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**MISSOURI PUBLIC SERVICE COMMISSION**

**UTILITY SERVICES DIVISION**

**REBUTTAL TESTIMONY**

**OF**

**ARTHUR W. RICE, PE**

**Great Plains Energy, Inc.  
KANSAS CITY POWER & LIGHT COMPANY**

**FILE NO. ER-2010-0355**

**Jefferson City, Missouri  
December 8, 2010**

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**ARTHUR W. RICE, PE**  
**KANSAS CITY POWER & LIGHT COMPANY**  
**FILE NO. ER-2010-0355**

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1 **REBUTTAL 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  
8 Service 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  
12 Services 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 in the Kansas City Power & Light Company (KCPL) rate case  
17 in File No. ER-2010-0355 and also on November 17, 2010 in the Kansas City Power & Light,  
18 Greater Missouri Operations Company (GMO) rate case in File No. ER-2010-0356.

19 **PURPOSE AND SUMMARY**

20 Q. What is the purpose of this testimony?

21 A. The purpose of this testimony is to address the 2008 Depreciation Study  
22 attached to the Direct Testimony of John S. Spanos as Schedule JJS2010-1. I present a  
23 comparison of the depreciation rates requested by the company to the rates recommended by

1 Staff. I identify Staff's concerns with KCPL's study and requested depreciation expense and  
2 recommend changes to the depreciation rates proposed by Mr. Spanos that would mitigate  
3 Staff's concerns, to the extent possible.<sup>1</sup> I also address the certain aspects of the testimony of  
4 MIEC witness Greg Meyer.

5 Q. How is the comparison of depreciation rate proposals by the Company and  
6 Staff presented?

7 A. This comparison is presented as attached Schedule AR-1 to this testimony

8 Q. What are Staff's concerns with Mr. Spanos' testimony?

9 A. Staff's concerns are:

- 10 1. The treatment of the Steam Production accounts and Other  
11 (Combustion Turbines) Production accounts as dying accounts.
- 12 2. KCPL's treatment of the over-accrual depreciation reserves and regulatory  
13 depreciation amortization.
- 14 3. KCPL's requested change in method for certain General Plant accounts to  
15 an Amortization method. Staff's current recommendation is to leave the  
16 depreciation rates for these accounts at the current ordered rates until  
17 verification of plant in service is conducted to verify the amortization  
18 periods proposed or a revised depreciation rate assigned.

19 **CORRECTIONS TO DEPRECIATION SECTION OF COST OF SERVICE REPORT**

20 Q. Do you have corrections or omissions to your section of the  
21 Staff Cost of Service Report?

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<sup>1</sup> Staff continues to recommend the depreciation rates and depreciation expense described in Staff's Cost of Service Report.

1 A. Yes. I have one correction and have identified one omission related my  
2 depreciation area of the Staff's Cost of Service Report.

3 A typographical error is contained in Schedules AR-1 and AR-2. Correction of this  
4 typographical error does not result in any change to the recommended deprecation rates on  
5 schedule AR-1 or to the calculated reserves shown on Schedule AR-2. The Iowa survivor  
6 curve designators shown for the four Hawthorn Unit 5 Rebuild accounts are corrected as  
7 follows:

<u>Account</u>	<u>Incorrect as Shown</u>	<u>Corrected</u>
311.02	65 R2.5	48 L2
312.03	42 R1	43 S0
315.01	40 L2	43 L1.5
316.01	42 R3	37 R2

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13 KCPL has informed Staff that the reported \$438,000,000 excess depreciation reserve  
14 incorporates the reported \$169,000,000 regulatory depreciation reserve. Thus, footnote 60 at  
15 page 160 should state, "This \$438,000,000 includes the \$169,000,000 collected from  
16 regulatory plans, but does not include reserves held for Hawthorn unit 5 due to insurance  
17 reimbursements and does not include reserves currently held for future cost of removal."

18 **STEAM PRODUCTION AND OTHER (COMBUSTION TURBINES) PRODUCTION**  
19 **ACCOUNTS**

20 Q. Does Staff agree with KCPL's requested treatment of the Steam Production  
21 accounts and the Other Production Accounts?

22 A. No. The treatment of the Steam Production accounts and Other  
23 (Combustion Turbines) Production accounts is better represented by Staff's choice of using a  
24 living account mass property analysis which uses known retirement history of steam plants

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1 removed from service than Mr. Spanos' choice of dying accounts life span analysis which  
2 ignores this historical data.

3 Q. Does Staff agree with Mr. Spanos' disaggregation of the generation fleet  
4 accounts to discreet dying accounts for each unit?

