Exhibit No.: Issues: Witness: Sponsoring Party: MoPSC Staff Date Testimony Prepared:

Depreciation Arthur W. Rice *Type of Exhibit:* Surrebuttal Testimony File No.: ER-2010-0355 January 5, 2011

MISSOURI PUBLIC SERVICE COMMISSION

UTILITY SERVICES DIVISION

SURREBUTTAL TESTIMONY

OF

ARTHUR W. RICE, PE

KANSAS CITY POWER & LIGHT COMPANY

FILE NO. ER-2010-0355

Jefferson City, Missouri January, 2011

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1	SURREBUTTAL TESTIMONY
2	OF
3	ARTHUR W. RICE, PE
4	KANSAS CITY POWER & LIGHT COMPANY
5	FILE NO. ER-2010-0355
6	Q. Please state your name and business address.
7	A. My name is Arthur W. Rice and my business address is Missouri Public Service
8	Commission, P.O. Box 360, Jefferson City, MO 65102.
9	Q. What is your position with the Staff ("staff") of the Missouri Public Service
10	Commission ("Commission")?
11	A. I am a Utility Regulatory Engineer I in the Engineering and Management Services
12	Department of the Utility Services Division.
13	Q. Are you the same Arthur W. Rice that previously filed testimony in
14	this proceeding?
15	A. Yes, I am. I filed testimony on November 10, 2010, contributing to
16	Staff's Cost of Service Report, and Rebuttal Testimony on December 8, 2010, in the
17	Kansas City Power & Light Company (KCPL) rate case in File No. ER-2010-0355. I also filed
18	testimony on November 17, 2010, contributing to Staff's Cost of Service Report, and
19	Rebuttal Testimony on December 15, 2010, in the in the KCP&L Greater Missouri Operations
20	Company (GMO) rate case in File No. ER-2010-0356.
21	PURPOSE AND SUMMARY

22

Q. What is the purpose of your Surrebuttal Testimony?

A. In response to KCPL witness John Weisensee's Rebuttal Testimony, I will address a change in Staff's depreciation recommendation that affects the depreciation rates of most of the plant accounts, relating to both the treatment of the accumulated additional amortizations and also net salvage. Also, in response to KCPL witness John Spanos' Rebuttal Testimony I will address KCPL's general plant amortization request.

6

STAFF'S REVISED RECOMMENDATION AND NET SALVAGE

Q. What treatment of the accumulated regulatory plan additional amortizations¹ does
KCPL witness Weisensee request in his Rebuttal Testimony?

A. Mr. Weisensee, at page 26 and 27, states that "KCP&L recommends spreading
the amortization to all plant accounts, excluding Iatan 2, but would be willing to discuss other
proposals such as that offered by Mr. Robertson." Mr. Weisensee also discusses the various party
proposals on this issue.

Q. Has Staff revised its recommendation concerning the treatment of theaccumulated additional amortizations?

- A. Yes. Staff's revised recommendation is to apply the accumulated additional
 amortizations to the Iatan 2 plant account, as described in more detail below.
- Q. How did Staff recommend treating the accumulated additional amortizations in its
 Direct Filing?

A. Staff had recommended maintaining a segregated account for the accumulated
additional amortizations, from which expenditures for net salvage (cost of removal) would
be recovered.

¹ In addition to the \$132,221,058 based on December 31, 2010 of additional amortizations accrued pursuant to the Experimental Regulatory Plan, KCPL has accrued additional amortizations in the amount of \$36,674,731 pursuant to Case No. EO-94-199.

- Q. In its direct recommendation, did Staff include an allowance for net salvage in its
 calculated depreciation rates?
- A. No. Because of Staff's direct-filed recommendation to utilize the accumulated additional amortizations for incurred net salvage (cost of removal) expenditures, Staff did not include an allowance for net salvage in its direct-filed recommended deprecation rates, nor in its direct-filed depreciation expense recommendation.
- Q. Does Staff's revision to its recommended treatment of the accumulated additional
 amortizations require a revision to its depreciation recommendations?
- A. Yes. Staff has recalculated depreciation rates to include an allowance for net
 salvage. This revised recommendation of depreciation rates is attached as Schedule AR 1. The
 revised depreciation rates resulted in an annual depreciation expense of \$90,234,298, when
 applied to plant balances in the Staff Accounting Schedules as of December 21, 2010.
- Q. How does Staff's revised recommendation compare to KCPL's current request,
 using these same Staff's plant balances?
- A. Staff input the depreciation rates requested in Mr. Spanos' Direct Testimony to
 the Staff Accounting Schedules. The resultant annual depreciation expense calculated was
 \$90,875,531.
- Q. Does Staff's recommendation concerning treatment of the accumulated additional
 amortizations require segregating the Iatan 2 depreciation reserve accounts from the remaining
 steam production fleet?
- A. Yes. To calculate applicable depreciation rates, Staff recommends segregating
 the Iatan 2 steam plant accounts as separate sub accounts from the remainder of the steam

generation production fleet². Assigning the regulatory plant amortizations to the reserves of only 1 2 five steam production accounts specific to Iatan 2 is a relatively straight forward way to track 3 these additional dollars. The Staff recommended depreciation rates shown in attached 4 Schedule AR - 1 for Iatan 2 have been adjusted to amortize these additional reserves over the 5 expected service life of the new plant in service. Depreciation rates are calculated on a service 6 life basis to ensure that ordered rates reflect the benefit of the accumulated additional 7 amortizations to prevent the collection of these dollars a second time.

What specific accounting treatment does Staff recommend concerning the 8 Q. 9 accumulated additional amortizations?

10 Staff's recommends the Commission order KCPL to assign the accumulated A. 11 additional amortizations to Iatan 2 steam production plant depreciation reserve subaccounts. 12 Specifically, Staff recommends the Commission order KCPL to assign the approximately \$36.7 million and \$132.2 million (total \$168.9 million) currently held in account 399 to newly 13 created accounts 311.5, 312.5, 314.5, 315.5, and 316.5 on a dollar weighted Missouri 14 15 jurisdictional cost basis of the prudently allowed additions to plant accounts resulting from the 16 construction of Iatan 2, and assigning to accounts 311.6, 312.6, 314.6, 315.6, and 316.6 the 17 depreciation expense accruals resulting from applying the ordered depreciation rates to plant in service for Iatan 2. 18

19

Q. How should these sub accounts be treated for depreciation purposes?

20

A.

defined above are to be viewed as if the two subaccount were a one account for depreciation 21

For each of the Iatan 2 accounts 311, 312, 314, 315, and 316 the subaccounts

²This is similar to the depreciation treatment used for the Hawthorn 5 rebuild accounts. Hawthorn 5 has a large casualty insurance settlement residing in depreciation reserves that are set aside to apply to Hawthorn 5 only. Hawthorn 5 depreciation rate computations are adjusted based on the current reserves balances and expected life of the current dollars in service to ensure depreciation expense is not collected from rate payers to pay for plant that has already been covered by the insurance settlement.

