Exhibit No:	
Issue:	Depreciation
Witness:	William W. Dunkel
Type of Exhibit:	Surrebuttal Testimony
Case No.:	ER-2008-0093
Date Testimony Prepared:	April 25, 2008

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Empire District Electric Company of Joplin, Missouri for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Missouri Service Area of the Company.	)))))	Case No. ER-2008-0093 Tariff File No. YE-2008-0205

SURREBUTTAL 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
OF THE STATE OF MISSOURI

In the Matter of the Empire District Electric Company of Joplin, Missouri for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Missouri Service Area of the Company.	)))))	**Case No. ER-2008-0093** Tariff File No. YE-2008-0205

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 23rd day of April 2008.

Notary Public

My commission expires 2/27/2010.

"OFFICIAL SEAL"
Sarah J. Williams
Notary Public, State of Illinois
My Commission Exp. 02/27/2010

Introduction

Q. Are you the same William W. Dunkel that previously filed Direct and Rebuttal Testimony in this proceeding on behalf of Office of the Public Counsel of the State of Missouri (OPC)?

A. Yes.

Q. What is the purpose of this Surrebuttal testimony?

A. The purpose of this Surrebuttal testimony is to respond to the depreciation issues in testimonies filed by other parties in this proceeding on or about April 4, 2008.

Response to Staff Testimony

Q. What does the Staff Rebuttal testimony recommend pertaining to depreciation rates?

A. Staff recommends that the current Empire depreciation rates not be changed in this case. Staff recommends "that the Company's currently ordered depreciation rates should be ordered in this case."[1]

Q. Do you oppose the Staff recommendation "that the Company's currently ordered depreciation rates should be ordered in this case"?

A. No. I do not oppose this Staff recommendation. There are significant problems in the new depreciation rates proposed by Empire, as discussed in my Direct testimony. The Staff recommendation that the current Empire depreciation rates not be changed in this case eliminates the problems in Empire's proposed depreciation rates.

[1] Rebuttal Testimony of Rosella L. Schad, PE, CPA ("Schad Rebuttal") page 12, lines 24-26.

Q. The Staff testimony cites a prior order that states that the use of the whole life technique is a long-standing policy.[2] If the Commission accepts the Staff recommendation to use the current Empire depreciation rates this issue is resolved for this case, but for future utility depreciation studies in Missouri do you object to the whole life technique?

A. No. The problem I will discuss only occurs when the actual book reserve amounts are not used in the whole life depreciation study. Nationwide the depreciation rates proposed in whole life depreciation studies are generally calculated considering the actual book reserve amounts. For example, in the recent AmerenUE proceeding in Missouri, the whole life depreciation study filed by AmerenUE included the adjustments for the actual book reserve amounts. 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."[3] He stated that using the actual "book" accumulated depreciation reserve amount was "to insure complete recovery of capital over the life of the property."[4]

Q. Is recovering the investment over the service life of the property part of proper depreciation rates?

A. Yes. The FERC Uniform System of Accounts (USOA) requires:

"22. *Depreciation Accounting.*

[2] Rebuttal Testimony of Rosella L. Schad, PE, CPA ("Schad Rebuttal") page 12, lines 1-16.
[3] 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.
[4] 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.

> 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."[5] (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 with only 4 years remaining life.[6] 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. 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

[5] General Instruction number 22 of FERC USOA 18 C.F.R. 101
[6] This example also assumes 0% future net salvage.

amount.[7] However, if there is only $500 in the actual 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.[8] On the other hand if there is $700 in the actual 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.[9]

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.[10]

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

[7] 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.
[8] 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.
[9] 4 years * $100 per year = $400 depreciation expense accrued in the future. $500 already in the depreciation reserve account + $700 additional depreciation expense = $1,100. $1,100 depreciation accruals collected - $1,000 amount retired = $100 over recovered.
[10] Except in the rare instance in which the book depreciation reserve amount happens to equal the "theoretical" reserve amount.

years = $25). All of the input numbers are readily available in the standard computer programs used for depreciation studies.

Attached as Schedule WWD-S7 are pages from the AmerenUE testimony in Case No. ER-2007-002. The last page shows how simple this calculation is.