5 A. No. The life span method results in excess accruals collected from rate payers  
6 during the early years of a new production installation for all equipment that lasts longer than  
7 the proposed retirement date, specifically when evidence shows only portions of a facility  
8 may be retired and/or replaced near the retirement date. For example, the 81 year-old  
9 Grand Avenue Station facility still produces steam heat – albeit under different ownership,  
10 where steam heat is provided using the structures, boilers, coal handling equipment, and  
11 miscellaneous auxiliary equipment originally in service as a KCPL steam electrical  
12 production plant. For Hawthorn 1, 2, 3, and 4, retired in 1984, the coal handling yards, ash  
13 handling and site general infrastructure continue to be used. The original Hawthorn 4 steam  
14 turbine with associated condensate, cooling water, steam piping, vacuum system, and other  
15 electrical auxiliaries are incorporated into a combustion turbine combined cycle unit at its  
16 original location and continue as plant in service. At Ralph Green, the original structure built  
17 around 1900 used by the Company to house steam production equipment continues to be used  
18 as a warehouse and lay-down area for maintenance and construction projects. For the  
19 Ralph Green steam production units 1 and 2 and the Edmund Street Stations, these facilities  
20 are still in use as industrial facilities by GMO with some of the original land improvements  
21 such as roads, parking, drainage landscaping, concrete pads, and other improvements are still  
22 used and useful.

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1 Q. Has KCPL exhibited a history of “green fielding” sites that it no longer uses to  
2 provide utility service?

3 A. No. Site remediation or “green fielding” for these facilities is minimal and the  
4 historical record shows that estimates for future cost of removal should not include complete  
5 site remediation costs estimates.

6 Q. If the Commission chooses to accept the use of the dying account life span  
7 method of analysis proposed by Mr. Spanos for steam production equipment, does Staff  
8 recommend modifications to Mr. Spanos’ study to provide a better estimated prediction of the  
9 proper rate of return of shareholder capital?

10 A. Yes. If the Commission adopts dying account treatment for the steam  
11 production equipment for purposes of deriving depreciation rates, it should extend the life  
12 span used for Iatan 2 from 50 to 60 years as recommended in my direct testimony, and as  
13 proposed in direct testimony of Greg R. Meyer. Greg Meyer discusses the life spans ranging  
14 from 66 to 72 years for the AmerenUE steam production plants approved by the Commission  
15 in Case ER-2010-0036. The 60 year proposal is also consistent with the recent decision by  
16 the Kansas Corporation Commission (“the Kansas Commission”) for Iatan 2. It is  
17 inconsistent that the life span recommended by Mr. Spanos for Iatan 1 is 60 years and for the  
18 new Iatan 2 unit he recommends only 50 years. While a shorter initial life estimate used for a  
19 new plant will increase the initial depreciation expense and tend to smooth this expense over  
20 the total life of the plant, it is not the initial users that put addition demands and requirements  
21 on the plant in future years requiring future plant additions or premature retirements. Staff  
22 recommends that the Commission should also extend the retirement date for all units by at  
23 least three months, from June of the retirement year to September of the retirement year. It is

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1 not reasonable to retire units going into peaking months when those units could be kept in  
2 service through the peaking months.

3 Q. Does Staff agree with Mr. Spanos use of a projected future retirement date for  
4 each Steam Production unit as a basis for the Company's proposed depreciation rates?

5 A. No. KCPL has sufficient retirement history of Steam Production equipment  
6 for use in a depreciation study treating all steam production equipment as one production  
7 system. Staff included final retirements from steam production units removed from service in  
8 a living account mass property type depreciation analysis. Staff believes the results of this  
9 analysis of Company prior retirement cost is a better predictor of future expected steam plant  
10 unit retirements than the Company's use of a proposed future retirement date for each  
11 separate steam unit. Past retirement of steam production plant include 5 units at the  
12 Northeast Station, the Grand Avenue Station and Hawthorn units 1, 2, 3, & 4. Additional  
13 Steam Production unit retirements used for review of cost of removal for steam units removed  
14 from service include GMO's Ralph Green units 1 and 2, and the Edmund Street Station.<sup>2</sup>

15 Q. Does Staff recommend treatment of the combustion turbine production fleet as  
16 individual dying accounts?

17 A. No. Based on the combustion turbine usage and history, Staff recommends  
18 against treatment of the combustion turbine fleet as individual dying accounts. It is most  
19 appropriate to treat the combustion turbines as a fleet of production units using a living  
20 account mass property depreciation analysis method. Treating KCPL's fleet of combustion  
21 turbine units as living accounts is consistent with the methods used for Union Electric  
22 Company d/b/a AmerenUE's ("AmerenUE") requested depreciation rates adopted by the  
23 Commission in Case No ER-2010-0036. Mr. Spanos' request is to segregate the assets



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1 associated with each unit into a separately tracked dying account, assign an individual  
2 retirement date to each combustion turbine unit, and use the life span method to compute a  
3 depreciation rate for each unit.

4 Q. Are there any major differences between the Company proposal and the Staff  
5 proposal that you would like to point out?