1	analysis purj	poses. Retirement records for use	in future depr	reciation studies shall be recorded					
2	and treated using the sum of the two subaccounts as one reserve account.								
3	Q. What amount of the \$168.9 million dollars is credited to each new reserve								
4	subaccount for Iatan 2?								
5	А.	The distribution to plant accour	nts recognizing	g Staff's recommended prudency					
6	disallowance	es is shown in the table below.							
7 8	P	Staff's recommended assig Additional Amortizations to the re	nment of the serves for play	Accumulated nt in service accounts					
9 10 11 12 13 14	311.5 312.5 314.5 315.5 316.5	Structures and Improvements Boiler Plant Equipment Turbogenerator Units Accessory Electrical Equip Misc Power Plant Equip	10.5 % 75.2 10.4 3.5 0.4	\$ 17,721,103 127,006,720 17,624,608 5,894,241 1,787,709 \$168 895 789					
13 16 17	Q.	Does the Report and Order i	n Case No. 1	ER-2006-0314 provide guidance					
18	concerning t	he accounting treatment of the accur	nulated addition	onal amortizations?					
19	А.	Yes. The Commission states at p	bage 56 of its 2	2006 Order "any Regulatory Plan					
20	additional a	mortization that is provided to KC	PL pursuant to	o that Stipulation and Agreement					
21	shall be used	as a reduction in rate base for the l	onger of (a) at	t least ten (10) years following the					
22	effective dat	e of the July 28, 2005 Report And C	Order in Case 1	No. EO-2005-0329 or (b) until the					
23	investment in	n plant in service accounts to which	the Regulatory	y Plan additional amortizations are					
24	ultimately as	signed by the Commission is retired							
25	Q.	Is KCPL's requested treatment	for the accu	mulated additional amortizations					
26	consistent w	ith the Report and Order?							
27	А.	No. KCPL's requested tre	atment assign	ns the accumulated additional					
28	amortization	s to all plant accounts other than	Iatan 2. So	me of those accounts consist of					

property near the end of useful life and near term significant retirements are expected to occur.
 There are approximately 4.3 years remaining in the ten year period. Under Staff's depreciation
 studies the overall plant estimated remaining life is 30 years. Approximately 14% of the current
 plant in service is expected to be retired during these 4.3 years.

Q. Is Staff's recommendation to assign the regulatory plan amortization to the Iatan 2
accounts consistent with the Report and Order in Case No. ER-2006-0314?

A. Yes. Staff's recommended treatment uses the accumulated additional
amortizations as a reduction in rate base for the life of Iatan 2. Both Staff and KCPL expect
Iatan 2 to remain in service past August 7, 2015, which is ten years after the effective date of the
July 28, 2005 Report and Order in Case No. EO-2005-0329.

Q. Is it important to be able to identify the accumulated additional amortizations in
the depreciation reserve?

A. Yes. Assignment of the additional amortizations to the Iatan 2 reserves allows
monitoring and identification of these funds.

15

Q. Does Staff's revised recommendation include any other modifications?

A. Yes. For the nuclear plant accounts the net salvage (cost of removal) has been
modified to remove terminal net salvage from the computation of depreciation rates. This is
further explained below. A table showing a comparison of the current Staff recommended
depreciation rates to the depreciation rates representing the Company proposal from
Mr. Spanos' Direct Testimony is included as Schedule AR - 2 to this testimony.

3

4

IATAN 2 DEPRECIATION RATES, ESTIMATED PLANT LIFE, AND ADDITIONAL RESERVES

Q. What are the differences between Staff's revised depreciation recommendation for Iatan 2 and KCPL's request?

A. Staff used an estimated life of 60 years to determine the adjusted remaining life
depreciation rates for the Iatan 2 steam production plant accounts. Mr. Spanos used an estimated
life of 50 years. Staff included 100% of the Regulatory Plan Additional Amortizations as
accumulated depreciation reserves for Iatan 2. Mr. Spanos distributed 100% of the
Additional Amortizations to all plant accounts except Iatan 2, which received none.

Q. Does Staff's revised recommendation concerning the accumulated additional
amortizations affect Staff's recommendation regarding the depreciation treatment for Iatan 2
Steam Production Plant?

A. Yes. Staff is recommending that Iatan 2 be treated separately to allow
estimation of an average service life and a remaining life for each Iatan 2 plant account separate
from the other steam plant accounts. These estimates were calculated using an expected life for
Iatan 2 of 60 years.

Q. What basis does Staff use for its 60 year life estimate for deprecation purposes for
Iatan 2.

A. Staff bases its 60 year life estimate on observations of the estimated lives apparent
for other large coal fired steam production plants currently in service in Missouri. Attached
Schedule AR - 3 is a table showing an average expected life of 64 years for 24 steam production
units currently in service in Missouri. The 60 year estimated life for Iatan 2 is reasonable in
comparison to the 64 year average for other Missouri plants, and is also consistent with the
recent decision by the Kansas Corporation Commission ("the Kansas Commission") for Iatan 2.

0

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Does Staff's life estimate differ from KCPL's request?

2 Yes. Mr. Spanos used a 50 year life as the basis for KCPL's request. Staff's A. 3 understanding from Mr. Spanos' testimony is that he has specified this shorter life to increase 4 depreciation expense in the early years of the plant's life. Mr. Spanos' claims a shorter initial 5 life estimate used for a new plant will increase the initial depreciation expense and tend to 6 smooth this expense over the total life of a plant that may suffer a future requirement for a major 7 modification or early retirement. Staff does not agree that the initial users of a new plant should 8 be asked to return capital to KCPL on an accelerated schedule in anticipation of speculative 9 additional demands and requirements placed on the plant in future years by future users. If 10 future users or governmental agencies place additional demands and/or restrictions resulting in 11 early retirement of plant, it should be that future party's liability, not a speculative prepayment from current users. Current users already pay through depreciation rates for expected future 12 replacement of worn components, routine modifications, and upgrades. Most importantly, past 13 14 history which is used to estimate depreciation rates already includes these type of upgrades 15 including retirements that have occurred as a result of upgrades for changes in environmental laws. 16

Q. Does Mr. Spanos offer an over-simplified example concerning KCPL's request to
 manipulate the Iatan 2 depreciation rates to achieve faster capital recovery?

A. Yes. Staff views Mr. Spanos' example starting at page 20 of his rebuttal as oversimplified and misleading. His example does not represent the actual practice used in setting depreciation rates. This example is premised on the assumption that "no major capital expenditures occur" which is inconsistent with Staff's study that recognizes the interim retirements and major capital expenditures that have actually occurred, and are factored into

current rates. Interim retirements resulting from past changes in demands and requirements for
 plant are already factored into depreciation rates as calculated by Staff, although Spanos'
 example is premised on an assumption that they are not.

4 To illustrate this point, a 50 year estimated life yields a simple 2% depreciation rate as 5 shown in Mr. Spanos' example. However, we recognize that worn parts are replaced and routine 6 modifications occur causing interim retirements - so the depreciation study takes these into 7 account by recognizing interim retirements. Included in these interim retirements are retirements 8 resulting from major modifications and upgrades caused by changes in environmental laws. For 9 KCPL and GMO these interim retirements for steam plant equipment account for an addition of 10 approximately 0.7% to the 2% rate. Staff also includes in deprecation rates an allowance for 11 future cost of removal of steam plant, which adds another 0.3% for the major accounts. Adding 12 all three components of the depreciation rate results in current rate payers paying a 3% depreciation rate.³ This is 150% of the straight 2% simple rate that Mr. Spanos used in his 13 14 example. To ask the current rate payers to pay even more by shortening the expected life span 15 by ten years to cover a speculative additional increase in the rate of change is not reasonable.

Q. Does Staff agree with Mr. Spanos' characterization on page 21 line 13 that
ratepayers pre- and post-renovation will be paying different rates for "the same assets?"

A. No. The assets after a renovation of a plant are different than the assets prior to
the renovation – it is not at all unexpected that ratepayers enjoying the benefit of a refurbished
plant would pay different rates than ratepayers who did not have the benefit of the
refurbishments.

³ The current case for Iatan 2 shows a much lower depreciation rate because the rate has been modified to account for the regulatory plan amortizations added to reserves. These reserve additions account for approximately one third of Missouri jurisdictional cost of the Iatan 2 plant.

Q. Does Staff agree with Mr. Spanos' discussion on page 22 of his
 Rebuttal Testimony concerning comparison of older units as support for a life span of a newly
 constructed unit?

A. Yes. Staff agrees that blind comparisons should not be made. Staff has used the
actual retirement history for KCPL to estimate the depreciation rates for the current plants in
service from which that history was derived. For the Hawthorn 5 rebuild, and for the new
supercritical steam plant, Iatan 2, Staff has recognized that additional consideration is warranted,
and has separated these plants for individual depreciation treatment.

Q. Does Staff agree with Mr. Spanos' assertion that "[m]any life spans are revised
over time due to changes in functionality, regulatory requirements and rulings, as well as
efficiency and improvements of the facility, but the proper time for these revisions is at the time
of the change, not when estimating the initial life span."?