Q. What do you recommend?

A. For this case, if the Commission accepts the Staff recommendation to use the current Empire depreciation rates this issue is resolved for this case. However prior to the next utility depreciation case in Missouri, I recommend the Staff consider using the whole life depreciation rates that do incorporate the actual existing book accumulated depreciation reserve amounts. Using the book accumulated depreciation reserve amounts is necessary in order to recover the investment "over the service life of the property."

The standard way this is done in whole life depreciation studies is to amortize the difference between (1) the book accumulated depreciation reserve amount for an account and (2) the theoretical reserve amount, over the averge remaining life of that account, as is shown on the last page of Schedule WWD-S7. This is what I recommend the Staff adopt in the next depreciation case.

Q. Do you recommend using the actual book accumulated depreciation reserve amounts in all cases, regardless of the direction of the reserve differences?

A Yes. In some cases using whole life depreciation rates that incorporate the actual book reserve amounts may result in depreciation rates that are overall higher than they would be under "unadjusted" whole life rates. In other cases using whole life depreciation rates

that incorporate the actual book reserve amounts may result in depreciation rates that are lower overall than they would be under "unadjusted" whole life rates. Whole life depreciation rates that incorporate the actual book reserve amounts should be used in either event, because using the actual book accumulated depreciation reserve amounts is necessary in order to recover the investment "over the service life of the property."

Q. Does failing to incorporate the actual "book" accumulated depreciation reserve amounts often result in excess depreciation charges to the customers?

A. Yes. In this Empire case failing to incorporate the actual "book" accumulated depreciation reserve amounts results in higher depreciation expense, as I demonstrated in my Direct testimony. In addition, Empire witness Roff's Rebuttal Schedule DSR-2 shows that the total annual depreciation expense is $845,300 less when the actual book reserve amounts are used, as compared to the unadjusted whole life rates. That $845,300 amount does not even include all accounts, as will be discussed later in this testimony.[11]

In the AmerenUE case the Staff testimony states "The Staff's theoretical reserve for 2005 is $3,559,684,994, which represents 33% of the original cost of AmerenUE's actual plant in service. AmerenUE's actual 2005 reserve is $4,325,788,188, which represents 41% of the original cost of AmerenUE's actual plant-in-service. Based on the Staff's depreciation study, AmerenUE's depreciation reserve is over accrued by $766,103,194."[12]

[11] Rebuttal Schedule DSR-2, attached to the Rebuttal Testimony of Donald S. Roff
[12] Page 10, Direct Testimony of Jolie L. Mathis, Case No. ER-2007-0002 (regarding AmerenUE)

The "unadjusted" whole life rates effectively assume that the actual book reserve amounts are the same as the theoretical reserve amounts. Using the above Staff numbers from the AmerenUE case, the "unadjusted" whole life rates effectively assumed the reserve amount was $3,559,684,994, but the actual reserve amount was $4,325,788,188. The "unadjusted" whole life rates would effectively ignore $766,103,194 of money that had been paid into the reserve by the customers. Because $766,103,194 of the money in the actual book reserve is ignored, the "unadjusted" whole life rates would be designed to collect $766,103,194 too much over the service life of the investments.

I am sure the Staff goal is to calculate the appropriate depreciation rates. Using whole life depreciation studies that incorporate the book reserve amounts is a key step in recovering the investment over the service live of the investment. In order to recover the investment "over the service life", I recommend the "book" reserve amounts be used in all future cases, including both cases in which this is an upward adjustment and cases in which this is a downward adjustment (as compared to the "unadjusted" whole life rates).

Response to the Company Rebuttal Testimony

Q. In your Direct Testimony you stated that Mr. Roff used a double standard. You testified that for some accounts Mr. Roff made an adjustment based on the book reserve amounts, but in other accounts he did not adjust for the book reserve amounts. You testified this double standard resulted in higher depreciation rates, all as explained in more detail on pages 3-9 of your Direct Testimony. Does Mr. Roff admit that his treatment of the reserve amounts was "inconsistent"?

A. Yes. On page 4 of his Rebuttal Testimony, lines 10- 16, Mr. Roff admits that his treatment of the reserves was "inconsistent" and that he "actually used the book reserve in calculating an adjustment" for certain accounts.

On his Rebuttal Schedule DSR-2, Mr. Roff calculates that if he adjusted for the book reserve amounts, for the accounts shown on the Schedule, that adjustment would reduce his annual depreciation expense by $845,330.