6 A. Yes. For some accounts the differences are excessive and abnormal.  
7 Examples are as follows:

<u>Account</u>	<u>Description</u>	<u>Company Rate %</u>	<u>Staff Rate %</u>
312.02	Boiler Plant AQC	0.00	2.33
353.03	Trans Station Comm Equip	28.92	3.33
362.03	Dist Station Comm Equip	27.41	3.33
391.02	General Computer Equip	20.00	5.40

13 Q. What do you attribute these differences to?

14 A. For accounts 312.02, 353.03 and 362.03 the life span remaining life method  
15 the Company uses for the depreciation study truncates the account and computes a rate to  
16 arrive at a specific accumulated reserve amount at a specific date. For these accounts which  
17 are expected to continue to live and have future additions and retirements (some of which  
18 have already occurred since the 2008 depreciation study) these abnormal depreciation rates  
19 are not appropriate. The table in Schedule AR-1 shows composite depreciation rates of all  
20 locations and facilities. The Company's actual proposed deprecation rates shown in Mr.  
21 Spanos' Direct Schedule JJS2010-1 are further segregated into different depreciation rates for  
22 each production plant unit. A similar wide spread in the proposed rate for each different  
23 production unit is exhibited in the Company proposed rates.

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<sup>2</sup> See responses to KCPL DR No. 215, 216, 294, 390, 391 and 392, and GMO DR No. 282, 283, 284, and 285.

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1 Q. Is it good regulatory practice to impose large differences in depreciation rates  
2 for the same types of equipment but at a different location within a utility?

3 A. No. Subsequent additions and modification to an individual plant input dollars  
4 which become subject to these distorted rates and thus aggravate the ability to maintain  
5 consistent depreciation rates over the life of the plant.

6 Q. Does the amount of plant shown on the books for account 391.02,  
7 Computer Equipment, appear reasonable?

8 A. No. This is one of the accounts that the Company has proposed to switch to  
9 the amortization method. The 5.4% depreciation rate in the Staff proposal is the currently  
10 ordered rate which has been recommended by Staff in the current case due to a disagreement  
11 between Staff and the Company as to the plant balance in this account. Staff's concern is the  
12 amount of plant shown on the books in this account which were studied for depreciation. The  
13 plant balance shown on December 31, 2008 which was used in the deprecation study was only  
14 \$64,601. The current plant balance shown for this account in July 2010 in the  
15 Staff Accounting Schedules is \$789,725. The response to Data Request Number 310 shows  
16 no additions to this account in 2009 or 2010. The numbers just do not add up and question  
17 account activity from various mergers, acquisitions and office moves.

18 Q. Does Staff agree with the deprecation rates proposed for Combustion Turbine  
19 Generator units by Mr. Spanos?

20 A. No. Staff does not agree with depreciation rates, the life span dates, or the  
21 depreciation study method Mr. Spanos used in determining depreciation rates for  
22 combustion turbines.

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1 Q. Is the depreciation analysis method used by Mr. Spanos best regulatory  
2 practice for combustion turbine fleets at a utility the size of KCPL?

3 A. No. Mr. Spanos used a life span method that assumes each combustion turbine  
4 unit is a separate dying account, and based the projected retirement date of all the facility  
5 equipment for each unit on a proposed useful life of one part of the unit, the combustion  
6 turbine internal expansion rotor. Given KCPL's actual history of maintaining and retrofitting  
7 these units with periodic overhauls that enable the survival of the balance of plant, it is best  
8 regulatory practice to treat these facilities as living accounts where individual systems and  
9 components are replaced as needed, but the fleet is maintained into the foreseeable future.  
10 There is no basis for projecting a retirement date for the whole combustion turbine unit or  
11 facility at the expected life of just one part even if it is a significant piece of equipment such  
12 as the turbine rotor.

13 Q. Although Iatan 1 is a steam production unit and not a combustion turbine unit,  
14 did KCPL replace all of Iatan 1 when one of the main turbine rotors was recently  
15 severely damaged?

16 A. No.

17 Q. What evidence has Staff used to determine that the combustion turbine  
18 production system of turbine generators and facilities are living accounts and should be  
19 treated for deprecation purposes as mass property?

20 A. Staff visited KCPL and GMO combustion turbine generator facilities,<sup>3</sup> and  
21 discussed the operation, maintenance and equipment replacement history and future plans  
22 with the Production Manager of KCPL's and GMO's combustion turbine fleet. For the older

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<sup>3</sup> Staff visited the South Harper, Greenwood Energy Center, Ralph Green, Hawthorn, Northeast, and Nevada facilities which have operating combustion turbine units.

1 units at the Greenwood Energy Center, Staff found evidence of extensive replacement and  
2 upgrades. These include all facility operator monitoring and control equipment for each  
3 generator unit, a newly installed fuel supply system, a complete replacement for the turbine  
4 air intake and filtration system which included upgraded equipment to accommodate  
5 increased capacity at Greenwood, a new back-up generator and black start control system, fire  
6 suppression system, the lubricating oil cooling system, and the turbine rotor seal system.  
7 These modifications and upgrades are consistent with a future maintenance schedule that  
8 includes replacement of the turbine rotors with an upgraded design and metallurgy to get  
9 approximately another 10 megawatts per unit.

