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Issue: Depreciation  
Witness: Rosella L. Schad, P.E., C.P.A.  
Sponsoring Party: MoPSC Staff  
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Case No.: ER-2006-0314  
Date Testimony Prepared: August 08, 2006

**MISSOURI PUBLIC SERVICE COMMISSION**  
**UTILITY SERVICES DIVISION**

**FILED**

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**DIRECT TESTIMONY**

**OF**

Missouri Public  
Service Commission

**ROSELLA L. SCHAD, P.E., C.P.A.**

**KANSAS CITY POWER & LIGHT COMPANY**

**CASE NO. ER-2006-0314**

*Jefferson City, Missouri*  
*August 2006*

~~STAY~~ Exhibit No. 131  
Case No(s). ER-2006-0314  
Date 10-16-06 Rptr XF

**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 Begin the Implementation of Its Regulatory Plan. )

Case No. ER-2006-0314

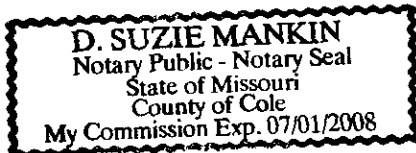
**AFFIDAVIT OF ROSELLA L. SCHAD**

STATE OF MISSOURI       )  
                                      )       ss.  
COUNTY OF COLE        )

Rosella L. Schad, of lawful age, on her oath states: that she has participated in the preparation of the foregoing Direct Testimony in question and answer form, consisting of 12 pages to be presented in the above case; that the answers in the foregoing Direct Testimony were given by her; that she has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of her knowledge and belief.

Rosella L. Schad  
Rosella L. Schad

Subscribed and sworn to before me this 4<sup>th</sup> day of August 2006.



D. Suzie Mankin

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**ROSELLA L. SCHAD, P.E., C.P.A.**  
**KANSAS CITY POWER & LIGHT COMPANY**  
**CASE NO. ER-2006-0314**

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**DIRECT TESTIMONY OF**  
**ROSELLA L. SCHAD, P.E., C.P.A.**  
**KANSAS CITY POWER & LIGHT COMPANY**  
**CASE NO. ER-2006-0314**

Q. Please state your name and business address.

A. Rosella L. Schad, P.O. Box 360, Jefferson City, MO 65102

Q. By whom are you employed and in what capacity?

A. I am employed by the Missouri Public Service Commission (Commission) as an Engineer in the Engineering & Management Services Department.

Q. Please describe your educational training and professional background.

A. I received a Bachelor of Science degree (1978) in Mechanical Engineering and a Masters of Public Administration (2004) from the University of Missouri-Columbia. I am currently enrolled at the University of Missouri-Columbia in a Masters of Business Administration, with an emphasis in Finance. My anticipated completion date is May 2008.

I am a Licensed Professional Engineer and Certified Public Accountant in the State of Missouri. I am a member of the National Society of Professional Engineers, the Society of Depreciation Professionals, and the Missouri Society of Certified Public Accountants. I was employed by Union Electric (now AmerenUE) as an Engineer Intern during the summer of 1977. I was employed as a Mechanical Engineer by Union Electric in its Nuclear Construction Department from 1978 to 1980. I have been with the Missouri Public Service Commission's Staff (Staff) since 1999. In my current position I have completed training in depreciation concepts, attended numerous industry seminars for electric, natural gas, telecommunications, water, and wastewater regulatory matters and made on-site tours of

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1 many of the facilities of the electric, natural gas, telecommunications, water, and wastewater  
2 utilities operating in the State of Missouri, which are regulated by the Commission

3 Q. Please describe your duties while employed by the Commission.

4 A. I am responsible for engineering analyses and depreciation rate determinations  
5 of companies regulated by the Commission.

6 Q. Have you previously filed testimony before this Commission?

7 A. Yes. Schedule 1, attached to my testimony, shows a list of Commission cases  
8 in which I have filed testimony and the issues that I addressed.

9 Q. What expert knowledge, skill, experience, training, or education do you have  
10 in these matters?

11 A. I have acquired general knowledge of these topics through my experience and  
12 analyses in prior rate cases before this Commission presented in Schedule 1 and I have  
13 assisted in Staff's depreciation rate filings in GR-2005-0284, ER-2001-672, ER-2001-299,  
14 WR-2000-844, and GR-2000-512. I have also reviewed prior Commission decisions with  
15 regard to depreciation issues. I have reviewed the testimony, workpapers, and responses to  
16 Staff's data requests addressing these issues in prior cases.

17 I have attended the National Conference of Regulatory Commission Engineers'  
18 meeting and symposiums offered on current topics of regulation. I have received formal  
19 depreciation training offered by Depreciation Programs, Inc., the Society of Depreciation  
20 Professionals, and Gannett Fleming Valuation and Rate Consultants, Inc. I have had on-going  
21 discussions with Gannett Fleming technical personnel regarding the functionality of the  
22 Gannett Fleming software, including data input requirements, statistical analysis, and  
23 interpretation of results.

1 I have attended with other members of the Staff several of the Chapter 22 Electric  
2 Resource Planning (Integrated Resources Planning) semi-annual meetings of the electric  
3 utilities regulated by the Commission, where resource planning, capacity upgrades, and  
4 proposed generation additions are discussed. I have toured all the major generating facilities  
5 of all electric companies in the state of Missouri regulated by the Commission and met with  
6 company engineers, operating personnel and management to discuss plant operations, both  
7 past and present, as well as any future activities being considered.