A. Yes. Staff agrees that the proper time for revisions in depreciation rates is at the time of the change, not when estimating the initial plant life and rates. This is why Staff supports use of a 60 year life for calculating depreciation rates applicable to Iatan 2, as opposed to KCPL's requested – foreshortened - 50 year life.

Q. If the Commission does not order Staff's recommended treatment of the
accumulated additional amortizations, or a similar treatment, does Staff recommend Iatan 2
depreciation rates be developed by segregating Iatan 2 from the remainder of the steam
generation fleet?

A. No. It is only necessary to segregate Iatan 2 and utilize remaining life
treatment in order to effectuate Staff's recommendation concerning the accumulated additional
amortizations.

1 2

The Unrecovered General Plant Amortizations

Q In Mr. Spanos' Rebuttal Testimony, regarding the adoption of the use of an Amortization of General Plant method of depreciation accounting, Mr. Spanos states, starting at page 14, "[t]he current rates were not established based on the type of assets that exist today in the respective accounts or sub-accounts." Does Staff agree with Mr. Spanos?

- A. Yes. Staff agrees that the plant recorded book balances of current plant in service
 for these accounts does not properly represent KCPL's actual used and useful equipment in
 service. These accounts contain many small or hard to track items which over time some may
 become no longer used or useful without a retirement being recorded on the books. The apparent
 low depreciation rates in some of KCPL's General Plant accounts reflect the results of
 depreciation mortality studies where the retirement history is deficient.
- 12

Q Why does Staff believe the plant accounts are inflated?

A. The Company's request to switch to a General Plant Amortization method for
some of the general plant accounts to better represent plant in service and depreciation expense
shows booking of approximately \$12,025,000 in retirements and requests \$18,421,033 in
unrecovered plant. This is evidence that booking of additional retirements is warranted.

Q. Does Staff agree that KCPL should be allowed an increase depreciation expense
to recover a claimed deficiency in reserves in the General Plant accounts?

A. No. KCPL has an overall excess accumulated depreciation reserve on the order of
\$400,000,000. Requesting additional funds in rates for an alleged \$18,421,033 due to the book
retirement of property in some of the General Plant accounts which are alleged to have been
removed from service in years past is not reasonable. The KCPL overall excess reserves
(theoretical calculate minus book) are approximated as follows:

1		Regul	atory Additional Amortizations	\$169,000,000
2		Hawtl	norn 5 Rebuild Steam Plant	\$94,000,000
3		Wolf	Creek Nuclear Plant	\$105,000,000
4		Trans	mission and Distribution Plant	\$40,000,000
5	Q.	Why	does Staff recommend staying with	the current depreciation rates if Staff
6	believes the o	current r	ates do not reflect the actual consump	tion of current plant in service?
7	А.	The c	urrent rates do reflect what is record	ed on the books. A low depreciation
8	rate for an	inflated	l plant balance produces approxim	ately the same depreciation accrual
9	(expense) as	an incre	ased rate on a reduced plant balance.	
10	Q.	Why	does Staff, at this time, object t	o KCPL's request to switch to an
11	Amortization	method	d of depreciation accounting and boo	king the resultant retirements to plant
12	and reserves	to fit the	e amortization period chosen?	
13	А.	There	are three reasons:	
14		1)	The Company claims additional ret	irements need to be recorded to books
15			for some of these General Plant	accounts, but has not provided an
16			inventory of plant in service to she	ow what needs to be retired from the
17			books. Staff believes the retirement	nt history in its current form does not
18			reasonably represent the actual co	onsumption of plant, and is thus not
19			reliable to estimate the depreciation	n rate assignments for these accounts.
20			Without a reasonable retirement	history record, there is insufficient
21			evidence to support the amortization	periods the Company has chosen.
22		2)	Staff also believes retirements have	been taken in some of these accounts
23			which resulted from the Aquila a	equisition that should be recorded to

1				synergies accomplished due to the acquisition, and not to depreciation
2				expense through early retirements in these accounts.
3			3)	Staff does not agree with the Company request to increase depreciation
4				expense with an amortization for unrecovered plant. Staff recommends a
5				balancing of reserves by transferring excess depreciation reserves from
6				Transmission Plant to cover the deficiency in General Plant reserves.
7	Ç) .	What o	does Staff recommend to the Commission?
8	A	A.	Staff r	ecommends the Commission order the following:
9			1)	KCPL to conduct an inventory of the property in General account numbers
10				391, 393, 394, 395, 397, and 398 and retire equipment from the books that
11				is found to be not used and useful within six (6) months of the date of the
12				Report and Order for this case.
12 13			2)	Report and Order for this case. KCPL to provide a list to Staff of all items retired from these accounts,
12 13 14			2)	Report and Order for this case. KCPL to provide a list to Staff of all items retired from these accounts, transfers into or out of these accounts, starting at the date of the
12 13 14 15			2)	Report and Order for this case. KCPL to provide a list to Staff of all items retired from these accounts, transfers into or out of these accounts, starting at the date of the acquisition of Aquila through December 31 2010, showing a description
 12 13 14 15 16 			2)	Report and Order for this case. KCPL to provide a list to Staff of all items retired from these accounts, transfers into or out of these accounts, starting at the date of the acquisition of Aquila through December 31 2010, showing a description of the item retired, the date of retirement, the date the item was placed in
 12 13 14 15 16 17 			2)	Report and Order for this case. KCPL to provide a list to Staff of all items retired from these accounts, transfers into or out of these accounts, starting at the date of the acquisition of Aquila through December 31 2010, showing a description of the item retired, the date of retirement, the date the item was placed in service, and the amount of the original cost. For items found to have been
 12 13 14 15 16 17 18 			2)	Report and Order for this case. KCPL to provide a list to Staff of all items retired from these accounts, transfers into or out of these accounts, starting at the date of the acquisition of Aquila through December 31 2010, showing a description of the item retired, the date of retirement, the date the item was placed in service, and the amount of the original cost. For items found to have been retired early due to the acquisition, conduct a reconciliation to the reserve
 12 13 14 15 16 17 18 19 			2)	Report and Order for this case. KCPL to provide a list to Staff of all items retired from these accounts, transfers into or out of these accounts, starting at the date of the acquisition of Aquila through December 31 2010, showing a description of the item retired, the date of retirement, the date the item was placed in service, and the amount of the original cost. For items found to have been retired early due to the acquisition, conduct a reconciliation to the reserve accounts such that the un-depreciated portion of the retirement that was
 12 13 14 15 16 17 18 19 20 			2)	Report and Order for this case. KCPL to provide a list to Staff of all items retired from these accounts, transfers into or out of these accounts, starting at the date of the acquisition of Aquila through December 31 2010, showing a description of the item retired, the date of retirement, the date the item was placed in service, and the amount of the original cost. For items found to have been retired early due to the acquisition, conduct a reconciliation to the reserve accounts such that the un-depreciated portion of the retirement that was taken is added back into the respective reserve account. Provide this
 12 13 14 15 16 17 18 19 20 21 			2)	Report and Order for this case. KCPL to provide a list to Staff of all items retired from these accounts, transfers into or out of these accounts, starting at the date of the acquisition of Aquila through December 31 2010, showing a description of the item retired, the date of retirement, the date the item was placed in service, and the amount of the original cost. For items found to have been retired early due to the acquisition, conduct a reconciliation to the reserve accounts such that the un-depreciated portion of the retirement that was taken is added back into the respective reserve account. Provide this information to Staff within six (6) months from the date of the Report and

1	3) KCPL to work with Staff to determine the amount, if any, of reserves is to
2	be transferred from the Transmission Plant Reserve accounts to the
3	General Plant reserves accounts to cover any unrecovered General Plant.
4	This transfer of reserves, if any, is to be completed within nine (9) months
5	of the date of the Report and Order for this case.
6	The Use of Terminal Net Salvage
7	Q. Has Staff used the same depreciation computation methods for the nuclear plant
8	accounts as proposed by Mr. Spanos?
9	A. No. For the nuclear plant accounts, Staff corrected the net salvage rate used in the
10	depreciation rate computation to eliminate the inclusion of terminal net salvage. Terminal net
11	salvage is the gross salvage minus the cost of removal when a production plant is removed from
12	service and disposed of. A separate and independent collection and funding mechanism is used
13	to provide a special decommissioning fund for nuclear plants. Normal collection of net salvage
14	includes collection of funds for future cost of removal of plant when plant is retired. The net
15	salvage rate is computed as a percentage of original cost. When a retirement occurs, the gross
16	salvage minus the cost of removal for the piece of plant being retired is the net salvage. The net
17	salvage rate is simply a ratio of the net salvage to the original cost of that piece. An average of

the net salvage for retired pieces is applied to the total cost of plant in service and collected over the life of the plant. But only a fraction of the plant in service is expected to be replaced as interim retirements. When a production unit is taken out of service, a significant amount of the original installed plant is included in the retirement. That portion retired which is still original installed plant has had cost of removal collected as net salvage over the entire life of the plant.