10 Staff found no evidence to support the assignment of a retirement date which assumed  
11 that all equipment associated with an individual combustion turbine would be removed from  
12 service when the combustion turbine itself needed replacement.

13 Q. How did KCPL account for depreciation in its request?

14 A. The Company's accounting practice treats this system of combustion turbine  
15 generators as a system with many small units of property. That is, when sections or parts are  
16 replaced, a retirement is recorded and the new section or part is recorded as a plant addition.  
17 This produces the interim retirement curve the Company used in its dying account life span  
18 method of depreciation analysis. There is no history of a combustion turbine unit by itself, or  
19 with all auxiliary equipment, or a combustion turbine facility as a whole that has been  
20 shutdown and dismantled in either the KCPL fleet or the GMO fleet. Thus, the interim  
21 retirement curve proposed by the Company represents the current consumption of capital for  
22 this production equipment as a fleet. The Company's depreciation study method of truncating  
23 the common fleet survivor curve at different points (dates) for each individual production unit

1 is not appropriate. Retiring a whole unit account does not follow the Company's accounting  
2 practice of assigning many small units of property for retirement within each account. This is  
3 currently true for both KCPL and GMO. Staff's position is that this system should be treated  
4 as a living account system where all retirements continue to be recorded as interim  
5 retirements, including future replacement of a combustion turbine assembly. This production  
6 system is similar to a city, in that the city evolves and lives on with new people, buildings,  
7 and infrastructure with no planned terminal retirement date.

8 Q. Did Staff consider other information concerning the method of assignment of  
9 depreciation rates to combustion turbine equipment?

10 A. Yes. Staff also reviewed the Gas Turbine Operations and Maintenance  
11 Manual<sup>4</sup> used by the Company. The overall theme throughout the manual is that the overall  
12 combustion turbine unit has been manufactured to allow routine inspection and replacement  
13 of worn parts. After several major overhauls of the combustion section of the turbine  
14 assembly, (at 6 to 10 year intervals), when the cost to repair this assembly exceeds the cost to  
15 replace, then the turbine rotor is replaced. This may be an expensive part to replace, but it is  
16 not the whole electrical generating unit or facility. In essence, it is far less costly to replace  
17 this critical piece of equipment compared to the costs to replace the entire combustion turbine  
18 unit and all associated auxiliaries at once.

19 Q. Is the Staff aware of any evidence that KCPL operates its combustion turbines  
20 production equipment or maintains the associated accounting records as would be expected of  
21 systems with dying accounts?

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<sup>4</sup> Data request 234 in the KCPL case or GMO Data Request 190 in the GMO case.

1           A.     No. KCPL has not exhibited a practice of abandoning a combustion turbine  
2 site at the end of the useful life of a turbine rotor. KCPL has exhibited a practice of replacing  
3 worn parts, and continuing to utilize the related production equipment, as described in above  
4 testimony for the Greenwood Energy Center.

5           **TREATMENT OF DEPRECIATION RESERVES AND REGULATORY**  
6           **AMORTIZATIONS**

7           Q.     Do you agree with the method that Mr. Spanos used to account for the  
8 regulatory plan depreciation reserve?

9           A.     No. Mr. Spanos was premature in assuming the amount and the method of  
10 treatment of these funds. Mr. Spanos used an estimate of the overall regulatory plan  
11 depreciation reserve amount projected at December 31, 2010, and distributed this amount  
12 over the plant reserve account balances in his study for the period ending December 31, 2008.  
13 The remaining life depreciation rates he proposes from his study using December 31, 2008  
14 plant balances have been modified by approximately \$169,000,000 of additions to plan  
15 reserves which were not at that time, (and still have not been) assigned to individual plant  
16 account reserves.

17           Ratepayers have provided \$169,000,000 of capital to KCPL. Staff recommends that  
18 this money be used to reduce the amount of dollars current rates collect to cover future costs.  
19 The currently ordered depreciation rates include collection of dollars from ratepayers for  
20 future cost of removal. Staff disaggregated the collection of dollars for future cost of removal  
21 from depreciation rates, utilizing the dollars already collected from ratepayers as additional  
22 amortizations for future cost of removal.

23           Q.     Is Staff recommending a return of money to ratepayers?

24           A.     Yes. The overall recovery Staff recommends for this case is reduced.

1 Q. Please explain how Staff's proposed treatment of the additional amortizations  
2 resulting from the Regulatory Plan<sup>5</sup> reduce the recovery and return money to the rate payers?