8 **EXECUTIVE SUMMARY**

9 Q. Please summarize the remainder of your testimony.

10 A. The Staff conducted a depreciation study of Kansas City Power and Light  
11 Company's capital assets and has recommended depreciation rates which, when applied to the  
12 Missouri jurisdictionally allocated plant-in-service as of June 30, 2006, generated the  
13 depreciation expense used in the Staff's revenue requirement program. The depreciation rates  
14 determined in this study will decrease the currently ordered annual depreciation expense from  
15 approximately \$65 million to \$55 million, a difference of approximately \$10 million.

16 The depreciation system used in this current study is the straight line method, broad  
17 group procedure and whole life technique. The depreciation rates are based on Staff's  
18 estimate of average service life, (except as noted above for wind generation assets and nuclear  
19 generation assets) and net salvage for each capital plant account, and are calculated by the  
20 following equation:

21 
$$\text{Depreciation Rate} = (100\% - \text{Net Salvage } \%) \div \text{Average Service Life}$$

1 Staff also analyzed the accumulated reserve for depreciation by comparing it to a  
2 theoretical depreciation reserve that was calculated using the mortality characteristics  
3 determined in the depreciation study. This comparison is on a total company basis and not  
4 Missouri jurisdictionally allocated plant-in-service basis.

5 **DEPRECIATION ISSUES**

6 Q. What matters will you address in your direct testimony?

7 A. I will address the Staff's recommendation regarding depreciation rates for  
8 Kansas City Power & Light Company (KCPL).

9 Q. When were depreciation rates for the Company last adopted by a Commission  
10 order?

11 A. Depreciation rates were last adopted for the Company by Stipulation and  
12 Agreement (S&A) in EO-2005-0329.

13 Q. Was there specific language in the S&A that depreciation rate changes may  
14 occur subsequent to the Report and Order approving KCPL's regulatory plan?

15 A. Yes. On page 32 of the S&A it is noted, "Paragraph III.B.1.i does not preclude  
16 KCPL, or any other party from requesting that this amortization be directed toward specific  
17 plan accounts or from requesting additional changes in depreciation rates that may result from  
18 depreciation studies."

19 **DEPRECIATION STUDY**

20 Q. What is the definition of depreciation?

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1           A.     Depreciation is the loss, not restored by current maintenance, which is due to  
2 all factors causing the ultimate retirement of the property. These factors embrace wear and  
3 tear, decay, inadequacy, obsolescence, and requirements of public authorities.

4           The purpose of depreciation in a regulatory setting is to recover the cost of capital  
5 assets allocated rationally over the assets' useful lives. Annual depreciation expense, when  
6 accumulated over the life of the asset, yields the full recovery of the original cost of the  
7 utility's assets.

8           Q.     Please describe the depreciation study that you conducted in this case.

9           A.     I performed a broad group-average life depreciation study, where all units of  
10 plant within a particular depreciation category are considered to be one group when analyzing  
11 mortality data to determine average service lives. The average service life (ASL), expressed  
12 in years, is the expected period of useful service of all units of the group, or capital plant  
13 account, regardless of the placement date.

14          Q.     Briefly describe the different capital plant account classifications.

15          A.     Capital plant accounts are classified by function: Production (Generation),  
16 Transmission, Distribution, and General.

17          Q.     What are the steps involved in life estimation?

18          A.     Determining an account's average service life begins with four primary steps.  
19 The first primary step is to collect and review the historical placement and retirement plant  
20 data. The mortality data is checked for reasonableness and to ensure that sufficient data exists  
21 to perform a statistical analysis. The second primary step is touring a utility's facilities to  
22 gain familiarity with the facilities and to discuss with operations personnel, engineers,  
23 accountants and others, current trends and developments that may influence the useful life of



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1 plant in service. The third primary step is to perform a statistical analysis of the retirement  
2 experience of the utility plant accounts. The fourth primary step in the process of determining  
3 average service life is applying experience and informed judgment to the results of the life  
4 analysis to confirm that the results are reasonable for the type of plant in question.

5 Q. If Staff is unable to perform the steps involved in life estimation as noted  
6 above, how does Staff make life estimations?

7 A. In those instances Staff uses informed judgment and recognition of current  
8 developments to develop service life estimations, including the review of average service  
9 lives for plant at other Missouri Commission-regulated utilities.

10 Q. How did you evaluate the retirement experience of the Company's plant  
11 accounts?

12 A. I used the retirement rate method of life analysis using the Gannett Fleming  
13 software. The retirement rate method analyzes historical plant data by calculating the ratio of  
14 retirements to exposures during an age interval, then solving for the percent surviving by age,  
15 to develop a survivor curve for an account. The required data are plant additions in dollars by  
16 year, or vintage, and retirements from each vintage in dollars by year. The exposures at a  
17 given age are the dollars remaining from the various vintages that have lived to that age. The  
18 retirement ratio is the dollars retired during an age interval divided by the exposures at the  
19 beginning of that interval. The survivor ratio is then calculated by subtracting the retirement  
20 ratio from one. Multiplying each successive survivor ratio by the percent surviving of the  
21 previous age will generate a survivor curve. This original survivor curve can then be  
22 smoothed or fitted to an empirically developed statistical model known as the Iowa type  
23 curves.

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1 Q. What are the Iowa-type curves?

2 A. The Iowa curves are widely used models of the life characteristics of utility  
3 property. The system of Iowa curves is a family of curve shapes empirically derived from  
4 analysis of mortality data of 176 types of utility and industrial property. The curves were  
5 developed at the Iowa Engineering Experiment Station at what is presently known as Iowa  
6 State University. The Iowa curves were first published in 1935 and reconfirmed in 1980.

