

Exhibit No.:
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Nuclear Decommissioning
Accrual
Witness: Don A. Frerking
Type of Exhibit: Direct Testimony
Sponsoring Party: Kansas City Power & Light Company
Case No.: ER-2006-____
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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2006-____

DIRECT TESTIMONY

OF

DON A. FRERKING

ON BEHALF OF

KANSAS CITY POWER & LIGHT COMPANY

**Kansas City, Missouri
January 2006**

***** [REDACTED] *** Designates that "Proprietary" Information has been Removed.
"Highly Confidential" Information has been Removed from Certain
Schedules Attached To This Testimony Designated ("HC")
Pursuant to the Standard Protective Order.**

DIRECT TESTIMONY

OF

DON A. FRERKING

Case No. ER-2006-_____

1 **Q: Please state your name and business address.**

2 A: My name is Don A. Frerking. My business address is 1201 Walnut, Kansas City,
3 Missouri 64106-2124.

4 **Q: By whom and in what capacity are you employed?**

5 A: I am employed by Kansas City Power & Light Company ("KCPL" or "Company") as a
6 Senior Regulatory Analyst.

7 **Q: What are your responsibilities?**

8 A: My responsibilities include performing cost of service analyses, depreciation studies,
9 nuclear decommissioning analyses, property valuations, and other financial analyses.

10 **Q: Please describe your education, experience and employment history.**

11 A: I graduated from the University of Missouri-Columbia in 1986 with a Bachelor of
12 Science degree in Industrial Engineering. I received a Master of Business Administration
13 degree with an emphasis in Finance from the University of Missouri-Columbia in 1987. I
14 am a member of the Society of Depreciation Professionals and am a registered
15 Professional Engineer in the State of Missouri. I have been employed by KCPL or its
16 affiliates since 1987 in various analytical roles in the areas of Valuation Engineering,
17 Business Development, and Finance and Structuring as well as my current role in
18 Business Planning and Regulatory Affairs.

1 **Q: Have you previously testified in a proceeding at the Missouri Public Service**
2 **Commission (“MPSC”) or before any other utility regulatory agency?**

3 A: I have not previously testified before the MPSC. I have provided written testimony to the
4 Kansas Corporation Commission (“KCC”) on several occasions.

5 **Q: On what subjects will you be testifying?**

6 A: I will be testifying on Revenue Requirement Schedules and Nuclear Decommissioning
7 Accrual.

8 **I. REVENUE REQUIREMENT SCHEDULES**

9 **Purpose and Scope**

10 **Q: What is the purpose of this portion of your testimony?**

11 A: The purpose of this portion of my testimony is to describe the revenue requirement
12 schedules that were used to support the rate increase that KCPL is requesting in this
13 proceeding.

14 **Q: Were these revenue requirement schedules prepared either by you or under your**
15 **direction?**

16 A: Yes, they were.

17 **Q: Are these revenue requirement schedules attached to your testimony?**

18 A: Yes, they are attached as Schedule DAF-1 (HC) and are collectively referred to as the
19 Revenue Requirement Model. I will describe the Revenue Requirement Model schedules
20 in further detail later in my testimony.

21 **Q: Please describe the process that you used to determine the requested rate increase.**

22 A: I utilized a standard ratemaking process to determine the rate increase request. I used
23 historical test year data from the financial books and records of the Company as the basis

1 for the operating revenues, operating expenses, and rate base. I then adjusted the
2 historical test year data to reflect: (1) the Company's financial data on a 100% Missouri
3 basis; (2) "normal" levels of revenue and expenses that would have occurred during a
4 year with normal weather, etc.; and (3) known and measurable changes that have been
5 identified since the end of the historical test year. I then allocated the adjusted test year
6 data to arrive at operating revenues, operating expenses, and rate base applicable to the
7 Missouri jurisdiction. I subtracted the operating expenses from the operating revenues to
8 arrive at operating income. I then divided the operating income by the rate base to
9 calculate the rate of return before the requested rate increase. The requested rate increase
10 is the amount necessary in order for the post-increase calculated rate of return to equal
11 the rate of return supported by KCPL witness Samuel Hadaway.