3 A. Staff's recommendation is a non-cash transfer of reserves between different  
4 reserve accounts with no immediate step change in rate base and a gradual reduction in the  
5 excess depreciation reserves, which is currently over-accrued by almost half a billion dollars.  
6 The Company has a total depreciation reserve of approximately \$1.6 billion dollars. The  
7 actual average annual net salvage (cost of removal) during recent years is approximately  
8 \$3,500,000 per year.<sup>6</sup> The difference in annual depreciation expense charged to ratepayers  
9 when including net salvage versus setting net salvage to zero is approximately \$19,000,000.<sup>7</sup>  
10 Staff's proposal set net salvage to zero which produces this \$19,000,000 reduction in recovery  
11 and the method to return money to the rate payers. The result of the recommendation to set  
12 net salvage to zero and charge current net salvage to the regulatory amortization reserve is  
13 only a \$3.5 million annual reduction in the \$169 million, but is a \$19 million reduction in  
14 revenue requirement, and approximately a \$15.5 million annual reduction in excess reserves.  
15 The increase in rate base over time from the approximate \$3.5 million annual net salvage  
16 charge to the \$169,000,000 regulatory amortization is minimal. Even if the Company chose  
17 to dismantle and remove Hawthorn units 1 through 4, only approximately one year's worth  
18 (\$19 million) of this future net salvage would become current. Thus the offset to rate base is  
19 maintained for the immediate future while the collection from rate payers for future cost of  
20 removal is temporarily suspended. Staff recommends this zero net salvage collection for an

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<sup>5</sup> The Commission approved KCPL's Regulatory Plan in Case No. EO-2005-0329 in July 2005. The total \$169,000,000 includes \$132,221,058 amortizations from this plan based on December 31, 2010 projections, and KCPL has accrued additional amortizations in the amount of \$36,674,731 pursuant to Case No. EO-94-199

<sup>6</sup> This \$3,500,000 annual average was obtained from the depreciation study historical data provided by the Company.

<sup>7</sup> From the Staff Cost of Service Report Appendix 6 Schedule AR-3, Staff Case C versus Staff Case A total plant depreciation expense.

1 undefined period, monitoring progress in the reduction of the excess reserves using the results  
2 of future depreciation studies. Depreciation studies are required by Missouri statute to be  
3 conducted every 3 to 5 years.

4 **AMORTIZATION OF GENERAL PLANT**

5 Q. Please describe the Company's proposal regarding the amortization of certain  
6 general plant accounts.

7 A. As described at pages 14 through 16 of Mr. Spanos' testimony, the Company  
8 seeks to suspend depreciation of certain general plant accounts and, in lieu thereof, amortize  
9 the amounts recorded in those accounts over a fixed amortization period. Specifically, KCPL  
10 seeks amortization treatment for the accounts shown in the table below. The effect of the  
11 change to a general plant amortization method using Mr. Spanos' recommended life and net  
12 salvage parameters is an increase in current depreciation expense of  
13 approximately \$2,000,000.<sup>8</sup>

14 Q. In your direct testimony you testified that imbalances in plant and reserve  
15 accounts were found between the historical records the Company used in the depreciation  
16 study and the Staff auditing records. Have these imbalances been addressed?

17 A. Yes. For the historical records through the end of December 31, 2008 used in  
18 the depreciation study, these imbalances have been resolved. KCPL's request removed the  
19 proposed un-depreciated plant from plant reserve balances, and distributed the additional  
20 regulatory reserves into the individual reserve accounts. When these actions are reversed the  
21 plant and reserve account balances are consistent between KCPL and Staff through the  
22 end of 2008.

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<sup>8</sup> This approximate \$2,000,000 is the annual amortization of unrecovered plant



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1 Q. Does resolving this imbalance issue of historical data used in the depreciation  
2 study between Staff and KCPL resolve all of the concerns Staff has regarding plant balances  
3 for these accounts?

4 A. No. Staff is still concerned with the question of the amount plant and reserves  
5 shown on the books which represent plant that was not retired from the books when it became  
6 no longer used and useful.

7 Q. With respect to the General Plant accounts that Mr. Spanos proposed switching  
8 to the Amortization Method (Square Curve method), did Staff attempt to verify the length of  
9 the amortization period that was proposed?

10 A. Yes. For each account the Staff used the retirement history provided by the  
11 Company to conduct a depreciation study. The average service life found for each account  
12 should correspond well with the amortization period proposed for each account. The account  
13 numbers and account descriptions the Company recommends switching to the amortization  
14 method are shown in the table below. The average service lives indicated from the Staff  
15 depreciation study for some accounts did not correlate well as shown in the following table.

<b>Staff Depreciation Analysis Results versus Company Proposed Square Curve Amortization Period</b>					
Account	Account Title	Analysis Iowa Curve	Staff SQ ASL Proposal	Company SQ ASL Proposal	
391	Office Furniture	23 - R1.5	20 years	20 years	
391	Computer Equip		8	5	Assumption, Account includes Desk tops, Laptops, Printers Firewalls, Servers, etc
	Hardware	8-L0			
	Software*	11 - R1			
393	Stores Equip	32 - R3	25	25	
394	Tools & shop Equip	50 - R2.5	30	20	
395	Lab Equip	37 - R2.5	30	20	
397	Comm Equip**	35 - L0	30	15	
398	Misc Equip	15 - O3	15	20	
* Data Request 397 indicates software is in account 303, an amortized intangibles account					

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1 Staff found longer average service lives for all accounts with the exception of  
2 account 398, and thus a longer indicated amortization period than the Company proposed.  
3 This confirms the Company position that there is property recorded on the books which is no  
4 longer used and useful and should have been retired.