7 Q. How do the Iowa-type curves help determine an account's average service life?

8 A. Smoothing the original survivor curve by fitting it to an Iowa-type curve  
9 eliminates irregularities and extrapolates stub curves to zero percent. The original survivor  
10 curve is both mathematically and visually matched with various Iowa-type curves to  
11 determine which has the most appropriate fit. The average service life of an account's  
12 original survivor curve is estimated as the area under the selected Iowa-type curve.

13 Q. What can cause an account's average service life to change over time?

14 A. Subsequent developments such as technological changes, environmental  
15 regulations, regulatory requirements, or accounting changes can all affect the average service  
16 life of property in an account. Examples of these factors include different vintages of plant  
17 manufactured from different materials, changes in installation practices, or the development  
18 of a life extending maintenance procedure.

19 Q. Are there any other elements that are factored into the depreciation rate  
20 calculation?

21 A. Yes. Consideration was given to the net salvage that property in an account  
22 may experience.

23 Q. What is net salvage?

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1           A.     Net salvage is gross salvage, or recovered marketable value of retired plant,  
2     less cost of removal, or the cost associated with the retirement from service and disposition of  
3     plant. Negative net salvage occurs when the cost of removal exceeds gross salvage; this is  
4     also referred to as net cost of removal or net salvage expense.

5           Q.     Was net salvage calculated in your depreciation study?

6           A.     Yes. Net salvage rates realized by the Company were developed by taking the  
7     experienced net salvage for the last ten years, exclusive of the highest and lowest net salvage  
8     amounts, and dividing by the original cost of plant retired for the last ten years for each  
9     account. Excluding the highest and lowest net salvage amounts in determining a ten year  
10    average eliminates outliers that can result from the delayed timing of data entry into the  
11    accounting system.

12          Q.     Is the Staff's determination of net salvage for mass property accounts  
13    calculated consistent with the Commission's depreciation policy provided in the Report and  
14    Order for Case No. ER-2004-0570?

15          A.     Yes. The net salvage for mass property accounts is determined using the  
16    traditional accrual method. In the traditional accrual method of the depreciation formula, net  
17    salvage equals the gross salvage value of the asset minus the cost of removing the asset from  
18    service. The net salvage percentage is determined by dividing the net salvage experienced for  
19    a period of time by the original cost of the property retired during the same period of time.

20          Q.     Did the Staff include any net salvage for Production plant accounts?

21          A.     The Production plant accounts have interim net salvage determined using the  
22    traditional accrual method as explained above. The Staff did not include terminal net salvage  
23    for the Generation units. This is consistent with the Commission's decision in Case

1 No. ER-2004-0570, page 53, Report and Order, "Second, with respect to Terminal Net  
2 Salvage of Production Plant Accounts, this Commission generally has not allowed the accrual  
3 of this item. The reason is that generating plants are rarely retired and any allowance for this  
4 item would necessarily be purely speculative."

5 Q. Were there any plant assets that the Staff assigned depreciation rates on a basis  
6 other than a broad group-average service life depreciation study?

7 A. Yes. Wind generation assets and nuclear generation assets.

8 Q. What is the basis for the wind generation assets' depreciation rates?

9 A. The Company will retain ownership when construction is completed of  
10 approximately 100 MWs of wind generation near Spearville, Kansas, but does not have  
11 historical data for this type of plant. The basis for the 20-year life assigned to these assets  
12 reflects (1) the provision for a 20-year life for wind assets at page 23 of the KCPL regulatory  
13 plan Stipulation and Agreement approved by the Commission and (2) Staff has no basis for  
14 proposing a different average service life.

15 Q. What is the basis for the Wolf Creek generation plant assets' depreciation  
16 rates?

17 A. The basis for these rates is the expected extension of the nuclear unit's  
18 operating license from 40 years to 60 years (Schedule 5), plus an allowance for interim net  
19 salvage.

20 Q. What were the results of Staff's depreciation study?

21 A. The depreciation rates determined in the Staff's study will decrease the  
22 currently ordered depreciation accrual by approximately \$10 million, based on June 30, 2006  
23 Missouri jurisdictional allocated plant-in-service balances.

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1 Q. When was the last time the Staff performed a depreciation study for KCPL  
2 plant assets?

3 A. The Staff last performed a depreciation study for KCPL plant assets in the mid-  
4 1980s for Case No. EO-85-224, with rates authorized in Depreciation Order No. 148, dated  
5 June 9, 1986. Depreciation rates were subsequently revised in Case No. EO-94-199 and Case  
6 No. EO-2005-0329. In addition, the Company was to begin a \$3.5 million annual  
7 amortization on the effective date of the Order for Case No. EO-94-199. Further information  
8 regarding this amortization can be found in the direct testimony of Cary G. Featherstone.

9 Q. Please summarize Staff's recommendation for depreciation rates for the  
10 Company's plant accounts.

11 A. The Staff's recommended average service lives, net salvage percentages, and  
12 depreciation rates for each account are provided in Schedule 3.

13 **DEPRECIATION RESERVE ANALYSIS**

14 Q. Did Staff analyze the Company's accumulated provision for depreciation?

15 A. Yes. The revised estimate of average service life and the selected Iowa-type  
16 curve are used to compute the "calculated" accumulated depreciation, or theoretical reserve.  
17 The theoretical reserve is the amount that would be in the accumulated provision for  
18 depreciation, or book depreciation reserve, if the depreciation rate corresponding to the  
19 revised estimates had been applied from the original placement of plant to the date of the  
20 study. The theoretical reserve can be thought of as the difference between the original cost of  
21 plant currently in service and the summation of annual depreciation expense that is to be  
22 collected from the study date until the date of final retirement of the account.