12 **Test Year**

13 **Q: What historical test year did KCPL use in determining rate base and operating**
14 **income?**

15 A: The schedules included in this filing are based upon an historical test year ending
16 December 31, 2005, (initially filed with nine (9) months actual and three (3) months
17 budget data). The test year data will be updated with actual data for the 12 months
18 ending December 31, 2005 in the update and true-up process of this case.

19 **Adjustments**

20 **Q: Is there a listing of the adjustments to the test year data attached to your testimony?**

21 A: Yes, there is a listing of the adjustments along with the dollar amount of those
22 adjustments attached as Schedule DAF-2 (HC) and referred to as the Summary of

Adjustments. A listing of the KCPL witnesses who will be sponsoring these adjustments can be found in attached Schedule DAF-3 (HC).

Q: Please explain the adjustments to reflect the Company's financial data on a 100% Missouri basis?

A: KCPL has an integrated operating system that serves retail customers in Missouri and Kansas, as well as full-requirements, or firm, wholesale customers. The rates for the Missouri retail customers fall under the jurisdiction of the MPSC, the rates for the Kansas retail customers fall under the jurisdiction of the KCC, and the rates for the firm wholesale customers fall under the jurisdiction of the Federal Energy Regulatory Commission ("FERC"). Each of these commissions authorizes, among other things, the rates used to record book depreciation. The Company's financial books show a blended amount for the book depreciation authorized by the various commissions. An adjustment is thus necessary to reflect the historical MPSC-authorized depreciation rates. In addition, adjustments are necessary to reflect differences in the statutory tax rates in Missouri and Kansas and any other differences in accounting treatments authorized by the various commissions. The result, after these adjustments are made, is financial information for the total Company that looks like it operates solely in Missouri and is regulated only by the MPSC.

Q: Please explain the adjustments to reflect "normal" levels of revenue and expenses?

A: These include adjustments to revenue, fuel expense, and purchased power to reflect levels that would have occurred if the weather had been "normal" during the test year. Also included are adjustments to reflect a "normal" level of maintenance at the generating stations. This is necessary because, for example, turbine maintenance does not occur

every year. Thus, an individual generating unit may have large variations in maintenance from year to year. The adjustments to normalize maintenance reflect the entire cycle of non-annual maintenance levels.

Q: Please explain the adjustments to reflect known and measurable changes that have been identified since the end of the historical test year?

A: These adjustments are for changes in the level of revenues, expenses and rate base that either have happened or are expected to happen by the time of the September 30, 2006 true-up described in the Regulatory Plan Stipulation and Agreement, which the MPSC approved in Case No. EO-2005-0329 ("Regulatory Plan S&A").

Allocations

Q: Why is it necessary to allocate revenues, expenses and rate base to the jurisdictions?

A: KCPL does not have separate operating systems for its Missouri, Kansas, and firm wholesale jurisdictions. Instead, it operates a single production and transmission system that is used to provide service to the retail customers in Missouri and Kansas as well as the full-requirements firm wholesale customers.

Q: Please explain how revenues, expenses, and rate base items were allocated.

A: The allocators that were utilized can be classified as "input" allocators or "calculated" allocators. The input allocators are based on the weather-normalized demand, energy, and customer information that is described in the testimony of KCPL witness George McCollister. The calculation of these input allocators is attached to my testimony as Schedule DAF-4. The calculated allocators are, at their root, based on the Demand, Energy, and Customer allocators. The calculated allocators are, however, calculated

1 within the Revenue Requirement Model. They are often calculated as combinations of
2 amounts that have previously been allocated using one or more of the input allocators.

3 **Q: Please describe the Demand allocator.**

4 A: The Demand allocator is a 12-month average of the coincident peak demands for the
5 Missouri and Kansas retail jurisdictional customers and the firm wholesale FERC
6 jurisdictional customers.