5 Q. What is Staff's position regarding the amortization of general plant as  
6 proposed by KCPL?

7 A. Staff opposes general plant amortization at this time for two reasons. First, the  
8 results of the Staff depreciation study for some of the accounts in question show  
9 unrealistically long average service lives. Without conducting a physical inventory, retiring  
10 plant found to no longer be in service, and subsequently conducting another depreciation  
11 study the Company has no evidence to propose new average service lives or amortization  
12 periods. Second, the general plant amortization would violate the requirements of rule  
13 4 CSR 240-20.030 which directs electrical corporations to "keep all accounts in conformity  
14 with the Uniform System of Accounts" and maintain records for each plant account.

15 Q. Please explain how the Company's general plant amortization proposal would  
16 violate Rule 4 CSR 240-20.030.

17 A. Rule 4 CSR 240-20.030 states "keep all accounts in conformity with the  
18 Uniform System of Accounts" as prescribed by the Federal Energy Regulatory Commission  
19 (FERC). Section (3)(M) of that FERC rule states:

20 Keep mortality records of property and property retirements as will  
21 reflect the average life of property which has been retired and will  
22 aid in estimating probable service life by actuarial analysis of  
23 annual additions and retirements.

24 As promulgated, the CSR rule and the FERC Uniform System of Accounts are  
25 designed to ensure that necessary data is compiled to allow actuarial analyses to be performed

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1 thereby allowing depreciation rates which better reflect actual experience. As envisioned by  
2 the Company, the general plant amortization would alleviate the need to separately account  
3 for these plant assets, thereby precluding any party from conducting future depreciation  
4 studies. In effect, KCPL implicitly seeks a waiver from the requirements of the  
5 Commission's rule, though they do not explicitly request one.

6 Q. What is the rationale underlying KCPL's general plant amortization request?

7 A. As expressed on page 14 of Mr. Spanos' direct testimony:

8 However, depreciation accounting is difficult for these assets  
9 because periodic inventories are required to properly reflect plant  
10 in service.

11 Q. Do you agree with the rationale underlying the Company's general plant  
12 amortization request?

13 A. No. In adopting the rule obligating electric utilities to keep and maintain  
14 records of property, the Commission recognized that there will be certain costs incurred and,  
15 so long as prudently incurred, those costs of doing business will be recovered from regulated  
16 ratepayers. While the Company purportedly maintains that cost savings will be experienced  
17 in the form of reduced workload through the elimination of record keeping burdens, this  
18 argument is not compelling in that a continued level of the record keeping burdens will be  
19 necessary for tax and insurance purposes.

20 Q. Has Staff reviewed the type of assets which are recorded as plant in service for  
21 these accounts?

22 A. Yes. Staff has reviewed responses to Data Requests 236 and 319 which  
23 contain descriptions and asset item entries within these accounts.

24 Q. What are some of the findings from this review?

Rebuttal Testimony of  
Arthur W. Rice

1           A.     The first finding is questionable allocation of types of assets to the FERC  
2 described plant accounts. These General plant accounts contain assets which are clearly  
3 assigned to various production, transmission and distribution functions and locations. Some  
4 of the assets contained in an account fit the FERC description of assets belonging to some  
5 other account. For example:

- 6                   1.    Account 397, General Communications Equipment: assets included are  
7                        automatic meter reading equipment, video conferencing equipment,  
8                        microware equipment and towers located at substations and production  
9                        plants, flat screen TVs, automated vehicle ID system, and security  
10                      cameras. Staff's question is why are items such as automatic meter  
11                      reading equipment and security cameras in this account. The FERC  
12                      description would place these items in the accounts 370, Meters, and  
13                      account 390, Structures and Improvements respectively.
- 14                   2.    Account 391, General Office Furniture, includes the typical office  
15                        furnishings at substations, production plants, and general offices plus  
16                        automated security system hardware at production facilities, flat screen  
17                        TVs, printers and copiers. Again we find security system equipment in  
18                        this account.
- 19                   3.    Account 394, Tools, Shop and Garage Equipment, includes the typical  
20                        special tools such as impact wrenches, hoists, lathes, hydraulic presses  
21                        and wire cutters plus items such as a \$39,000 powered floor sweeper,  
22                        fork lift battery packs, Tommy life gates attached to trucks, and a  
23                        GE motor control station. Following the FERC account descriptions  
24                        would have placed the floor sweeper and the fork lift batteries in account  
25                        396, Power Operated Equipment, and the lift gates attached to a specific  
26                        vehicle in account 392, Transportation Equipment.

27           Q.     What is the significance of the assets being somewhat randomly placed in the  
28 various FERC accounts?

29           A.     It is not prudent to assign a fixed amortization period to these accounts and  
30 stop reviewing the actual consumption of dollars (retirements) in the account when it is not  
31 understood what types of equipment will be added to these accounts in the future.