23 Q. What are the results of your analysis of the book depreciation reserve?

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1           A.     My analysis indicates that the book depreciation reserve is over-accrued by  
2 approximately \$800 million. A comparison of the theoretical reserve to the book reserve is  
3 presented in Schedule 4. This comparison, using 12-31-05 plant and accumulated reserve  
4 balances from the company's response to DR 173, is on a total company basis and not  
5 Missouri jurisdictionally allocated plant-in-service basis.

6           Q.     What caused the book depreciation reserve to be over-accrued?

7           A.     Current expectations varying from previous study estimates of average service  
8 life, retirement dispersion pattern, net salvage, and the expected extension of the Wolf Creek  
9 operating license, combined with actual plant experience created the theoretical over-accrual  
10 of the book depreciation reserve.

11          Q.     What are Staff's criteria for an adjustment of an over-accrual of depreciation  
12 reserve?

13          A.     The need for, magnitude of and timing of a reserve imbalance adjustment  
14 should be based on consideration of several factors including the characteristics of the  
15 account, the causes for the difference, the magnitude of the imbalance, and the year-to-year  
16 volatility of the accumulated provision for depreciation.

17          Q.     What is the effect of adjusting an over-accrual of depreciation reserve?

18          A.     An adjustment for an over-accrual of depreciation reserve is a negative  
19 amortization and the effect is an increase to rate base in the revenue requirement.

20          Q.     What is the Staff's recommendation for adjusting the depreciation reserve  
21 over-accrual?

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1           A.     The Staff does not propose an adjustment of the depreciation reserve at this  
2 time.   The depreciation reserve imbalance should again be noted and continued to be  
3 monitored in future depreciation studies.

4   **RECOMMENDATION**

5           Q.     Please summarize the Staff's proposal regarding depreciation in this case.

6           A.     The Staff recommends that the Commission order the depreciation rates  
7 proposed in Schedule 2.  Additionally, the Commission should note the accumulated  
8 depreciation reserve over-accrual in Schedule 4 and make no adjustment at this time.

9           Q.     Does this conclude your direct testimony?

10          A.     Yes, it does.

# CASE PROCEEDING PARTICIPATION

ROSELLA L. SCHAD

COMPANY	CASE NO./ FILING	ISSUES
Silverleaf Resorts, Inc. and Algonquin Water Resources of Missouri, LLC	WO-2005-0206 Rebuttal	Depreciation
Laclede Gas Company	GR-99-315 Supplemental Rebuttal	Depreciation, Cost of Removal, and Net Salvage
Laclede Gas Company	GR-99-315 Supplemental Direct	Depreciation, Cost of Removal, and Net Salvage
AQUILA, INC. d/b/a AQUILA NETWORKS-MPS (Electric) AND AQUILA NETWORKS – L&P (Electric and Steam)	ER-2004-0034 and HR-2004-0024 (Consolidated) Surrebuttal	Production Plant Retirement Dates; Accumulated Depreciation; Cost of Removal and Depreciation
AQUILA, INC. d/b/a AQUILA NETWORKS-MPS AND AQUILA NETWORKS-L&P	GR-2004-0072 Rebuttal	Depreciation; Accumulated Depreciation; Cost of Removal and Production Plant Retirement Dates
AQUILA, INC. d/b/a AQUILA NETWORKS-MPS (Electric) AND AQUILA NETWORKS – L&P (Electric and Steam)	ER-2004-0034 and HR-2004-0024 (Consolidated) Rebuttal	Production Plant Retirement Dates; Accumulated Depreciation Reserve Balances; Cost of Removal and Depreciation
AQUILA, INC. d/b/a AQUILA NETWORKS-MPS AND AQUILA NETWORKS-L&P	GR-2004-0072 Direct	Depreciation and Accumulated Depreciation Reserve
AQUILA, INC. d/b/a AQUILA NETWORKS-MPS (Electric) AND AQUILA NETWORKS – L&P (Electric and Steam)	ER-2004-0034 and HR-2004-0024 (Consolidated) Direct	Depreciation and Accumulated Depreciation Reserve
Laclede Gas Company	GR-2002-356 Rebuttal	Decommissioning
Laclede Gas Company	GR-2002-356 Direct	Depreciation
Union Electric Company d/b/a AmerenUE	EC-2002-1 Surrebuttal	Depreciation; Steam Production Plant Retirement Dates; Decommissioning Costs; Callaway Interim Additions
Laclede Gas Company	GR-2001-629 Direct	Depreciation
Ozark Telephone Company	TC-2001-402 Direct	Depreciation Rates



COMPANY	CASE NO./ FILING	ISSUES
Northeast Missouri Rural Telephone Company	TR-2001-344 Direct, Surrebuttal	Depreciation Rates
Oregon Farmers Mutual Telephone Company	TT-2001-328 Rebuttal	Depreciation Rates
KLM Telephone Company	TT-2001-120 Rebuttal	Depreciation Rates
Holway Telephone Company	TT-2001-119 Rebuttal	Depreciation Rates
Peace Valley Telephone Company	TT-2001-118 Rebuttal	Depreciation Rates
Iamo Telephone Company	TT-2001-116 Rebuttal	Depreciation Rates
Osage Water Company	WR-2000-557 Direct	Depreciation
Osage Water Company	SR-2000-556 Direct	Depreciation