- Thus under normal depreciation collection of net salvage, a portion of the total collections over
 the plant life remains for use as terminal net salvage (cost to dismantle the plant).
- 3

Q. Has Staff addressed this issue in its recommendation?

Yes, Staff modified the net salvage rates for the nuclear plant accounts to collect 4 A. 5 net salvage only on the portion of plant expected to retire as interim retirements. This correction 6 is derived from the interim survivor curves which show the portion of original plant still 7 surviving at the expected retirement date. The net salvage rate Staff used for each nuclear plant 8 account is reduced from the normal net salvage rate to reflect only the net salvage (cost of 9 removal) estimate required for interim retirements. The difference in net salvage rate and in the 10 depreciation rate for the nuclear plant accounts seen in attached Schedule AR - 2 is a direct 11 result of this terminal net salvage correction by Staff. KCPL has not corrected its request for 12 this issue. A similar correction for terminal net salvage was proposed and subsequently incorporated into the depreciation rates ordered by the Commission for the Callaway Nuclear 13 14 Plant in Union Electric Company d/b/a AmerenUE (AmerenUE) rate case ER-2010-0036.

15

Remaining Life Depreciation Rates

Q. Are there ways to address the concerns Mr. Spanos raises on page 12 of his
Rebuttal Testimony?

A. Yes. Whole life rates may be accompanied with rebalancing of reserves and/or
fixed amortizations to insure no more or no less depreciation expense is collected in aggregate,
as explained below.

1 2

3

Balancing of Depreciation Reserves Between Accounts

Q. What is Staff's response to Mr. Spanos' statement on page 12, line 15 that "[t]he whole life method has no checks for full recovery, over-recovery, or under-recovery."?

4 Staff recommends, for some accounts, the transfer of reserves between plant A. 5 accounts to rebalance book reserves with theoretically calculated reserves. Mr. Spanos requests 6 the use of remaining life depreciation rates for all plant accounts, and defends this position in his 7 Rebuttal Testimony starting at page 12. Staff recognizes that the whole life method does not 8 automatically correct for over or under recovery. Staff also recognizes that the blind use of 9 remaining life may introduce other undesirable effects. Staff takes a manual approach by 10 reviewing the theoretical calculated reserves versus the book reserves, makes an informed judgment as to why the over or under reserve condition exists, and recommends appropriate 11 12 action. In the implementation of its study in a given case, Staff may recommend to the Commission a transfer of reserves from over to under accrued accounts, specific reserve 13 14 amortizations, or that an over or under accrual should remain in place due to expected 15 future events.

16

Q. Is Staff recommending a transfer of reserves in this case?

A. Staff's position in this case is that the overall KCPL plant excess in reserves
consists mainly of three items, 1) accident insurance for Hawthorn 5, 2) a change in life span for
Wolf Creek, and 3) additional amortizations collected during the regulatory plan. These three
large over accruals (amounts discussed in above testimony) are relatively easy to monitor and
track, and are used to reduce rate base and to reduce current deprecation rates through remaining
life depreciation rates assigned to each of these plants. The remaining over accrual for the plant
accounts as a whole is relatively small (about 15%) of the total and spread across many accounts.

Staff recommends leaving this other 15% in the booked reserves for possible future events (such
 as the request by the Company to correct for unrecovered plant in the General Plant accounts).
 Staff recommends re-balancing reserves of the general Steam Production accounts, the
 Transmission accounts, and the Distribution accounts.

Q. What restrictions does Staff recommend on redistributing reserves between
accounts for the purpose of reducing the wide variability found in over and under accruals for
specific accounts?

A. Within the rate making process, the cost of Production, Transmission,
Distribution and General Plant accounts are not distributed equally between the different class
costs of service. Generally transfers between these groups should not be conducted, with the
possible exception of transfers between Transmission and General Plant accounts which are
fairly equally distributed between different class costs of service. Also, transfers of reserves in
or out of accounts with special amortizations, (such as Hawthorn 5, Wolf Creek, and Iatan 2)
should not be conducted.

15

Q. What are the transfers of reserves recommended by Staff?

A. The transfers of reserves recommended by Staff are shown in the attached
Schedule AR - 4.

18 Q. What does the Commission need to order in this case to implement Staff's19 depreciation recommendation?

20

21

22

23

24

25

A. Staff recommends the Commission include in its Report and Order the following:

- 1. That KCPL utilize the deprecation rates contained in Schedule AR 1. These rates are premised on:
 - i. Treatment of the bulk of KCPL's steam generation fleet as a living account, with mass asset, whole life depreciation rates, which include an allowance for both interim and terminal net salvage.

