3)	(6)	(7) = (5) / (6)
	Steam Production Plant, Cont.						
	Rush Island Steam Production Plant						
311	Structures & Improvements	52,312,784.76	31,645,884	29,545,640	(2,100,244)	19.9	(105,540)
312	Boiler Plant Equipment	353,903,249.06	196,980,361	171,795,897	(25,184,464)	18.5	(1,361,322)
314	Turbogenerator Units	136,041,230.85	53,484,413	56,053,858	2,569,445	19.0	135,234
315	Accessory Electrical Equipment	32,922,075.69	16,492,597	15,450,157	(1,042,440)	19.7	(52,916)
316	Miscellaneous Power Plant Equipment	10,112,325.21	4,266,116	3,736,856	(529,260)	18.6	(28,455)
	Total Rush Island Steam Production Plant	585,291,665.57	302,869,371	276,582,408	(26,286,963)		(1,412,999)
	Common						
311	Structures & Improvements	1,959,205.74	219,563	369,071	149,508	20.2	7,401
312	Boiler Plant Equipment	37,071,155.96	4,537,148	6,964,094	2,426,946	19.2	126,403
315	Accessory Electrical Equipment	3,129,974.57	342,692	573,594	230,902	19.8	11,662
316	Miscellaneous Power Plant Equipment	20,842.80	2,438	3,394	956	18.7	51
	Total Common	42,181,179.07	5,101,841	7,910,153	2,808,312		145,518
	Total Steam Production Plant	2,694,233,355.78	1,158,435,783	1,157,639,260	(796,523)		(81,389)
	Nuclear Production Plant						
	Callaway Nuclear Production Plant						
321	Structures & Improvements	892,849,631.74	440,030,469	434,654,823	(5,375,646)	18.2	(295,365)
322	Reactor Plant Equipment	957,396,834.63	284,736,650	390,891,119	106,154,469	17.4	6,100,832
323	Turbogenerator Units	498,999,735.95	185,853,221	208,726,905	22,873,684	18.3	1,249,928
324	Accessory Electrical Equipment	210,733,334.15	108,252,859	105,299,723	(2,953,136)	18.3	(161,374)
325	Miscellaneous Power Plant Equipment	164,519,297.02	32,314,189	59,951,889	27,637,700	17.2	1,606,843
	Total Nuclear Production Plant	2,724,498,833.49	1,051,187,388	1,199,524,459	148,337,071		8,500,864

AmerenUE - Electric

SCHEDULE 3. CALCULATION OF TOTAL ANNUAL DEPRECIATION INCLUDING AMORTIZATIONS OF THE RESERVE VARIANCE AT DECEMBER 31, 2005