Q. If the adjustment shown on Mr. Roff's Rebuttal Schedule DSR-2 were made, would Mr. Roff's treatment of the reserves then be consistent for all accounts?

A. No. For each account shown on Mr. Roff's Rebuttal Schedule DSR-2, Mr. Roff has recovered the difference between the theoretical reserve and the book reserve over the remaining life for that account. The remaining life is the correct period to use for this adjustment. However for accounts not shown on Rebuttal Schedule DSR-2, Mr. Roff is using a 4 year period, not that account's remaining life, for the reserve difference recovery period. The largest account that is not shown on Mr. Roff's Rebuttal Schedule DSR-2 is account 397, Communications Equipment. Mr. Roff in his Depreciation Study

determined that this account has an average remaining life of 8.7 years, but his filing recovers the reserve difference in this account over a 4 year period, not over the 8.7 year remaining life.[13] The accounts Mr. Roff did not show on Rebuttal Schedule DSR-2 are the accounts that he has proposed to "amortize." In his Depreciation Study, Mr. Roff's proposed annual expense for these accounts does include a recovery of the difference between the book reserve and the theoretical reserve, but that recovery is not over the remaining life.

Q. What is Schedule WWD-S8?

A. Schedule WWD-S8 shows the accounts that Mr. Roff did not include in his Rebuttal Schedule DSR-2. For these accounts (which are the accounts that Mr. Roff proposes to amortize), Schedule WWD-S8 shows that if the reserve differences in these accounts were recovered over their remaining lives, consistent with what Mr. Roff has shown for the other accounts on Rebuttal Schedule DSR-2, the annual expense would be $349,429 less than proposed in Mr. Roff's Depreciation Study.

This $349,429 difference is just for the 7 accounts shown on Schedule WWD-S8. This $349,429 reduction is in addition to the $845,330 reduction for the other account shown on Rebuttal Schedule DSR-2. In total the annual depreciation expense would be $1,194,759[14] less than Mr. Roff proposed in his Direct testimony if the only change is to amortize the difference between the theoretical reserve and the book reserve in each account over the remaining life of that account.

[13] "Average Life Group Method Account Summary" in the General Tab of Empire's Depreciation Study Workpapers Book 3 of 3

[14] $349,429 for the accounts Mr. Roff proposed to amortize, plus $845,330 for the account he did not proposed to amortize = $1,194,759.

Q. In your Direct testimony you had redistributed the depreciation reserve. On page 3 of his Rebuttal testimony, lines 15-21, Mr. Roff objects to redistributing the reserve. Please respond.

A. Redistributing the reserve is a common practice in depreciation studies, but it is close to a "zero sum" game. The total reserve amount does not change. In this case, redistributing the reserve changes the total annual depreciation expense by less than $42,000.[15]

In my Direct testimony I had (1) redistributed the reserve among the accounts within each Plant category,[16] and then (2) calculated depreciation rates that spread the difference between the book accumulated depreciation reserve and the theoretical reserve amount for that account, over the averge remaining life of that account. The result of only these two changes was an annual depreciation expense of $38,506,125 that was $1,153,610 less than the Company filing, as shown on Schedule WWD-1, attached to my Direct testimony.

In Rebuttal Schedule DSR-2, and Schedule WWD-S8 without redistributing the reserve, the difference between the book accumulated depreciation reserve and the theoretical reserve amount is amortized over the averge remaining life for each account. When only this change is made, the resulting annual depreciation expense of $38,464,973 is

[15] Calculated from Schedule WWD-S9 column C reserve redistributed amount of $38,506,124 less column E reserve not redistributed amount of $38,464,973 = $41,151.
[16] For example, within the Distribution Plant accounts

$1,153,610 less than the Company filing,[17] and is less than $42,000 different than the $38,506,125 figure from my Direct testimony that included redistributing the reserve.

Q. Earlier you proposed that the difference between (1) the book accumulated depreciation reserve amount for an account and (2) the theoretical reserve amount for that account should be amortized over the average remaining life of that account. Would this policy correct the inconsistent treatments of the reserve differences such as the inconsistent treatments Mr. Roff has proposed in this proceeding?

A. Yes. This policy would require the difference be amortized for all accounts, so that would eliminate amortizing the reserve differences for some accounts, but not for other accounts, which is what Mr. Roff did in his Direct Testimony.