2		ii. Treatment of Iatan 2, Hawthorne 5, and Wolf Creek as dying accounts, with life spanned, remaining life deprecation rates, based on:						
3	a. A 60 year life for Iatan 2.							
4	b. For Wolf Creek, the net salvage rates are adjusted to collect net							
5		salvage only on the portion of plant expected to retire as						
6		interim retirements.						
7		iii. The depreciation rates for Gener	ral Plant accour	nt numbers 391,				
8		393, 394, 395, and 398 rema	in the same	as ordered in				
9		Case No. ER-2005-0329.		~				
10		iv. Treatment of KCPL's combustion t	urbine generation	n fleet as a living				
11		account, with mass asset, whole life	e depreciation rat	es, which include				
12		an allowance for interim and final re	tirements.					
13	2	That KODI has a dama data ana da in ita h	1	·····				
14	2.	itam 2 halow	books the subacco	ounts identified in				
13		item 5 below.						
10	2	That KCDL has ordered to assign the	approximately \$	26.7 million and				
17 18	5.	\$132.2 million (total \$168.9 million)	currently held in	30.7 minimum and 300 to				
19		newly created accounts 311.5 312.5 31	145 3155 and 3	3165 on a dollar				
$\frac{1}{20}$		weighted Missouri jurisdictional cost	hasis of the n	rudently allowed				
$\frac{20}{21}$		additions to plant accounts resulting fro	m the construction	on of Iatan 2 and				
22		assigning to accounts 311.6, 312.6.	314.6. 315.6.	and 316.6 the				
23		depreciation expense accruals resulti	ing from apply	ing the ordered				
24		depreciation rates to plant in service for	Iatan 2.	0				
25		1 1						
25								
25 26	4.	That KCPL be ordered to record in	its books the	reserve transfers				
25 26 27	4.	That KCPL be ordered to record in identified as follows:	its books the	reserve transfers				
25 26 27 28	4. 311.5	That KCPL be ordered to record in identified as follows: Structures and Improvements	its books the 10.5 %	reserve transfers \$ 17,721,103				
25 26 27 28 29	4. 311.5 312.5	That KCPL be ordered to record in identified as follows: Structures and Improvements Boiler Plant Equipment	its books the 10.5 % 75.2	reserve transfers \$ 17,721,103 127,006,720				
25 26 27 28 29 30	4. 311.5 312.5 314.5	That KCPL be ordered to record in identified as follows: Structures and Improvements Boiler Plant Equipment Turbogenerator Units	its books the 10.5 % 75.2 10.4	reserve transfers \$ 17,721,103 127,006,720 17,624,608				
25 26 27 28 29 30 31	4. 311.5 312.5 314.5 315.5	That KCPL be ordered to record in identified as follows: Structures and Improvements Boiler Plant Equipment Turbogenerator Units Accessory Electrical Equip	its books the 10.5 % 75.2 10.4 3.5	reserve transfers \$ 17,721,103 127,006,720 17,624,608 5,894,241				
25 26 27 28 29 30 31 32	4. 311.5 312.5 314.5 315.5 316.5	That KCPL be ordered to record in identified as follows: Structures and Improvements Boiler Plant Equipment Turbogenerator Units Accessory Electrical Equip Misc Power Plant Equip	10.5 % 75.2 10.4 3.5 0.4	reserve transfers \$ 17,721,103 127,006,720 17,624,608 5,894,241 1,787,709				
25 26 27 28 29 30 31 32 33	4. 311.5 312.5 314.5 315.5 316.5	That KCPL be ordered to record in identified as follows: Structures and Improvements Boiler Plant Equipment Turbogenerator Units Accessory Electrical Equip Misc Power Plant Equip	its books the 10.5 % 75.2 10.4 3.5 0.4	reserve transfers \$ 17,721,103 127,006,720 17,624,608 5,894,241 1,787,709				
25 26 27 28 29 30 31 32 33 34	4. 311.5 312.5 314.5 315.5 316.5	That KCPL be ordered to record in identified as follows: Structures and Improvements Boiler Plant Equipment Turbogenerator Units Accessory Electrical Equip Misc Power Plant Equip TOTAL	its books the 10.5 % 75.2 10.4 3.5 0.4 100 %	reserve transfers \$ 17,721,103 127,006,720 17,624,608 5,894,241 1,787,709 \$168,895,789				
25 26 27 28 29 30 31 32 33 34 35	4. 311.5 312.5 314.5 315.5 316.5	That KCPL be ordered to record in identified as follows: Structures and Improvements Boiler Plant Equipment Turbogenerator Units Accessory Electrical Equip Misc Power Plant Equip TOTAL	its books the 10.5 % 75.2 10.4 3.5 0.4 100 %	reserve transfers \$ 17,721,103 127,006,720 17,624,608 5,894,241 1,787,709 \$168,895,789				
25 26 27 28 29 30 31 32 33 34 35 36	4. 311.5 312.5 314.5 315.5 316.5 5.	That KCPL be ordered to record in identified as follows: Structures and Improvements Boiler Plant Equipment Turbogenerator Units Accessory Electrical Equip Misc Power Plant Equip TOTAL That KCPL be ordered to transfer res	its books the 10.5 % 75.2 10.4 3.5 0.4 100 % serves between	reserve transfers \$ 17,721,103 127,006,720 17,624,608 5,894,241 1,787,709 \$168,895,789 steam production				
25 26 27 28 29 30 31 32 33 34 35 36 37	4. 311.5 312.5 314.5 315.5 316.5 5.	That KCPL be ordered to record in identified as follows: Structures and Improvements Boiler Plant Equipment Turbogenerator Units Accessory Electrical Equip Misc Power Plant Equip TOTAL That KCPL be ordered to transfer resaccounts 315 and 315, and 315 and 315, and 315 and	its books the 10.5 % 75.2 10.4 3.5 0.4 100 % serves between a erves within the	reserve transfers \$ 17,721,103 127,006,720 17,624,608 5,894,241 1,787,709 \$168,895,789 steam production transmission and				
25 26 27 28 29 30 31 32 33 34 35 36 37 38	4. 311.5 312.5 314.5 315.5 316.5 5.	That KCPL be ordered to record in identified as follows: Structures and Improvements Boiler Plant Equipment Turbogenerator Units Accessory Electrical Equip Misc Power Plant Equip TOTAL That KCPL be ordered to transfer res accounts 315 and 315, and transfer res distribution accounts to balance over an	its books the 10.5 % 75.2 10.4 3.5 0.4 100 % serves between a erves within the id under reserve a	reserve transfers \$ 17,721,103 127,006,720 17,624,608 5,894,241 1,787,709 \$168,895,789 steam production transmission and accruals as shown				
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39	4. 311.5 312.5 314.5 315.5 316.5 5.	That KCPL be ordered to record in identified as follows: Structures and Improvements Boiler Plant Equipment Turbogenerator Units Accessory Electrical Equip Misc Power Plant Equip TOTAL That KCPL be ordered to transfer res accounts 315 and 315, and transfer res distribution accounts to balance over an in Schedule AR – 4.	its books the 10.5 % 75.2 10.4 3.5 0.4 100 % serves between erves within the id under reserve a	reserve transfers \$ 17,721,103 127,006,720 17,624,608 5,894,241 1,787,709 \$168,895,789 steam production transmission and accruals as shown				
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40	4. 311.5 312.5 314.5 315.5 316.5 5.	That KCPL be ordered to record in identified as follows: Structures and Improvements Boiler Plant Equipment Turbogenerator Units Accessory Electrical Equip Misc Power Plant Equip TOTAL That KCPL be ordered to transfer res accounts 315 and 315, and transfer res distribution accounts to balance over an in Schedule AR – 4.	its books the 10.5 % 75.2 10.4 3.5 0.4 100 % serves between a verves within the d under reserve a	reserve transfers \$ 17,721,103 127,006,720 17,624,608 5,894,241 1,787,709 \$168,895,789 steam production transmission and accruals as shown				
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40	4. 311.5 312.5 314.5 315.5 316.5 5. 6.	That KCPL be ordered to record in identified as follows: Structures and Improvements Boiler Plant Equipment Turbogenerator Units Accessory Electrical Equip Misc Power Plant Equip TOTAL That KCPL be ordered to transfer res distribution accounts to balance over an in Schedule AR – 4.	its books the 10.5 % 75.2 10.4 3.5 0.4 100 % serves between erves within the d under reserve a	reserve transfers \$ 17,721,103 127,006,720 17,624,608 5,894,241 1,787,709 \$168,895,789 steam production transmission and accruals as shown				
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42	4. 311.5 312.5 314.5 315.5 316.5 5. 6.	That KCPL be ordered to record in identified as follows: Structures and Improvements Boiler Plant Equipment Turbogenerator Units Accessory Electrical Equip Misc Power Plant Equip TOTAL That KCPL be ordered to transfer res distribution accounts to balance over an in Schedule AR – 4. That KCPL be ordered to: i. Conduct an inventory of the property	its books the 10.5 % 75.2 10.4 3.5 0.4 100 % serves between erves within the d under reserve a y in General acco	reserve transfers \$ 17,721,103 127,006,720 17,624,608 5,894,241 1,787,709 \$168,895,789 steam production transmission and accruals as shown				
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43	4. 311.5 312.5 314.5 315.5 316.5 5. 6.	 That KCPL be ordered to record in identified as follows: Structures and Improvements Boiler Plant Equipment Turbogenerator Units Accessory Electrical Equip Misc Power Plant Equip TOTAL That KCPL be ordered to transfer resaccounts 315 and 315, and transfer resatistribution accounts to balance over an in Schedule AR – 4. That KCPL be ordered to: Conduct an inventory of the property 393, 394, 395, 397, and 398 and retained and an an	its books the 10.5 % 75.2 10.4 3.5 0.4 100 % serves between a erves within the d under reserve a y in General accoo ire equipment from	reserve transfers \$ 17,721,103 127,006,720 17,624,608 5,894,241 1,787,709 \$168,895,789 steam production transmission and accruals as shown ount numbers 391, on the books that				
25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44	4. 311.5 312.5 314.5 315.5 316.5 5. 6.	 That KCPL be ordered to record in identified as follows: Structures and Improvements Boiler Plant Equipment Turbogenerator Units Accessory Electrical Equip Misc Power Plant Equip TOTAL That KCPL be ordered to transfer resaccounts 315 and 315, and transfer resa distribution accounts to balance over an in Schedule AR – 4. That KCPL be ordered to: Conduct an inventory of the property 393, 394, 395, 397, and 398 and retains found to be not used and useful we appear to a second seco	tits books the 10.5 % 75.2 10.4 3.5 0.4 100 % serves between a erves within the d under reserve a y in General according ire equipment from vithin six (6) mor	reserve transfers \$ 17,721,103 127,006,720 17,624,608 5,894,241 1,787,709 \$168,895,789 steam production transmission and accruals as shown ount numbers 391, om the books that the of the date of				