7 **Q: Please describe the Energy allocator.**

8 A: The Energy allocator is based on the total annual kilowatt-hour usage by the Missouri and
9 Kansas retail customers and the firm wholesale FERC jurisdictional customers. The
10 kilowatt-hours that are sold to other utilities on a non-firm basis, often referred to as bulk
11 power sales or off-system sales, are not part of the calculation of the Energy allocator.
12 The Company's generation and transmission system was built to serve the requirements
13 of the retail and firm wholesale customers. Thus, it is proper to allocate the full costs of
14 the system to the retail and firm wholesale customers. However, because the full costs of
15 the system are being allocated to the retail and firm wholesale customers, the net
16 operating revenue from the off-system sales is being allocated to the retail and firm
17 wholesale customers and serves as an offset to the revenue requirement for those
18 customers.

19 **Q: Please describe the Customer allocator.**

20 A: The Customer allocator is based on the number of customers in the Missouri, Kansas, and
21 firm wholesale FERC jurisdictions.

22 **Q: Please explain how retail revenues were allocated.**

1 A: Retail revenues are the revenues received from the retail customers in Missouri and
2 Kansas. Retail revenues are not allocated. Rather, they are recorded by jurisdiction.

3 **Q: Please explain how miscellaneous revenues were allocated.**

4 A: Miscellaneous revenues include forfeited discounts, miscellaneous services, rent from
5 electric property, transmission service for others, and other electric revenues. These
6 miscellaneous revenues were subdivided and, where possible, assigned directly to the
7 jurisdiction where they were recorded. The miscellaneous revenues that were not directly
8 assignable to a jurisdiction were grouped by functional categories and allocated on a
9 basis appropriate for that functional category. Production and transmission-related
10 miscellaneous revenues were allocated using the Demand allocator. Distribution-related
11 miscellaneous revenues were allocated based on the distribution plant in each
12 jurisdiction.

13 **Q: Please explain how bulk power, or off-system, sales revenues were allocated.**

14 A: The bulk power, or off-system, sales revenues are for the capacity and non-firm energy
15 sold to other utilities. The revenues from off-system sales were subdivided into four
16 components for allocation purposes. These components are: (1) the capacity sales
17 revenues; (2) the transmission revenues associated with and included in the off-system
18 sales revenues; (3) the cost of sales (*e.g.*, fuel costs) associated with and included in the
19 off-system sales revenues; and (4) the margin or profit included in the off-system sales
20 revenues. The capacity and transmission components were allocated using the Demand
21 allocator. The cost of sales component was allocated using the Energy allocator. The
22 margin component was allocated on the basis of “unused energy.” The Unused Energy
23 allocator is derived from the Demand and Energy allocators. It is calculated by

1 subtracting the actual energy usage from the “available energy”. The available energy is
2 defined as the average of the 12 coincident peak demands multiplied by the total hours in
3 the test period. The allocation for all of these off-system sales revenue components is
4 consistent with the allocation of the costs associated with these sales.

5 **Q: Please explain how sales for resale revenues were allocated.**

6 A: The sales for resale revenues are the revenues from the full-requirements firm wholesale
7 customers under FERC jurisdiction. These revenues were allocated totally to the FERC
8 jurisdiction with the exception of the transmission revenues associated with and included
9 in these revenues. The transmission component was allocated using the Demand
10 allocator.

11 **Q: Please explain how fuel costs were allocated.**

12 A: The fuel costs were allocated using the Energy allocator. The fuel costs being allocated
13 include the fuel used to generate off-system sales. As I described earlier, the revenues
14 from off-system sales that cover the cost of those sales were also allocated using the
15 Energy allocator so the revenues and the costs associated with those revenues were
16 allocated on a consistent basis.

17 **Q: Please explain how purchased power costs were allocated.**

18 A: The purchased power costs were allocated using the Energy allocator. The purchased
19 power costs being allocated include the purchased power for resale. As I described
20 earlier, the revenues from off-system sales that cover the cost of those sales were also
21 allocated using the Energy allocator so the revenues and the costs associated with those
22 revenues were allocated on a consistent basis.