Requiring that the reserve difference always be amortized over the remaining life of that account would eliminate the inconsistent amortization periods, such as amortizing the reserve differences over the remaining life for some accounts, but using a 4 year amortization period (which is different than the remaining life) for other accounts. Such inconsistent reserve difference amortization periods is what would occur if the adjustment shown on Rebuttal Schedule DSR-2 was adopted, while continuing to use a 4 year reserve difference amortization period for the other accounts.

As demonstrated in Mr. Roff's filings in this case, witnesses are in Missouri <u>are</u> filing adjustment for the differences between the book accumulated depreciation reserve amounts and the theoretical reserve amounts. However, these adjustments may be

[17] As shown on Schedule WWD-1 page 1 attached to my Direct testimony

inconsistently applied between accounts, and/or may use inconsistent amortization periods.

Q. Could you please summarize your overall recommendations?

A. Yes. I do not object to the Staff's recommendation that the current Empire depreciation rates not be changed in this case. However, prior to the next utility depreciation case in Missouri, I recommend that Staff consider using the whole life depreciation rates that do incorporate the actual existing book accumulated depreciation reserve amounts. This adjustment is necessary in order to recover the investment "over the service life of the property."

Also, as demonstrated in this testimony there are significant inconsistencies in the depreciation rates proposed by Mr. Roff. However, if the Commission accepts Staff recommendation to continue to use the current Empire depreciation rates, it will not be necessary for the Commission to address these inconsistencies in Mr. Roff's depreciation proposal.

Q. Does this conclude your Surrebuttal Testimony?

A. Yes.

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 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)
	Distribution Plant						
361	Structures & Improvements	15,759,383.26	4,953,060	4,928,091	(24,969)	42.5	(588)
362	Station Equipment	513,217,383.08	159,407,965	158,604,372	(803,593)	42.8	(18,776)
364	Poles & Fixtures	653,216,781.90	520,097,324	517,475,456	(2,621,868)	29.6	(88,577)
365	Overhead Conductors & Devices	712,573,522.48	254,733,135	253,448,997	(1,284,138)	35.8	(35,870)
366	Underground Conduit	164,964,340.73	57,721,787	57,430,805	(290,982)	48.0	(6,062)
367	Underground Conductor & Devices	447,520,715.19	134,015,952	133,340,363	(675,589)	39.6	(17,060)
368	Line Transformers	346,481,166.48	107,491,678	106,949,801	(541,877)	31.3	(17,312)
369.1	Overhead Services	123,917,172.02	145,720,361	144,985,769	(734,592)	22.2	(33,090)
369.2	Underground Services	118,053,965.91	73,486,852	73,116,397	(370,455)	26.3	(14,086)
370	Meters	102,314,800.21	33,417,869	33,249,406	(168,463)	19.4	(8,684)
371	Installation On Customers' Premises	164,854.00	120,584	119,976	(608)	3.4	(179)
373	Street Lighting & Signal Systems	100,172,901.93	42,562,921	42,348,357	(214,564)	25.7	(8,349)
	Total Distribution Plant	3,298,356,987.19	1,533,729,488	1,525,997,790	(7,731,698)		(248,631)
	General Plant						
390	Structures & Improvements	164,206,365.17	46,077,375	45,845,094	(232,281)	33.1	(7,018)
391	Office Furniture & Equipment	39,127,355.95	24,084,713	23,963,299	(121,414)	8.2	(14,807)
391.1	Mainframe Computers	422,013.95	422,014	422,014	-	-	-
391.2	Personal Computers	1,310,097.52	584,257	581,312	(2,945)	1.6	(1,841)
392	Transportation Equipment	84,159,803.74	30,127,187	29,975,313	(151,874)	8.9	(17,064)
393	Stores Equipment	2,065,006.72	1,324,092	1,317,417	(6,675)	6.0	(1,113)
394	Tools, Shop, & Garage Equipment	10,524,040.25	5,996,285	5,966,057	(30,228)	6.6	(4,580)
395	Laboratory Equipment	6,819,983.73	3,347,588	3,330,712	(16,876)	6.0	(2,813)
396	Power Operated Equipment	10,465,818.28	4,232,262	4,210,927	(21,335)	10.2	(2,092)
397	Communications Equipment	127,014,325.86	94,611,692	94,134,744	(476,948)	2.9	(164,465)
398	Miscellaneous Equipment	637,305.10	279,472	278,063	(1,409)	11.7	(120)
	Total General Plant	446,752,116.27	211,086,937	210,024,952	(1,061,985)		(215,911)
TOTAL DEPRECIABLE ELECTRIC PLANT		10,492,945,443.99	4,325,788,188	$ 4,479,445,639	$ 153,657,451		$ 8,531,976