	Depreciable Group (1)	Original Cost at December 31, 2005 (2)	Annual Accrual Amount (3)	Reserve Variance Amortization (4)	Total Annual Depreciation (5)	Total Annual Depreciation Rate (6) = (5) / (2)
	Nuclear Production Plant					
	Callaway Nuclear Production Plant					
321	Structures & Improvements	892,849,631.74	25,185,774	(295,365)	24,870,409	2.79
322	Reactor Plant Equipment	957,396,834.63	32,350,836	6,100,832	38,451,668	4.02
323	Turbogenerator Units	498,999,735.95	15,888,649	1,249,928	17,138,577	3.43
324	Accessory Electrical Equipment	210,733,334.15	5,775,099	(161,374)	5,613,725	2.66
325	Miscellaneous Power Plant Equipment	164,519,297.02	6,087,886	1,606,843	7,694,729	4.68
	Total Nuclear Production Plant	2,724,498,833.49	85,288,244	8,500,864	93,789,108	3.44
	Hydraulic Production Plant					
	Osage Hydraulic Production Plant					
331	Structures & Improvements	3,750,643.60	69,601	25,607	95,208	2.54
332	Reservoirs, Dams, & Waterways	25,597,634.77	446,324	121,864	568,188	2.22
333	Water Wheels, Turbines, & Generators	19,301,222.57	470,038	15,979	486,017	2.52
334	Accessory Electrical Equipment	4,112,455.94	103,850	2,500	106,350	2.59
335	Miscellaneous Power Plant Equipment	1,699,726.57	50,398	762	51,160	3.01
336	Roads, Railroads, & Bridges	77,445.00	970	(67,299)	(66,329)	-85.65
	Total Osage Hydraulic Production Plant	54,539,128.45	1,141,181	99,413	1,240,594	2.27
	Keokuk Hydraulic Production Plant					
331	Structures & Improvements	3,791,126.88	79,678	15,500	95,178	2.51
332	Reservoirs, Dams, & Waterways	12,170,522.71	243,785	50,551	294,336	2.42
333	Water Wheels, Turbines, & Generators	58,830,125.25	1,793,069	203,377	1,996,446	3.39
334	Accessory Electrical Equipment	9,161,003.79	273,200	43,857	317,057	3.46
335	Miscellaneous Power Plant Equipment	2,630,626.79	78,292	(2,859)	75,433	2.87
336	Roads, Railroads, & Bridges	114,926.08	2,272	(279)	1,993	1.73
	Total Keokuk Hydraulic Production Plant	86,698,331.50	2,470,296	310,147	2,780,443	3.21
	Taum Sauk Hydraulic Production Plant					
331	Structures & Improvements	5,468,207.72	98,555	49,150	147,705	2.70
332	Reservoirs, Dams, & Waterways	27,594,081.56	579,644	189,231	768,875	2.79
333	Water Wheels, Turbines, & Generators	37,277,699.18	940,956	199,764	1,140,720	3.06
334	Accessory Electrical Equipment	4,106,260.74	106,127	7,580	113,707	2.77
335	Miscellaneous Power Plant Equipment	1,620,779.78	50,340	(8,026)	42,314	2.61
336	Roads, Railroads, & Bridges	45,570.00	663	(31,658)	(30,975)	-67.97
	Total Taum Sauk Hydraulic Production Plant	76,112,598.98	1,776,305	406,041	2,182,346	2.87
	Total Hydraulic Production Plant	217,350,058.93	5,387,782	815,601	6,203,383	2.85
	Other Production Plant					
341	Structures & Improvements	15,310,060.11	437,537	(56,630)	380,907	2.49
342	Fuel Holders, Producers, & Accessories	12,123,100.78	360,240	(6,496)	353,744	2.92
344	Generators	583,555,234.92	17,281,842	(679,334)	16,602,508	2.85
345	Accessory Electrical Equipment	26,830,795.85	775,482	(21,483)	753,999	2.81
346	Miscellaneous Power Plant Equipment	5,376,474.25	152,016	(4,722)	147,296	2.74
	Total Other Production Plant	643,195,665.71	19,007,119	(768,665)	18,238,454	2.84
	Total Production Plant	6,279,277,913.91	216,437,886	8,466,411	224,904,297	3.58

COMPARISON OF THEORETICAL AND ACTUAL RESERVE AMOUNTS

		12/31/07 Theoretical Reserve	12/31/07 Actual Book Reserve	Difference
		A	B	C = B - A
	Nuclear Production Plant			
	Callaway Nuclear Production Plant			
321	Structures & Improvements	321,793,642	482,970,249	161,176,607
322	Reactor Plant Equipment	327,286,694	333,271,962	5,985,268
323	Turbogenerator Units	160,593,634	208,558,657	47,965,023
324	Accessory Electrical Equipment	78,985,494	118,398,232	39,412,737
325	Miscellaneous Power Plant Equipment	41,877,393	39,763,893	(2,113,500)
	Total Nuclear Production Plant	930,536,857	1,182,962,992	252,426,136

AMOUNT TO BE OVER COLLECTED BY USING THE THEORETICAL RESERVE INSTEAD OF ACTUAL BOOK RESERVE

		12/31/07 Plant in Service	Net Salvage to be Recovered	Total to be Recover	Company Depreciation Rate	Annual Accrual	Remaining Life	Amount Recovered over Remaining Life	12/31/07 Book Reserve	Amount Company will Recover over Life of Investment	Amount Over Recovered
		A	B	C = A + B	D	E=A*D	F	G=E*F	H	I = G + H	J = I - C
Nuclear Production Plant											
Callaway Nuclear Production Plant											
321	Structures & Improvements	906,436,649	27,193,099	933,629,748	1.97%	17,856,802	34.11	609,126,771	482,970,249	1,092,097,020	158,467,272
322	Reactor Plant Equipment	981,328,832	86,188,153	1,067,516,984	2.46%	24,140,689	30.45	735,097,159	333,271,962	1,068,369,121	852,136
323	Turbogenerator Units	504,699,969	15,140,999	519,840,968	2.08%	10,497,759	34.06	357,514,094	208,558,657	566,072,751	46,231,783
324	Accessory Electrical Equipment	210,995,010	4,219,900	215,214,910	1.91%	4,030,005	33.86	136,469,239	118,398,232	254,867,471	39,652,561
325	Miscellaneous Power Plant Equipment	165,793,435	1,657,934	167,451,369	2.49%	4,128,257	30.33	125,220,602	39,763,893	164,984,495	(2,466,875)
Total Nuclear Production Plant		2,769,253,894	134,400,086	2,903,653,980		60,653,512		1,963,427,865	1,182,962,992	3,146,390,857	242,736,877