1 **Q: Please explain how the other production operating and maintenance (“O&M”) costs**
2 **were allocated.**

3 A: The variable production O&M costs were allocated using the Energy allocator. The
4 variable production O&M costs are primarily those non-fuel costs that are related to fuel.
5 The rest of the production O&M costs are considered to be fixed and were allocated
6 using the Demand allocator.

7 **Q: Please explain how the transmission O&M costs were allocated.**

8 A: The transmission O&M costs were allocated based on the allocation of the transmission
9 plant. As I will describe later, the transmission plant was primarily allocated using the
10 Demand allocator.

11 **Q: Please explain how the distribution O&M costs were allocated.**

12 A: The distribution O&M costs were allocated based on the allocation of the distribution
13 plant. As I will describe later, the distribution plant was primarily allocated based on its
14 physical location.

15 **Q: Please explain how the customer accounts expenses were allocated.**

16 A: The customer accounts expenses were primarily allocated using the Customer allocator.
17 The exception is that the uncollectible accounts expenses were directly assigned to the
18 jurisdiction of their origin.

19 **Q: Please explain how the customer services and information expenses were allocated.**

20 A: The customer services and information expenses were primarily allocated using the
21 Customer allocator. The exception is that the amortizations of deferred demand-side
22 management (“DSM”) programs were directly assigned to the jurisdiction of their origin.

23 **Q: Please explain how the sales expenses were allocated.**

1 A: The sales expenses related to firm wholesale sales were directly assigned to the FERC
2 jurisdiction. The rest of the sales expenses were allocated using the Customer allocator.

3 **Q: Please explain how the administrative and general (“A&G”) expenses were**
4 **allocated.**

5 A: The A&G expenses were allocated using a number of methods depending on the cause of
6 the costs. The salaries, employee benefit, and injuries and damages expenses were
7 allocated based on the ratio of the allocated sum of the labor portion of the production,
8 transmission, distribution, customer, and sales expenses described previously. The
9 regulatory expenses were directly assigned to the jurisdiction of their origin. The
10 property insurance expenses were allocated based on the allocation of total plant.
11 General plant maintenance and fleet expenses were allocated based on the allocation of
12 the plant with which they are associated. General advertising expenses were allocated
13 using the Customer allocator, and the remainder of the A&G expenses was allocated
14 using the Energy allocator.

15 **Q: Please explain how the depreciation and amortization expenses were allocated.**

16 A: As I described previously, the depreciation and amortization expenses were adjusted to
17 reflect the appropriate jurisdictionally approved depreciation rates. The adjusted
18 depreciation and amortization expenses were then allocated based on the allocation of the
19 plant with which they are associated.

20 **Q: Please explain how the interest on customer deposits was allocated.**

21 A: The interest on customer deposits was directly assigned to the jurisdiction of its origin.

22 **Q: Please explain how taxes other than income were allocated.**

1 A: Property taxes related to Wolf Creek were allocated based on the allocation of Wolf
2 Creek plant. Property taxes not related to Wolf Creek were allocated based on the
3 allocation of total plant excluding Wolf Creek. Payroll taxes related to Wolf Creek
4 payroll were allocated using the Demand allocator. Payroll taxes related to non-Wolf
5 Creek payroll were allocated based on the allocation of the non-Wolf Creek payroll.
6 Gross receipts taxes were assigned directly to the jurisdiction of their origin and then
7 eliminated through an adjustment. Capital stock taxes were allocated based on the
8 allocation of total plant. Kansas City, Missouri earnings taxes were first calculated based
9 on the earnings in the Revenue Requirement Model and then allocated 100% to Missouri.

10 **Q: Please explain how income taxes were allocated.**

11 A: Currently payable income taxes were not allocated. Instead, the currently payable
12 income taxes were calculated in the Revenue Requirement Model using the statutory tax
13 rates for the appropriate jurisdiction and applying them to the taxable income calculated
14 in the Revenue Requirement Model. The deferred taxes were primarily allocated based
15 on the allocation of the plant with which they are associated.

16 **Q: Please explain how production plant-in-service costs were allocated.**

17 A: Production plant costs were primarily allocated using the Demand allocator. The
18 exception is for plant items that have been afforded different jurisdictional accounting
19 treatment through past commission orders. An example is the Missouri gross-up
20 accounting treatment of allowance for funds used during construction ("Missouri Gross
21 AFDC"). These items were directly assigned to their jurisdiction of their origin.