COMPARISON OF EMPIRE'S CALCULATED THEORETICAL RESERVE
AND ACTUAL BOOK RESERVE 12/31/06
FOR THE AMORTIZED GENERAL ACCOUNTS

Account Number	Description	Theoretical Reserve with Salvage	Book Reserve	Difference	Remaining Life From Roff Study (years)	Annual $, Reserve Diff Over Remaining Life	Years Roff Used	Annual Reserve Difference Recovery Roff Used	Annual Difference
A	B	C	D	E=C-D	F	G=E/F	H	I=E/H	J=G-I
Accounts Mr. Roff Proposes to Amortize									
391.1	Office Furniture & Equipment	$2,005,721	$1,776,797	$228,924	15.4	$14,914	4	$57,231	($42,317)
391.2	Computer Equipment	4,537,880	3,358,085	1,179,795	6.7	175,044	4	294,949	(119,905)
393	Store Equipment	190,255	257,315	(67,060)	16.8	(3,982)	4	(16,765)	12,783
394	Tools, Shop, & Garage Equipment	1,832,137	1,765,859	66,278	9.7	6,826	4	16,570	(9,744)
395	Laboratory Equipment	412,279	616,370	(204,091)	25.3	(8,083)	4	(51,023)	42,940
397	Communications Equipment	5,605,111	3,886,570	1,718,541	8.7	196,855	4	429,635	(232,781)
398	Miscellaneous Equipment	101,817	99,716	2,101	17.4	120	4	525	(405)
	Total Amortized General Plant	$14,685,199	$11,760,712	$2,924,487	7.7	$381,693	4	$731,122	($349,429)

The $731,122 amount calculated above agrees with that same amount shown on Table 1a, column 8, of Roff Schedule DSR-3 attached to Roff Direct Testimony
Columns C and D from the "Amortization Schedule" in the General Tab of Depreciation Study Workpapers Book 3 of 3
Column F from the "Average Life Group Method Account Summary" in the General Tab of Depreciation Study Workpapers Book 3 of 3

**Calculation of Empire's Adjusted Annual Depreciation Expense
with the Difference Between Book Reserve Amounts and Theoretical Reserve Amounts
Recovered over the Remaining Life**

		Reserve Redistributed		Reserve Not Redistributed	
Description	Annual Accrual Amount Roff Direct DSR-3, Table 1	Annual Difference Dunkel Direct WWD-1, Page 1	OPC Filed Dunkel Direct WWD-1, Page 1	Change to Accrual due to Adjusting for Book Reserve (Rebuttal Schedule DSR-2 & Schedule WWD-S8)	Annual Accrual Amount - Reserve Difference Recovered over Remaining Life
	A	B	C	D	E=A+D
Steam Production Plant	4,331,421	(1,024,485)	3,306,937	(989,211)	3,342,210
Hydraulic Production Plant	79,894	(15,670)	64,224	(5,788)	74,106
Other Production Plant	6,747,943	(816,514)	5,931,430	(748,873)	5,999,070
Transmission Plant	5,343,191	638,166	5,981,357	614,992	5,958,183
Distribution Plant	19,339,746	1,011,747	20,351,493	838,654	20,178,400
General Plant(1)	1,371,998	(215,731)	1,156,266	(555,105)	816,893
Total Depreciable Plant	37,214,193	(422,487)	36,791,707	(845,330)	36,368,862
Amortized General Plant	2,445,540	(731,123)	1,714,417	(349,429)	2,096,111
Total Plant	39,659,733	(1,153,610)	38,506,124	(1,194,759)	38,464,973

Note:
(1) General Plant does not include the Amortized General Plant Accounts

Sources:
Schedule DSR-3, Table 1 attached to Roff Direct Testimony
Rebuttal Schedule DSR-2, attached to Roff Rebuttal Testimony