$ \begin{array}{c} 1\\2\\3\\4\\5\\6\\7\\8\\9\\10\\11\\12\\13\\14\\15\end{array} $	ii. iii.	Provide a list to Staff of all items retired from these accounts, transfers into or out of these accounts, starting at the date of the acquisition of Aquila through December 31 2010, showing a description of the item retired, the date of retirement, the date the item was placed in service, and the amount of the original cost. For items found to have been retired early due to the acquisition, conduct a reconciliation to the reserve accounts such that the un-depreciated portion of the retirement that was taken is added back into the respective reserve account. Provide this information to Staff within six (6) months from the date of the Report and Order for this case, Work with Staff to determine the amount, if any, of reserves is to be transferred from the Transmission Plant Reserve accounts to the General Plant reserves accounts to cover any unrecovered General Plant. This transfer of reserves, if any, is to be completed within nine (9) months of the date of the Report and Order for this case.
16	Q. Does this	end your testimony?
17	A. Yes.	

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Application of) Kansas City Power & Light Company for) Approval to Make Certain Changes in its) Charges for Electric Service to Continue the) Implementation of Its Regulatory Plan)

File No. ER-2010-0355

AFFIDAVIT OF ARTHUR W. RICE, PE

STATE OF MISSOURI)	
)	SS.
COUNTY OF COLE)	

Arthur W. Rice, PE, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Surrebuttal Testimony in question and answer form, consisting of 1^{4} pages to be presented in the above case; that the answers in the foregoing Surrebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.

Nuter a Rice

Arthur W. Rice, PE

Subscribed and sworn to before me this

2011. day of

D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri Commissioned for Cole County My Commission Expires: December 08, 2012 Commission Number: 08412071

Notary Public

				Survivor	Reserves	Not	Proposed
USOA				Curve	AS % OI Plant	Salvade	Rate
Account	Sub Account		ASL yrs	Туре	(Note 1)	%	%
STEAM P	RODUCTION PLANT				51.6		
311	Structures and Improvements		48	48-L2	52.4	(20)	2.50
312	Boiler Plant Equipment		43	43-S0	57.0	(15)	2.68
312.01	Unit Coal Trains		25	25-R2.5	8.6	20	3.14
312.02	Boiler Plant AQC		49	40-S0	65.3	(15)	2.33
314	Turbgenerator Units		47	47-R1.5	47.0	(15)	2.45
315	Accessory Electrical Equipment	t	43	43-L1.5	38.5	(10)	2.56
316	Miscellaneous Power Plant Equ	ipment	37	37-R2	31.7	0	2.70
Hawthorn	Unit 5 rebuild						
311.02	Structures & improvements		34	90-S0.5	87.9	(20)	1.19
312.03	Boiler Plant Equipment		31	55-R1	84.8	(15)	1.20
315.01	Accessory Electrical Equip		31	50-L1	84.1	(10)	1.07
316.01	Misc Power Plant Equip		32	55-L1	84.8	0	0.61
latan 2 St	eam Plant						
311	Structures and Improvements	latan 2	55	90-S0.5	36.3	(20)	1.53
312	Boiler Plant Equipment	latan 2	47	44-R1	36.3	(15)	1.68
314	Turbgenerator Units	latan 2	50	60-R1.5	36.3	(15)	1.59
315	Accessory Electrical Equipment	latan 2	43	50-L2	36.3	(10)	1.71
316	Miscellaneous Power Plant Equip	ment latan 2	45	55-L1	36.3	0	1.41
Nuclear P	roduction Plant						
321	Structures & improvements		54	90-S0.5	56.0	(1.2)	1.36
322	Reactor Plant Equipment		49	60-R2	55.2	(2.3)	1.51
323	Turbogenerator Units		46	50-S1.5	65.9	(7.0)	1.59
324	Accessory Electrical Equip		46	50-S1.5	44.5	0	2.10
325	Misc power Plant Equip		36	40-R0.5	25.5	0	2.92
Other Pro	duction Plant						
341	Structures & improvements		60	60-R1	29.5	(5)	1.75
342	Fuel Holder & Accessories		45	45-R2	32.3	(10)	2.44
344	Generators		35	35-S0.5	33.6	(10)	3.15
345	Accessoriy Electrical Equip		45	45-R2.5	46.0	0	2.22
	ODUCTION PLANT						
341.02	Structures and Improvements		20	20-S1	11.4	0	5.00
344.02	Generators		20	20-S1	11.4	0	5.00
345.02	Accessoriy Electrical Equip		20	20-S1	11.4	0	5.00
TRANSMI	SSION PLANT				48.0		
352	Structures and Improvements		60	60-R2.5	46.7	(5)	1.75
353	Station Equipment		60	60-R0.5	41.0	(10)	1.83
353.03	Station Equip - Communications		30	30-S1	90.9	0	5.12
354	Towers and Fixtures		70	70-R3	88.5	(20)	1.72
355	Poles and Fixtures		50	50-S0.5	49.8	(40)	2.80
356	Overhead Conductors		53	53-R2	47.6	(20)	2.26
357	Underground Conduit		60	60-R3	75.5	0	1.67
358	Underground Conductors		55	55-R4	92.2	0	1.82

			o .	Reserves	N	Proposed
USOA			Survivor	As % Of Plant	Net Salvage	Depreciation Rate
Account	Sub Account	ASL yrs	Туре	(Note 1)	%	%
DISTRIBU	TION PLANT			34.4		
361	Structures and Improvements	50	60-S0.5	34.6	(5)	2.10
362	Station Equipment	48	48-R1.5	31.4	(5)	2.19
362.03	Station Equip - Communications	30	30-S1	75.5	0	6.66
364	Poles, Towers and Fixtures	38	38-R3	53.3	(40)	3.68
365	Overhead Conductors	45	45-R0.5	26.5	(20)	2.67
366	Underground Conduit	55	55-R2	27.1	(25)	2.27
367	Underground Conductors	50	50-R1.5	21.8	(5)	2.10
368	Line Transformers	34	34-R2	33.2	10	2.65
369	Services	48	48-R2.5	70.1	(100)	4.17
370	Meters	36	36-R1.5	37.7	0	2.78
371	Installations on Customer Prop	20	20-L1.5	35.3	(15)	5.75
373	Street Lighting, Signal Systems	25	25-L0.5	32.1	(5)	4.20
GENERAL	_ PLANT					
390	Structures and Improvements	45	45-R1	33.4	(15)	2.56
391	Office Furniture and Equipment	*Current Or	dered Rate	37.3	0	5.40
391.01	Office Furniture - Wolf Creek	*Current Or	dered Rate	41.4	0	5.40
391.02	Computer Equipment	*Current Or	dered Rate	8.2	0	5.40
392	Transportation Equipment					
	Autos	7	7-R2	43.8	25	10.71
	Light Trucks	8	8-R0.5	9.4	25	9.38
	Heavy Trucks	10	10-S1.5	16.8	25	7.50
	Tractors	12	12-S0	16.7	25	6.25
	Trailers	20	20-S1.5	39.2	25	3.75
393	Stores Equipment	*Current Or	dered Rate	57.1	0	3.58
394	Tools, Shop & Garage Equip	*Current Or	dered Rate	49.3	0	2.61
395	Laboratory Equipment	*Current Or	dered Rate	50.2	0	3.37
396	Power Operated Equipment	13	12-L2	18.0	15	6.54
397	Communications Equipment	*Current Or	dered Rate	9.6	0	2.50
398	Miscellaneous Equipment	*Current Or	dered Rate	20.6	0	3.16
	Composite Overall Plant			43.4		2.31