22 **Q: Please explain how transmission plant-in-service costs were allocated.**

1 A: Transmission plant costs were primarily allocated using the Demand allocator. Missouri
2 Gross AFDC amounts in the transmission plant amounts were allocated directly to
3 Missouri. In addition, there are some costs included in the transmission plant amounts
4 that are more appropriately classified, by function, as distribution plant costs. These
5 amounts were allocated based on their physical location.

6 **Q: Please explain how distribution plant-in-service costs were allocated.**

7 A: Distribution plant costs were primarily allocated based on their physical location. There
8 are, however, some plant costs included in the distribution plant amounts that are more
9 appropriately classified, by function, as transmission plant costs. These amounts were
10 allocated using the Demand allocator.

11 **Q: Please explain how general plant-in-service costs were allocated.**

12 A: General plant costs were allocated based on their relationship to other production,
13 transmission, and distribution plant costs.

14 **Q: Please explain how intangible plant-in-service costs were allocated.**

15 A: Intangible plant is primarily capitalized software. These capitalized software costs were
16 allocated based on an allocation appropriate for the function of the software.

17 **Q: Please explain how the reserves for accumulated depreciation and amortization**
18 **were allocated.**

19 A: The reserves for accumulated depreciation and amortization were first adjusted to reflect
20 the appropriate jurisdictionally-approved historical depreciation and amortization rates.
21 Then the adjusted amounts were allocated based on the allocation of the plant with which
22 they are associated.

23 **Q: Please explain how the working capital was allocated.**

1 A: Cash working capital (“CWC”) was not allocated. Instead, the CWC amounts were
2 calculated in the Revenue Requirement Model by taking the CWC factors developed in
3 the lead/lag study described in the direct testimony of KCPL witness Christine M.
4 Davidson and applying them to other allocated amounts in the Revenue Requirement
5 Model. Fuel inventory was allocated using the Energy allocator except for the Missouri
6 Gross AFDC amounts in fuel inventory that were assigned directly to Missouri.
7 Materials and supplies (“M&S”) and prepayments were grouped by function and
8 allocated based on allocations appropriate for the function of the M&S and prepayments.

9 **Q: Please explain how the regulatory assets were allocated.**

10 A: The regulatory assets were assigned directly to the jurisdiction of their origin.

11 **Q: Please explain how the accumulated reserve for deferred taxes was allocated.**

12 A: The accumulated reserve for deferred taxes was first adjusted to reflect the appropriate
13 jurisdictionally-approved historical depreciation rates and the appropriate statutory tax
14 rates. The accumulated reserve for deferred taxes was then primarily allocated based on
15 the allocation of plant with which it was associated. However, deferred tax reserve
16 amounts that are associated with regulatory assets and liabilities were assigned directly to
17 their jurisdiction of origin.

18 **Q: Please explain how the customer advances for construction and the customer**
19 **deposits were allocated.**

20 A: The customer advances for construction and the customer deposits were assigned directly
21 to the jurisdiction of their origin.

22 **Q: Why is the method by which the allocations are made critical?**

1 A: The method of allocation is critical first to ensure that the rates charged to each
2 jurisdiction of customers reflect the full cost of serving those customers but not the cost
3 of serving customers in other jurisdictions. Secondly, the method of allocation must
4 allow the Company the opportunity to recover fully its prudent costs of serving those
5 customers. If the sum of the allocation factors allowed in each jurisdiction do not equal
6 100%, then the Company is unable to recover its prudent cost of service and return on
7 rate base.

8 **Q: Have you applied the allocations, which you have described, consistently to the**
9 **Missouri, Kansas, and FERC jurisdictions?**

10 A: Yes, I have.

11 **Description and Purpose of the Schedules in the Revenue Requirement Model**

12 **Q: Please describe the Revenue Requirement Model.**

13 A: The Revenue Requirement Model consists of multiple Excel-based spreadsheets which
14 reflect a consistent format of unadjusted and adjusted system financial information and
15 which result in allocated Missouri jurisdictional rate base, operating income and rate of
16 return. I will discuss both the schedules and format later in my testimony. Collectively,
17 we refer to this model and its underlying schedules as the "Revenue Requirement
18 Model".