32           Q.     What would mitigate the need to track small-value units of  
33 property separately?

1           A.     KCPL may increase its capitalization limit. Staff recommends that KCPL  
2 consider, at its option, raising its capitalization limit for general plant assets from its current  
3 level to approximately \$2,000. The Staff believes a new limit would be justified as a  
4 reasonable compromise between accurate accounting for plant assets and administrative  
5 simplicity. If KCPL adopts a higher capitalization limit, the Staff would amend its  
6 recommendation in this case to allow an amortization (based on a period consistent with the  
7 useful life contained within the Staff recommended depreciation rates) of the un-depreciated  
8 portion of plant assets in the seven accounts for those items below the chosen capitalization  
9 level. KCPL should continue to maintain aged data reflecting the acquisition and retirement  
10 of items in the previously listed accounts with a purchase price greater than the  
11 capitalization limit.

12           Q.     Could you define a capitalization limit?

13           A.     A capitalization limit is, in effect, a standard of materiality used to determine  
14 whether an item of small value which benefits more than one accounting period should be  
15 capitalized and have its cost charged to depreciation expense over its expected life, or instead  
16 be charged to expense in entirety in the first period of its use. Use of a capitalization limit  
17 recognizes that the theoretical appropriateness of charging the cost of an asset over the entire  
18 period of its use can be outweighed by the administrative difficulties in tracking that cost if  
19 the item is of a relatively small value. The Commission has not adopted any rules impacting  
20 KCPL that specify a minimum dollar amount to capitalize.

21           Q.     How would a raised capitalization limit function going forward?

Rebuttal Testimony of  
Arthur W. Rice

1           A.     KCPL could set a capitalization limit for these accounts, sweep (transfer<sup>9</sup>) all  
2 additions under this limit currently in these accounts to an expense account, and annualize or  
3 amortize the un-depreciated<sup>10</sup> portion for this rate case. Subsequently conduct a physical  
4 inventory of the fewer remaining larger value items to insure they are still in service and  
5 conduct a depreciation study on the verified plant in service. The administrative requirements  
6 of tracking and recording individual plant assets are largely dependent on the number of such  
7 assets, not their individual dollar value.

8           Q.     In the event the Company agreed to change its capitalization limit, would that  
9 affect the Staff's depreciation rate recommendation for this case?

10          A.     No. Insufficient time remains in this rate case to allow determination of the  
11 impact of changing the capitalization limit, conducting an inventory and conducting a  
12 depreciation study for these accounts. Staff recommends a continuation of the current ordered  
13 rates for these accounts.

14          Q.     Does Staff propose any additional recommendation for the Commission?

15          A.     Yes. Staff recommends the Commission order KCPL to conduct an inventory  
16 of the property in General account numbers 391, 393, 394, 395, 397, and 398 and retire  
17 equipment from the books that is found to be not used and useful, with or without a change in  
18 the Company capitalization limit.

19          Q.     What is Staff's recommended depreciation rates for KCPL?

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<sup>9</sup> Transfer as defined here is the removal of the total original cost from plant, and removal of only the depreciated portion from reserves.

<sup>10</sup> The un-depreciated portion as defined here is the difference between the original cost and the amount of depreciated reserves which were transferred.

Rebuttal Testimony of  
Arthur W. Rice

1           A.     The Staff-recommended depreciation rates are shown in Appendix 6 on  
2 Schedule AR-1 to the Staff Cost of Service Report, and on Schedule AR-1 of this rebuttal  
3 testimony.

4           Q.     Does this end your rebuttal testimony?

5           A.     Yes.

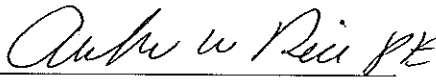
**BEFORE THE PUBLIC SERVICE COMMISSION**  
**OF THE STATE OF MISSOURI**

In the Matter of the Application of )  
Kansas City Power & Light Company for )  
Approval to Make Certain Changes in its ) File No. ER-2010-0355  
Charges for Electric Service to Continue the )  
Implementation of Its Regulatory Plan )


AFFIDAVIT OF ARTHUR W. RICE, PE

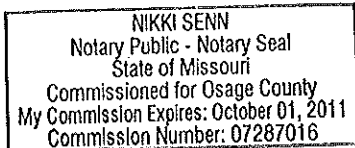
STATE OF MISSOURI     )  
  )  
COUNTY OF COLE     )     ss.

Arthur W. Rice, PE, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Rebuttal Testimony in question and answer form, consisting of 21 pages to be presented in the above case; that the answers in the foregoing Rebuttal 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.

  
\_\_\_\_\_  
Arthur W. Rice, PE

Subscribed and sworn to before me this 8<sup>th</sup> day of December, 2010.