**Case No. ER-2006-0314**  
**Kansas City Power and Light Company**  
**SCHEDULE 2 Depreciation Rate Recommendation**

<b>Account Number</b>	<b>Description</b>	<b>Depreciation Rate</b>
<b><u>STEAM PRODUCTION PLANT</u></b>		
311.00	Structures and Improvements	1.87%
311.00	Structures and Improvements-Hawthorn 5 Rebuild	1.87%
312.00	Boiler Plant Equipment (including trains)	2.35%
312.00	Boiler Plant Equipment-Hawthorn 5 Rebuild	2.35%
314.00	Turbogenerator Units	2.38%
315.00	Accessory Electric Equipment	2.26%
315.00	Accessory Electric Equipment-Hawthorn 5 Rebuild	2.26%
315.00	Accessory Electric Equipment-(like 391)	2.26%
316.00	Miscellaneous Power Plant Equipment	2.80%
316.00	Miscellaneous Power Plant Equipment-Hawthorn 5 Rebuild	2.80%
<b><u>NUCLEAR PRODUCTION PLANT</u></b>		
321.00	Nuc Structures & Improvements	1.75%
322.00	Nuc Reactor Plant Equipment	1.76%
323.00	Nuc Turbogenerator Units	1.70%
324.00	Nuc Accessory Electric Equipment	1.68%
325.00	Nuc Miscellaneous Power Plant Equipment	1.65%
328.00	Nuc Plant Write-Off	1.68%
<b><u>OTHER PRODUCTION PLANT</u></b>		
341.00	Structures and Improvements	1.74%
342.00	Fuel Holders and Accessories	2.86%
344.00	Generators	2.94%
345.00	Accessory Electric Equipment	2.86%
<b><u>OTHER PRODUCTION PLANT-WIND</u></b>		
341.00	Structures and Improvements	5.00%
344.00	Generators	5.00%
345.00	Accessory Electric Equipment	5.00%

**Case No. ER-2006-0314**  
**Kansas City Power and Light Company**  
**SCHEDULE 2 Depreciation Rate Recommendation**

<b>Account Number</b>	<b>Description</b>	<b>Depreciation Rate</b>
<b><u>TRANSMISSION PLANT</u></b>		
352.00	Structures and Improvements	1.69%
353.00	Station Equipment	1.97%
353.00	Station Equipment-Communication Equipment (like 397)	1.97%
354.00	Towers and Fixtures	1.82%
355.00	Poles and Fixtures	2.29%
356.00	Overhead Conductors and Devices	0.82%
357.00	Underground Conduit	1.67%
358.00	Underground Conductors and Devices	1.67%
<b><u>DISTRIBUTION PLANT</u></b>		
361.00	Structures and Improvements	1.70%
362.00	Station Equipment	1.91%
362.00	Station Equipment-Communication Equipment (like 397)	1.91%
364.00	Poles, Towers and Fixtures	2.18%
365.00	Overhead Conductors and Devices	1.78%
366.00	Underground Conduit	1.95%
367.00	Underground Conductors and Devices	1.60%
368.00	Line Transformers	3.00%
369.00	Overhead Services	3.93%
370.00	Meters	1.77%
371.00	Installations on Customers' Premises	4.28%
373.00	Street Lighting and Signal Systems	5.00%
<b><u>GENERAL PLANT</u></b>		
390.00	Structures and Improvements	1.70%
391.00	Office Furniture and Equipment	3.45%
392.00	Transportation Equipment	7.75%
393.00	Stores Equipment	3.33%
394.00	Tools, Shop and Garage Equipment	2.45%
395.00	Laboratory Equipment	3.26%
396.00	Power Operated Equipment	6.03%
397.00	Communications Equipment	3.33%
398.00	Miscellaneous Equipment	4.50%

Case No. ER-2006-0314  
Kansas City Power and Light Company  
SCHEDULE 3 Depreciation Rate Recommendation