19 **Q: What schedules are included in the Revenue Requirement Model?**

20 A: The following schedules are included in the Revenue Requirement Model:

- 21 ▪ SCHEDULE 1 – SUMMARY OF OPERATING INCOME AND RATE BASE;
- 22 ▪ SCHEDULE 2 – ALLOCATION OF REVENUES;

- SCHEDULE 4 – ALLOCATION OF OPERATIONS & MAINTENANCE EXPENSE;
- SCHEDULE 5 – ALLOCATION OF DEPRECIATION EXPENSES & AMORTIZATIONS;
- SCHEDULE 6 – ALLOCATION OF TAXES OTHER THAN INCOME TAXES;
- SCHEDULE 7 – ALLOCATION OF CURRENT & DEFERRED INCOME TAXES;
- SCHEDULE 8 – ALLOCATION OF ACCUMULATED DEFERRED TAXES;
- SCHEDULE 11 – ALLOCATION OF ELECTRIC PLANT IN SERVICE;
- SCHEDULE 12 – ALLOCATION OF ACCUMULATED DEPRECIATION & AMORTIZATION;
- SCHEDULE 15 – ALLOCATION OF WORKING CAPITAL;
- SCHEDULE 16 – CASH WORKING CAPITAL;
- SCHEDULE 18 – ALLOCATION OF SALARIES AND WAGES;
- ALLOCATORS;
- MISC % - MISCELLANEOUS PERCENTS;
- CWC% - CASH WORKING CAPITAL PERCENTS; and
- DEPR % - JURISDICTIONAL DEPRECIATION RATES

Q: Please describe the purpose of SCHEDULE 1 - SUMMARY OF OPERATING INCOME AND RATE BASE.

A: SCHEDULE 1 presents the overall summary of Net Electric Operating Income, including the major components of operating revenue and operating expenses. It also shows Rate Base, including a summary of the major components of net plant and line item detail for

1 other positive and negative rate base items. Finally, it shows the calculated Rate of
2 Return and Return on Equity for the SYSTEM TOTAL, ADJUSTED TOTAL,
3 MISSOURI JURISDICTION and PROFORMA JURISDICTION columns.

4 **Q: What is the purpose of SCHEDULE 2 – ALLOCATION OF REVENUES?**

5 A: SCHEDULE 2 presents the detail of Electric Operating Income, subtotaled by the major
6 components shown on SCHEDULE 1.

7 **Q: What is the purpose of SCHEDULE 4 – ALLOCATION OF OPERATIONS &
8 MAINTENANCE EXPENSE?**

9 A: SCHEDULE 4 presents the detail of other O&M expense by FERC sub-account, and
10 certain additional detail required for allocation purposes, subtotaled by functional
11 category.

12 **Q: What is the purpose of SCHEDULE 5 – ALLOCATION OF DEPRECIATION
13 EXPENSES & AMORTIZATIONS?**

14 A: SCHEDULE 5 presents annualized depreciation and amortization expense by plant sub-
15 account. The annualized depreciation expense amounts, and most amortization expense
16 amounts, were calculated by applying jurisdictional depreciation/amortization rates to
17 adjusted plant in service balances shown on SCHEDULE 11. The jurisdictional rates
18 were approved in the rate order approving the Regulatory Plan S&A and are shown on
19 Schedule DEPR %. The SYSTEM TOTAL column reflects depreciation expense
20 calculated for financial reporting purposes using blended jurisdictional rates from
21 Missouri, Kansas and FERC. The adjustments shown on SCHEDULE 5 include those
22 necessary to adjust from the financial blended depreciation/amortization expense to

1 annualized depreciation/amortization expense based on the September 30, 2006 plant in
2 service balances and the jurisdictional depreciation/amortization rates.