  
\_\_\_\_\_  
Notary Public





**Company versus Staff Depreciation Proposals**

USOA Account	Sub Account	KCPL PROPOSAL		STAFF PROPOSAL	
		Assigned Net Salvage %	Proposed Depreciation Rate (Zero Sal)	Assigned Net Salvage %	Proposed Depreciation Rate (With Sal)
<b>STEAM PRODUCTION PLANT</b>					
311	<b>Structures and Improvements</b>	-20	<b>2.78</b>	0	<b>2.08</b>
312	<b>Boiler Plant Equipment</b>	-15	<b>2.54</b>	0	<b>2.33</b>
312.01	<b>Unit Coal Trains</b>	20	<b>2.90</b>	0	<b>4.00</b>
312.02	<b>Boiler Plant AQC</b>	-15	<b>0.00</b>	0	<b>2.33</b>
314	<b>Turbogenerator Units</b>	-15	<b>2.96</b>	0	<b>2.13</b>
315	<b>Accessory Electrical Equipment</b>	-10	<b>3.52</b>	0	<b>2.33</b>
316	<b>Miscellaneous Power Plant Equipment</b>	0	<b>1.96</b>	0	<b>2.70</b>
<b>Hawthorn Unit 5 rebuild</b>					
311.02	Structures & improvements	-20	<b>0.99</b>	0	<b>0.16</b>
312.03	Boiler Plant Equipment	-15	<b>0.96</b>	0	<b>0.26</b>
315.01	Accessory Electrical Equip	-10	<b>0.84</b>	0	<b>0.28</b>
316.01	Misc Power Plant Equip	0	<b>0.39</b>	0	<b>0.31</b>
<b>Nuclear Production Plant</b>					
321	Structures & improvements	-5	<b>1.30</b>	0	<b>1.15</b>
322	Reactor Plant Equipment	-5	<b>1.41</b>	0	<b>1.25</b>
323	Turbogenerator Units	-10	<b>1.49</b>	0	<b>1.10</b>
324	Accessory Electrical Equip	0	<b>1.89</b>	0	<b>1.89</b>
325	Misc power Plant Equip	0	<b>2.69</b>	0	<b>2.69</b>
<b>Other Production Plant</b>					
341	<b>Structures &amp; improvements</b>	-5	<b>2.74</b>	0	<b>1.67</b>
342	<b>Fuel Holder &amp; Accessories</b>	-10	<b>2.90</b>	0	<b>2.22</b>
344	<b>Generators</b>	-10	<b>3.20</b>	0	<b>2.86</b>
345	<b>Accessory Electrical Equip</b>	0	<b>1.87</b>	0	<b>2.22</b>
<b>WIND PRODUCTION PLANT</b>					
341.02	Structures and Improvements	0	<b>4.80</b>	0	<b>5.00</b>
344.02	Generators	0	<b>4.74</b>	0	<b>5.00</b>
345.02	Accessory Electrical Equip	0	<b>5.14</b>	0	<b>5.00</b>
<b>TRANSMISSION PLANT</b>					
352	Structures and Improvements	-5	<b>1.73</b>	0	<b>1.67</b>
353	Station Equipment	-10	<b>1.34</b>	0	<b>1.67</b>
353.03	Station Equip - Communications	0	<b>28.92</b>	0	<b>3.33</b>
354	Towers and Fixtures	-20	<b>0.72</b>	0	<b>1.43</b>
355	Poles and Fixtures	-40	<b>2.20</b>	0	<b>2.00</b>
356	Overhead Conductors	-20	<b>1.53</b>	0	<b>1.89</b>
357	Underground Conduit	0	<b>1.31</b>	0	<b>1.67</b>
358	Underground Conductors	0	<b>0.55</b>	0	<b>1.82</b>

Kansas City Power and Light Company  
File No. ER-2010-0355

**Company versus Staff Depreciation Proposals**

USOA Account	Sub Account	KCPL PROPOSAL		STAFF PROPOSAL	
		Assigned Net Salvage %	Proposed Depreciation Rate (Zero Sal)	Assigned Net Salvage %	Proposed Depreciation Rate (With Sal)
<b>DISTRIBUTION PLANT</b>					
361	Structures and Improvements	-5	1.33	0	2.00
362	Station Equipment	-5	1.70	0	2.08
362.03	Station Equip - Communications	0	27.41	0	3.33
364	Poles, Towers and Fixtures	-40	3.00	0	2.63
365	Overhead Conductors	-20	2.39	0	2.22
366	Underground Conduit	-25	2.49	0	1.82
367	Underground Conductors	-5	2.04	0	2.00
368	Line Transformers	10	1.60	0	2.94
369	Services	-100	4.75	0	2.08
370	Meters	0	0.95	0	2.78
371	Installations on Customer Prop	-15	0.81	0	5.00
373	Street Lighting, Signal Systems	-5	4.16	0	4.00
<b>GENERAL PLANT</b>					
390	Structures and Improvements	-15	2.07	0	2.22
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	25	6.73	0	14.29
	Light Trucks	25	8.79	0	12.50
	Heavy Trucks	25	7.53	0	9.93
	Tractors	25	5.83	0	8.33
	Trailers	25	1.84	0	4.95
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	7.66
397	Communications Equipment	0	6.67	0	2.50
398	Miscellaneous Equipment	0	5.00	0	3.16