Account Number	Description	Adjusted Jurisdictional Plant Balance 6/30/2005	Staff Proposed					Existing Ordered				
			ASL (Years)	Iowa Curve	Average Net Salvage	Depreciation Rate	Annual Accrual	ASL (Years)	Iowa Curve	Average Net Salvage	Depreciation Rate	Annual Accrual
(1)	(2)	(3)	(4)	(5)	(6)	(7)=[100%-(6)]/(4)]	(8)=[(3)*(7)]	(9)	(10)	(11)	(12)	(13)=[(3)*(12)]
<b>STEAM PRODUCTION PLANT</b>												
311.00	Structures and Improvements	\$ 45,514,273	60.0	R3	-12%	1.87%	\$851,117	30.5		-1%	3.31%	\$1,506,522
311.00	Structures and Improvements-Hawthorn 5 Rebuild	\$ 4,512,625	60.0	R3	-12%	1.87%	\$84,386				0.82%	\$37,004
312.00	Boiler Plant Eq. (including trains)	\$ 304,266,464	45.0	R2	-6%	2.35%	\$7,150,732	28.6		-4%	3.63%	\$11,045,599
312.00	Boiler Plant Eq.-Hawthorn 5 Rebuild	\$ 119,194,508	45.0	R2	-6%	2.35%	\$2,801,071				0.90%	\$1,072,751
314.00	Turbogenerator Units	\$ 120,289,821	45.0	R2.5	-7%	2.38%	\$2,862,898	32.3		-1%	3.13%	\$3,765,071
315.00	Accessory Electric Eq.	\$ 46,923,978	45.0	L1	-2%	2.26%	\$1,060,482	31.3		-1%	3.23%	\$1,515,644
315.00	Accessory Electric Equipment-Hawthorn 5 Rebuild	\$ 20,020,518	45.0	L1	-2%	2.26%	\$452,464				0.80%	\$160,164
315.00	Accessory Electric Eq.-(like 391)	\$ 7,655	45.0	L1	-2%	2.26%	\$173	18.4		1%	5.40%	\$413
316.00	Miscellaneous Power Plant Eq.	\$ 13,063,793	36.0	R3	2%	2.80%	\$365,786	28.0		2%	3.50%	\$457,233
316.00	Miscellaneous Power Plant Eq.-Hawthorn 5 Rebuild	\$ 1,165,814	36.0	R3	2%	2.80%	\$32,643				0.87%	\$10,143
Total Steam Production Plant:		\$ 674,979,449					\$ 15,661,751					\$ 19,570,544
<b>NUCLEAR PRODUCTION PLANT</b>												
321.00	Nuc Structures & Improvements	\$ 232,471,905	59.5	SQ	-4%	1.75%	\$4,068,258				1.55%	\$3,603,315
322.00	Nuc Reactor Plant Eq.	\$ 388,939,912	59.5	SQ	-5%	1.76%	\$6,845,342				1.73%	\$6,728,660
323.00	Nuc Turbogenerator Units	\$ 94,539,560	59.5	SQ	-1%	1.70%	\$1,607,173				1.96%	\$1,852,975
324.00	Nuc Accessory Electric Eq.	\$ 77,415,819	59.5	SQ	0%	1.68%	\$1,300,586				1.73%	\$1,339,294
325.00	Nuc Miscellaneous Power Plant Eq.	\$ 38,150,311	59.5	SQ	2%	1.65%	\$629,480				2.36%	\$900,347
328.00	Nuc Plant Write-Off	\$ (144,993,259)	59.5	SQ	0%	1.68%	(\$2,435,897)				1.73%	(\$2,598,363)
Total Nuclear Production Plant:		\$ 686,524,248					\$ 12,014,952					\$ 11,916,208
<b>OTHER PRODUCTION PLANT</b>												
341.00	Structures and Improvements	\$ 2,398,024	60.0	R2.5	0%	1.74%	\$41,726	24.3		0%	4.12%	\$98,799
342.00	Fuel Holders, Producers and Access.	\$ 5,756,918	35.0	S6	0%	2.86%	\$164,619	24.3		0%	4.12%	\$237,144
344.00	Generators	\$ 139,643,739	35.0	R2.5	-3%	2.94%	\$4,105,526	24.3		0%	4.12%	\$5,753,322
345.00	Accessory Electric Equipment	\$ 7,453,976	35.0	R4	0%	2.86%	\$213,184	24.3		0%	4.12%	\$307,104
Total Other Production Plant:		\$ 155,251,657					\$ 4,525,055					\$ 6,396,368
<b>OTHER PRODUCTION PLANT-WIND</b>												
341.00	Structures and Improvements	\$0	20.0	SQ	0%	5.00%	\$0	20.0			5.00%	\$0
343.10	Wind Turbines	\$0	20.0	SQ	0%	5.00%	\$0	20.0			5.00%	\$0
345.00	Accessory Electric Equipment	\$0	20.0	SQ	0%	5.00%	\$0	20.0			5.00%	\$0
Total Other Production-Wind Plant:		\$0					\$0					\$0

Case No. ER-2006-0314  
 Kansas City Power and Light Company  
 SCHEDULE 3 Depreciation Rate Recommendation