*Current Ordered Rate: Case ER-2005-0329)

Note 1: After transferring reserves between accounts and adding \$169 mil to latan 2 as proposed by Staff

	KCPL PROPOSAL		STAFF PROPOSAL				
			Assigned Net	Proposed Depreciation		Assigned Net	Proposed Depreciation
USOA	Sub Account	ASL	Salvage	Rate	ASL	Salvage	Rate
STEAM D		115	70	70	115	70	70
311 311	Structures and Improvements	38.0	(20)	2 78	48.0	(20)	2 50
212	Poilor Plant Equipment	21.4	(20)	2.70	40.0	(20)	2.50
212.01		25.0	20	2.04	42.J 25.5	20	2.00
212.01		20.0	20	2.90	20.0	20	3.14
214		30.Z	(15)	0.00	49.4	(15)	2.33
314		32.0	(15)	2.90	40.9	(15)	2.43
315	Accessory Electrical Equipment	30.7	(10)	3.52	43.0	(10)	2.50
Jourthann		33.4	0	1.90	37.0	0	2.70
Dawthorn	Structures & Improvemente - Unit 5 Debuild	22.0	(20)	0.00	22.0	(20)	1 10
311.02	Structures & Improvements Onit 5 Rebuild	33.9	(20)	0.99	33.9	(20)	1.19
312.03	Boller Plant Equipment Unit 5 Rebuild	31.3	(15)	0.96	31.3	(15)	1.2
315.01	Accessory Electrical Equip Unit 5 Rebuild	30.9	(10)	0.84	30.9	(10)	1.07
316.01	Misc Power Plant Equip Unit 5 Rebuild	31.5	0	0.39	31.5	0	0.61
	eam Plant	40.0	(20)	0.50	54.0	(20)	4 50
311	Structures and improvements latan 2	40.9	(20)	2.30	04.0	(20)	1.55
312	Boller Plant Equipment latan 2	41.5	(15)	2.77	40.8	(15)	1.08
314	Turbgenerator Units Tatan 2	43.6	(15)	2.64	49.6	(15)	1.59
315	Accessory Electrical Equipment	39.3	(10)	2.8	43.1	(10)	1.71
316	Miscellaneous Power Plant Equipment latan 2	40.8	0	2.45	45.2	0	1.41
		F 4 4	(5)	1.20	F 4 4	(4.0)	4.90
321	Structures & Improvements	54.1	(5)	1.30	54.1	(1.2)	1.36
322	Reactor Plant Equipment	48.8	(5)	1.41	48.8	(2.3)	1.51
323		46.4	(10)	1.49	46.4	(7.0)	1.59
324	Accessory Electrical Equip	45.7	0	1.89	45.7	0	2.10
325		36.0	0	2.69	36.0	0	2.92
Other Pro			(5)	0.74		(=)	
341	Structures & improvements	31.8	(5)	2.74	60.0	(5)	1.75
342	Fuel Holder & Accessories	32.4	(10)	2.90	45.1	(10)	2.44
344	Generators	28.9	(10)	3.20	34.9	(10)	3.15
345	Accessoriy Electrical Equip	34.5	0	1.87	45.0	0	2.22
			•				
341.02	Structures and Improvements	20.0	0	4.80	20.0	0	5.00
344.02	Generators	20.0	0	4.74	20.0	0	5.00
345.02	Accessoriy Electrical Equip	20.0	0	5.14	20.0	0	5.00
IRANSM		<u> </u>	(5)	1 70	00.0	(5)	4.75
352		60.0	(5)	1.73	60.0	(5)	1.75
353		59.8	(10)	1.34	60.1	(10)	1.83
353.03		19.5	U	28.92	19.5	U (00)	5.12
354	I owers and Fixtures	69.8	(20)	0.72	69.8	(20)	1.72
355	Poles and Fixtures	50.0	(40)	2.20	50.0	(40)	2.80
356		52.9	(20)	1.53	53.1	(20)	2.26
357	Underground Conduit	59.9	0	1.31	59.9	0	1.67
358	Underground Conductors	54.9	0	0.55	54.9	0	1.82

		ł	KCPL PROPOSAL			STAFF PROPOSAL				
			Assigned	Proposed		Assigned	Proposed			
		4.01	Net	Depreciation	4.01	Net	Depreciation			
Account	Sub Account	ASL Yrs	Salvage %	Rate %	ASL Yrs	Salvage %	Rate %			
DISTRIBL	JTION PLANT									
361	Structures and Improvements	50.0	(5)	1.33	50.0	(5)	2.10			
362	Station Equipment	48.2	(5)	1.70	47.9	(5)	2.19			
362.03	Station Equip - Communications	15.0	0	27.41	15.0	0	6.66			
364	Poles,Towers and Fixtures	38.0	(40)	3.00	38.0	(40)	3.68			
365	Overhead Conductors	45.1	(20)	2.39	44.9	(20)	2.67			
366	Underground Conduit	54.8	(25)	2.49	55.1	(25)	2.27			
367	Underground Conductors	50.0	(5)	2.04	50.0	(5)	2.10			
368	Line Transformers	34.0	10	1.60	34.0	10	2.65			
369	Services	48.1	(100)	4.75	48.0	(100)	4.17			
370	Meters	36.0	0	0.95	36.0	0	2.78			
371	Installations on Customer Prop	20.0	(15)	0.81	20.0	(15)	5.75			
373	Street Lighting, Signal Systems	25.0	(5)	4.16	25.0	(5)	4.20			
GENERA	L PLANT									
390	Structures and Improvements		(15)	2.07		(15)	2.56			
391	Office Furniture and Equipment		0	5.00		0	5.40			
391.01	Office Furniture - Wolf Creek		0	5.00		0	5.40			
391.02	Computer Equipment		0	20.00		0	5.40			
392	Transportation Equipment									
	Autos	7.0	25	6.73	7.0	25	10.71			
	Light Trucks	8.0	25	8.79	8.0	25	9.38			
	Heavy Trucks	10.1	25	7.53	10.1	25	7.50			
	Tractors	12.0	25	5.83	12.0	25	6.25			
	Trailers	20.2	25	1.84	20.2	25	3.75			
393	Stores Equipment		0	4.00		0	3.58			
394	Tools, Shop & Garage Equip		0	5.00		0	2.61			
395	Laboratory Equipment		0	5.00		0	3.37			
396	Power Operated Equipment		0	6.35		0	6.54			
397	Communications Equipment		0	6.67		0	2.50			
398	Miscellaneous Equipment		0	5.00		0	3.16			
	Overall Composite Estimate			2.35			2.31			

Life Span Estimates for Missouri Coal Fired Electrical Generating Plants Missouri PSC Staff 12/28/2010

Company	Facility	Current Age Years	Life Span Years	Missouri Case No.
KCPL	latan 1	30	60	ER-2010-0355
	Hawthorn 5	41	67	
	Montrose 1	52	62	
	Montrose 2	50	50	
	Montrose 3	46	56	
	LaCyne 1	37	59	
	LaCyne 2	33	59	
MPS	Sibley 1	50	60	ER-2010-0355
	Sibley 2	48	58	
	Sibley 3	41	61	
L&P	Lake Road 2	53	63	
	Lake Road 4	43	63	
AmerenUE	Meramec 1	57	68	ER-2010-0036
	Meramec 2	56	66	
	Meramec 3	51	63	
	Meramec 4	49	61	
	Sioux 1	43	66	
	Sioux 2	42	65	
	Labadie 1	40	72	
	Labadie 2	39	71	
	Labadie 3	38	70	
	Labadie 4	37	69	
	Rush Island 1	34	70	
	Rush Island 2	33	69	
			64	
Average All Flants			04	

Transfers of Reserves to Rebalance Accounts													
			Original Cost	Actual	Excess Re	serves Used							
			AS OF	Dec 31 2008	Company P	roposed Net S		Reserve Balan	cing Transfer	s			
USOA	Sub		31-Dec-08	Book	Calculated	Excess (+)	Percent	Move	то	Move	From	New %	New
Account	Unit	Sub Account		Reserve	Reserve	Reserve	Over	OUT	Account	IN	Account	Over	Excess
					Version								
STEAM PR	RODUC	TION PLANT											
315		Accessory Electrical Equipment					(10)					(2)	
	30	Hawthorn Common	445,873	66,506	75,554	-9,048	(12)			6,455	316	(3)	-2,593
	35	Hawthorn Unit 5	5,712,879	894,498	1,016,191	-121,693	(12)			86,812	316	(3)	-34,881
	39	Hawthorn Unit 9 (6)	7,158,754	1,866,712	2,120,674	-253,962	(12)			181,169	310	(3)	-72,793
	40	Montrose Unit 1	1,744,970	000,472	910,400	-109,900	(12)			10,401	310	(3)	-31,525
	41	Montrose Unit 2	2,070,509	1,414,123	1,000,014	-192,309	(12)			137,244	216	(3)	-53,144
	42	Montrose Unit 3	2,504,099	1,300,045	2 014 619	-165,901	(12)			172,039	310	(3)	-53,502
	40	Montrose Combined	10 597 937	1,773,330	2,014,013	0	(12)			172,103	510	(3)	-05,105
	51	latan Unit 1	16,961,229	5.594.927	6.356.103	-761,176	(12)			543,000	316	(3)	-218,176
	50	latan Common	0	0,000,021	0,000,100	0	(-=)			0.10,000	0.0	(0)	0
	70	Lacvne Common	982.115	281.191	319,445	-38.254	(12)			27.289	316	(3)	-10.965
	71	Lacyne Unit 1	9,255,239	3,186,635	3,620,170	-433,535	(12)			309,271	316	(3)	-124,264
	72	Lacyne Unit 2	7,660,912	3,353,137	3,809,324	-456,187	(12)			325,430	316	(3)	-130,757
	99	Miscellaneous	10,773	1,038	1,180	-142	(12)			101	316	(3)	-41
		Accessory Electrical Equipment	58,785,711	20,607,446	23,411,038	-2,803,592	(12)			2,000,000	316		-803,592
316		Miscellaneous Power Plant Equipment						Т	ransfer = (exc	ess/total excess) * t	otal transfer		
	30	Hawthorn Common	1,179,544	245,854	174,700	71,154	41	-73,024	315			(1)	-1,870
	35	Hawthorn Unit 5	3,171,562	1,637,304	1,163,443	473,861	41	-486,314	315			(1)	-12,453
	39	Hawthorn Unit 9 (6)	98,002	35,578	25,281	10,297	41	-10,567	315			(1)	-271
	40	Montrose Common	2,315,674	1,502,775	1,067,848	434,927	41	-446,357	315			(1)	-11,430
	41	Montrose Unit 1	58,411	51,830	43,539	8,291	19	-8,509	315			(1)	-218
	42	Montrose Unit 2	23,320	20,077	24 747	3,010	17	-3,009	215			(0)	-79
	43	Montrose Combined	2 430 370	29,007	24,747	4,320	17	-4,433	315			(0)	-114
	51	latan Unit 1	2,430,370	1 283 187	906 283	376 904	42	-386 809	315			(1)	-9 905
	50	latan Common	2,001,200	1,203,107	500,205	0/0,304	72	-300,003	515			(1)	-0,000
	70	Lacyne Common	1.527.103	588.245	415,463	172,782	42	-177.323	315			(1)	-4.541
	71	Lacyne Unit 1	622,437	419.463	296.256	123.207	42	-126,445	315			(1)	-3.238
	72	Lacyne Unit 2	737,627	515,404	364,017	151,387	42	-155,365	315			(1)	-3,978
	99	Miscellaneous	2,596,657	403,936	285,290	118,646	42	-121,764	315			(1)	-3,118
													0
		Total Miscellaneous Power Plant Equipment	14,954,568	6,733,519	4,784,734	1,948,785	41	-2,000,000	315			(1)	-51,215
TRANSMIS	SSION	PLANT											
352		Structures and Improvements	2,637,328	749,412	886,969	-137,557	(16)		_	481,853	Trans All	38.82	344,296
353		Station Equipment	67,405,463	22,901,015	13,086,857	9,814,158	75	-4,734,209	Trans All			38.82	5,079,948
353.03		Station Equip - Communications	4,320,186	290,886	2,829,532	-2,538,646	(90)		_	3,636,990	Trans All	38.82	1,098,344
354		I owers and Fixtures	2,233,562	1,883,419	1,289,018	594,401	46	-94,040	Trans All	4 000 10-	T	38.82	500,360
355		Poles and Fixtures	57,018,757	27,181,435	20,449,849	6,731,586	33	1.007.00	T	1,206,468	I rans All	38.82	7,938,054
356		Overnead Conductors	51,423,043	23,450,381	16,166,940	7,283,441	45	-1,007,891	I rans All	040.007	Trans All	38.82	6,275,549
357		Underground Conduit	1,707,329	970,188	929,197	40,991	4			319,697	Trans All	38.82	360,688
308		Underground Conductors	1,564,565	1,251,175	1,038,998	212,177	20			191,133	I rans All	38.82	403,310
		Total Transmission Plant	188 310 222	78 677 010	56 677 360	22 000 550	38.82	-5 836 1/1		5 826 1/1		38.82	22 000 550
			100,310,233	10,011,910	50,077,300	22,000,550	J0.0Z	-3,630,141		5,650,141		30.02	22,000,000

			Original Cost	Actual	Excess Re	serves Used							
			AS OF	Dec 31 2008	Company Proposed Net S		Reserve Balancing Transfers						
USOA	Sub		31-Dec-08	Book	Calculated	Excess (+)	Percent	Move	то	Move	From	New %	New
Account	Unit	Sub Account		Reserve	Reserve	Reserve	Over	OUT	Account	IN	Account	Over	Excess
					Version								
DISTRIBU	TION P	LANT			Transfer = (Theor Calc * Avg Excess %) - Excess								
361		Structures and Improvements	5,411,263	2,608,861	1,754,521	854,340	49	-734,049	Dist All			7	120,290
362		Station Equipment	88,183,336	31,108,942	25,914,541	5,194,401	20	-3,417,698	Dist All			7	1,776,703
362.03		Station Equip - Communications	2,139,834	623,115	1,511,166	-888,051	(59)			991,657	Dist All	7	103,606
364		Poles, Towers and Fixtures	127,906,795	68,475,641	63,747,615	4,728,026	7	-357,485	Dist All			7	4,370,541
365		Overhead Conductors	107,607,477	28,727,878	26,660,634	2,067,244	8	-239,389	Dist All			7	1,827,855
366		Underground Conduit	101,154,718	15,301,146	25,632,262	-10,331,116	(40)			12,088,466	Dist All	7	1,757,350
367		Underground Conductors	184,961,242	30,504,727	37,666,302	-7,161,575	(19)			9,743,980	Dist All	7	2,582,404
368		Line Transformers	136,162,481	56,775,721	42,364,615	14,411,106	34	-11,506,585	Dist All			7	2,904,521
369		Services	43,707,937	20,826,695	28,690,702	-7,864,007	(27)			9,831,044	Dist All	7	1,967,036
370		Meters	47,384,638	30,230,195	16,738,050	13,492,145	81	-12,344,583	Dist All			7	1,147,562
371		Installations on Customer Prop	7,988,266	7,485,570	2,641,692	4,843,878	183	-4,662,764	Dist All			7	181,115
373		Street Lighting, Signal Systems	8,464,645	2,106,661	2,539,930	-433,269	(17)			607,407	Dist All	7	174,138
		Total Distribution Plant	861,072,632	294,775,149	275,862,030	18,913,119	7	-33,262,553		33,262,553		7	18,913,119