		Staff Proposed						Existing Ordered				
Account Number	Description	Adjusted Jurisdictional Plant Balance 6/30/2006	ASL (Years)	Iowa Curve	Average Net Salvage	Depreciation Rate	Annual Accrual	ASL (Years)	Iowa Curve	Average Net Salvage	Depreciation Rate	Annual Accrual
TRANSMISSION PLANT												
352.00	Structures and Improvements	\$ 2,367,556	60.0	S1.5	-1%	1.69%	\$40,012	73.5		0%	1.36%	\$32,199
353.00	Station Eq.	\$ 67,304,577	55.0	R1.5	-8%	1.97%	\$1,325,900	42.0		6%	2.24%	\$1,507,623
353.00	Station Eq.-Communication Eq. (like 397)	\$ 3,290,197	55.0	R1.5	-8%	1.97%	\$64,817	38.8		3%	2.50%	\$82,255
354.00	Towers and Fixtures	\$ 2,154,273	55.0	L4	0%	1.82%	\$39,208	50.0		0%	2.00%	\$43,085
355.00	Poles and Fixtures	\$ 51,674,525	55.0	SQ	-26%	2.29%	\$1,183,347	39.0		-40%	3.59%	\$1,855,115
356.00	Overhead Conductors and Devices	\$ 41,685,986	55.0	R2	55%	0.82%	\$341,825	48.0		-49%	3.10%	\$1,292,266
357.00	Underground Conduit	\$ 1,646,721	60.0	R5	0%	1.67%	\$27,500	75.5		0%	1.32%	\$21,737
358.00	Underground Conductors and Devices	\$ 1,509,025	60.0	L4	0%	1.67%	\$25,201	39.2		0%	2.55%	\$38,480
Total Transmission Plant:		\$ 171,632,860					\$ 3,047,809					\$ 4,872,760
DISTRIBUTION PLANT												
361.00	Structures and Improvements	\$ 5,109,675	60.0	L0.5	-2%	1.70%	\$86,864	33.8		0%	2.96%	\$151,246
362.00	Station Eq.	\$ 80,086,584	55.0	R1	-5%	1.91%	\$1,529,654	45.0		10%	2.00%	\$1,601,732
362.00	Station Eq.-Communication Eq. (like 397)	\$ 1,957,923	55.0	R1	-5%	1.91%	\$37,396	38.8		3%	2.50%	\$48,948
364.00	Poles, Towers and Fixtures	\$ 114,992,975	55.0	L1.5	-20%	2.18%	\$2,506,847	32.0		-31%	4.09%	\$4,703,213
365.00	Overhead Conductors and Devices	\$ 88,905,798	55.0	L0	2%	1.78%	\$1,582,523	41.0		17%	2.02%	\$1,795,897
366.00	Underground Conduit	\$ 74,505,280	60.0	S0.5	-17%	1.95%	\$1,452,853	75.3		0%	1.33%	\$990,920
367.00	Underground Conductors and Devices	\$ 154,828,560	60.0	S0	4%	1.60%	\$2,477,257	65.0		20%	1.23%	\$1,904,391
368.00	Line Transformers	\$ 120,068,514	35.0	R2	-55%	3.00%	\$3,601,995	30.0		7%	3.10%	\$3,722,062
369.00	Overhead Services	\$ 39,802,369	55.0	R1.5	-116%	3.93%	\$1,564,233	33.8		-6%	3.14%	\$1,249,794
370.00	Meters	\$ 46,462,809	55.0	R0.5	3%	1.77%	\$822,392	23.6		-2%	4.31%	\$2,002,547
371.00	Installations on Customers' Premises	\$ 6,863,264	25.0	L0.5	-7%	4.28%	\$293,748	10.9		-4%	9.51%	\$652,696
373.00	Street Lighting and Signal Systems	\$ 6,928,608	20.0	L0	0%	5.00%	\$346,430	24.4		10%	3.69%	\$255,666
Total Distribution Plant:		\$ 740,510,359					\$ 16,302,193					\$ 19,079,113
GENERAL PLANT												
390.00	Structures and Improvements	\$ 29,668,966	60.0	L0	-2%	1.70%	\$504,372	39.4		0%	2.54%	\$753,592
391.00	Office Furniture and Eq.	\$ 6,967,949	20.0	R2	31%	3.45%	\$240,394	18.4		1%	5.40%	\$376,269
392.00	Transportation Eq.	\$ 15,288,503	10.0	R1.5	22%	7.75%	\$1,184,859	13.3		28%	5.43%	\$830,166
393.00	Stores Eq.	\$ 361,039	30.0	R2.5	0%	3.33%	\$12,023	27.1		3%	3.58%	\$12,925
394.00	Tools, Shop and Garage Eq.	\$ 1,730,833	40.0	R2.5	2%	2.45%	\$42,405	37.5		2%	2.61%	\$45,175
395.00	Laboratory Eq.	\$ 2,561,898	30.0	R2.5	2%	3.26%	\$83,518	29.4		1%	3.37%	\$86,336
396.00	Power Operated Eq.	\$ 5,855,501	15.0	R1.5	9%	6.03%	\$353,087	16.2		10%	5.55%	\$324,980
397.00	Communications Eq.	\$ 40,305,253	30.0	S0	0%	3.33%	\$1,342,165	38.8		3%	2.50%	\$1,007,631
398.00	Miscellaneous Eq.	\$ 111,674	20.0	L0	10%	4.50%	\$5,025	31.3		1%	3.16%	\$3,529
Total General Plant:		\$ 102,851,616					\$ 3,767,848					\$ 3,440,603
Total Plant:		\$ 2,531,750,189					\$55,319,609					\$65,275,596

Case No. ER-2006-0314  
Kansas City Power and Light Company  
SCHEDULE 4 Depreciation Rate Recommendation

Account Number	Description	Total Company Accumulated Reserve 12/31/2005	Total Company Theoretical Reserve 12/31/2005
(1)	(2)	(3)	(4)
<b><u>STEAM PRODUCTION PLANT</u></b>			
311.00	Structures and Improvements	\$47,322,511	\$27,657,192
311.00	Structures and Improvements-Hawthorn 5 Rebuild		
312.00	Boiler Plant Eq. (including trains)	\$559,574,711	\$231,348,628
312.00	Boiler Plant Eq.-Hawthorn 5 Rebuild		
314.00	Turbogenerator Units	\$88,817,586	\$74,815,123
315.00	Accessory Electric Eq.	\$54,446,464	\$23,998,533
315.00	Accessory Electric Equipment-Hawthorn 5 Rebuild		
315.00	Accessory Electric Eq.-(like 391)		
316.00	Miscellaneous Power Plant Eq.	\$12,335,826	\$7,927,336
316.00	Miscellaneous Power Plant Eq.-Hawthorn 5 Rebuild		
Total Steam Production Plant:		\$ 762,497,098	\$ 365,746,812
<b><u>NUCLEAR PRODUCTION PLANT</u></b>			
321.00	Nuc Structures & Improvements	\$221,413,939	\$144,922,823
322.00	Nuc Reactor Plant Eq.	\$349,254,022	\$287,101,367
323.00	Nuc Turbogenerator Units	\$105,027,578	\$58,543,586
324.00	Nuc Accessory Electric Eq.	\$64,504,176	\$45,403,725
325.00	Nuc Miscellaneous Power Plant Eq.	\$15,320,030	\$17,080,989
328.00	Nuc Plant Write-Off	(\$73,643,005)	(\$45,111,419)
Total Nuclear Production Plant:		\$ 681,876,740	\$ 507,941,071
<b><u>OTHER PRODUCTION PLANT</u></b>			
341.00	Structures and Improvements	\$175,309	\$108,307
342.00	Fuel Holders, Producers and Access.	\$1,910,669	\$1,671,632
344.00	Generators	\$57,089,412	\$46,310,480
345.00	Accessory Electric Equipment	\$6,129,800	\$4,487,787
Total Other Production Plant:		\$ 65,305,190	\$ 52,578,206
<b><u>OTHER PRODUCTION PLANT-WIND</u></b>			
341.00	Structures and Improvements	\$0	\$0
343.10	Wind Turbines	\$0	\$0
345.00	Accessory Electric Equipment	\$0	\$0
Total Other Production-Wind Plant:		\$0	\$0

Case No. ER-2006-0314  
Kansas City Power and Light Company  
**SCHEDULE 4 Depreciation Rate Recommendation**

Account Number	Description	Total Company Accumulated Reserve 12/31/2005	Total Company Theoretical Reserve 12/31/2005
<b><u>TRANSMISSION PLANT</u></b>			
352.00	Structures and Improvements	\$1,389,376	\$1,332,012
353.00	Station Eq.	\$51,712,539	\$32,743,726
353.00	Station Eq.-Communication Eq. (like 397)		
354.00	Towers and Fixtures	\$3,370,944	\$2,318,281
355.00	Poles and Fixtures	\$45,401,632	\$24,099,254
356.00	Overhead Conductors and Devices	\$38,537,295	\$9,090,513
357.00	Underground Conduit	\$1,783,775	\$1,728,986
358.00	Underground Conductors and Devices	<u>\$1,897,456</u>	<u>\$1,644,646</u>
Total Transmission Plant:		\$ 144,093,017	\$ 72,957,418
<b><u>DISTRIBUTION PLANT</u></b>			
361.00	Structures and Improvements	\$3,784,727	\$1,901,881
362.00	Station Eq.	\$51,058,589	\$32,452,794
362.00	Station Eq.-Communication Eq. (like 397)		
364.00	Poles, Towers and Fixtures	\$104,347,129	\$55,255,703
365.00	Overhead Conductors and Devices	\$52,859,315	\$23,191,555
366.00	Underground Conduit	\$27,063,804	\$32,086,423
367.00	Underground Conductors and Devices	\$79,367,969	\$47,287,772
368.00	Line Transformers	\$86,835,045	\$71,679,826
369.00	Overhead Services	\$33,718,923	\$36,262,884
370.00	Meters	\$42,036,556	\$13,822,529
371.00	Installations on Customers' Premises	\$8,636,880	\$2,162,817
373.00	Street Lighting and Signal Systems	<u>\$5,930,602</u>	<u>\$9,386,823</u>
Total Distribution Plant:		\$ 495,639,539	\$ 325,491,007
<b><u>GENERAL PLANT</u></b>			
390.00	Structures and Improvements	\$16,615,157	\$7,628,448
391.00	Office Furniture and Eq.	\$4,660,754	\$3,593,092
392.00	Transportation Eq.	\$2,669,714	\$2,450,105
393.00	Stores Eq.	\$462,798	\$285,885
394.00	Tools, Shop and Garage Eq.	\$1,813,210	\$1,140,228
395.00	Laboratory Eq.	\$1,994,206	\$1,599,892
396.00	Power Operated Eq.	\$831,635	\$835,864
397.00	Communications Eq.	\$11,154,325	\$16,166,617
398.00	Miscellaneous Eq.	<u>\$106,412</u>	<u>\$66,064</u>
Total General Plant:		\$ 40,308,211	\$ 33,766,195
<b>Total Plant:</b>		<u>\$2,189,719,795</u>	<u>\$1,358,480,709</u>

**OVER-ACCRUAL:** [\$2,189,719,795 - \$1,358,480,709] **\$831,239,086**

# **WOLF CREEK**

NUCLEAR OPERATING CORPORATION

Richard A. Muench  
President and Chief Executive Officer

JUL 22 2003

WM 03-0029

U. S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555

Subject: Docket 50-482: Advance Notification of Intent to Pursue License  
Renewal

Gentlemen:

The Strategic Teaming and Resource Sharing (STARS)<sup>1</sup> plants are assessing the feasibility to jointly prepare, submit and support the review of license renewal applications for selected STARS plants. Not all STARS plants have made a decision to pursue license renewal at this time. Nuclear Regulatory Commission (NRC) Regulatory Issue Summary (RIS) 2003-02, "Importance of Giving NRC Advance Notice of Intent to Pursue License Renewal," dated February 3, 2003, requested licensees to provide a voluntary submission of licensee plans regarding license renewal. This voluntary submission is intended to assist the NRC in its budgeting and planning process.

This letter provides notification of Wolf Creek Nuclear Operating Corporation's (WCNOC) and its owners', Kansas Gas and Electric Company, Kansas City Power & Light Company, and Kansas Electric Power Cooperative, Inc., intent to pursue license renewal for Wolf Creek Generation Station (WCGS), Unit 1.

The WCGS Facility Operating License, License No. NPF-42, will expire at midnight on March 11, 2025. WCNOC intends to submit a license renewal application in accordance with 10 CFR Part 54 in September of 2006.

<sup>1</sup> STARS consists of six plants operated by TXU Generation Company LP, AmerenUE, Wolf Creek Nuclear Operating Corporation, Pacific Gas and Electric Company, STP Nuclear Operating Company and Arizona Public Service Company.



WM 03-0029

Page 2 of 2

If you have any questions concerning this matter, please contact me at (620) 364-4000, or Mr. Kevin Moles at (620) 364-4126.

Very truly yours,



Richard A. Muench

RAM/rig

cc: J. N. Donohew (NRC)  
D. N. Graves (NRC)  
T. P. Gwynn (NRC)  
Senior Resident Inspector (NRC)