3 **Q: What is the purpose of SCHEDULE 6 – ALLOCATION OF TAXES OTHER**
4 **THAN INCOME TAXES?**

5 A: SCHEDULE 6 presents the detail of property taxes, payroll taxes and other
6 miscellaneous taxes other than income taxes.

7 **Q: What is the purpose of SCHEDULE 7 – ALLOCATION OF CURRENT &**
8 **DEFERRED INCOME TAXES?**

9 A: SCHEDULE 7 presents both the calculation of currently payable income taxes and the
10 deferred income tax and investment tax credit amortization included in cost of service.
11 This schedule is further discussed in the direct testimony of Mr. Burright.

12 **Q: What is the purpose of SCHEDULE 8 – ALLOCATION OF ACCUMULATED**
13 **DEFERRED TAXES?**

14 A: SCHEDULE 8 presents the detail of Deferred Income Tax Reserve assets and liabilities
15 related to rate base items, calculated on a jurisdictional basis. This schedule is further
16 discussed in the direct testimony of Mr. Burright.

17 **Q: What is the purpose of SCHEDULE 11 – ALLOCATION OF ELECTRIC PLANT**
18 **IN SERVICE?**

19 A: SCHEDULE 11 presents the detail of Electric Plant in Service after adjusting the
20 amounts reflected in the financial statements for jurisdictional differences. Although
21 some of the detail is provided only at the FERC plant account level, most of the accounts
22 are further subdivided to allow for the application of different allocation factors to
23 portions of the account balance. The accounts are also subdivided when necessary to

1 facilitate use of different depreciation rates for different portions of the account as
2 required to annualize depreciation expense.

3 **Q: What is the purpose of SCHEDULE 12 – ALLOCATION OF ACCUMULATED**
4 **DEPRECIATION?**

5 A: SCHEDULE 12 presents the detail of Accumulated Reserve for Depreciation by FERC
6 plant account as if jurisdictional depreciation/amortization rates had been applied
7 throughout time to total company Plant in Service expressed on a jurisdictional basis.
8 Where necessary, the FERC plant accounts are further subdivided to allow for the
9 application of different allocation factors to portions of the account balance.

10 **Q: What is the purpose of SCHEDULE 15 – ALLOCATION OF WORKING**
11 **CAPITAL?**

12 A: SCHEDULE 15 presents the detail of each major component of Working Capital. Each
13 component is subdivided as necessary to allow for the application of different allocation
14 factors to portions of the account balance.

15 **Q: What is the purpose of SCHEDULE 16 – CASH WORKING CAPITAL?**

16 A: SCHEDULE 16 presents the calculation of the cash working capital amount shown on
17 SCHEDULE 15. Lead/lag factors, as shown on schedule CWC%, are applied to
18 applicable amounts of O&M expense, interest & taxes and revenues not related to retail
19 kWh sales. The amounts to which the factors are applied have all been transferred from
20 other supporting schedules.

21 **Q: What is the purpose of SCHEDULE 18 – ALLOCATION OF SALARIES AND**
22 **WAGES?**

1 A: SCHEDULE 18 presents labor costs by functional category for labor included in
2 SCHEDULE 4, ALLOCATION OF OPERATIONS & MAINTENANCE EXPENSE.
3 These amounts are used to derive the allocation factor identified as "Sal & Wages"
4 reflected in the schedule titled ALLOCATORS and applied elsewhere in the schedules.

5 **Q: What is the purpose of ALLOCATORS?**

6 A: The schedule identified as ALLOCATORS presents both the "input" allocators and
7 "calculated" allocators that are necessary to accomplish the allocation process that I
8 discussed previously in my testimony.

9 **Q: What is the purpose of MISCELLANEOUS PERCENTS?**

10 A: The MISCELLANEOUS PERCENTS schedule presents the development of various
11 percents used elsewhere in the schedules for calculation of income taxes, revenue related
12 taxes, capital structure, capital cost and the weighted cost of capital.

13 **Q: What is the purpose of CWC% - CASH WORKING CAPITAL PERCENTS?**

14 A: CWC% presents the calculation of lead/lag factors resulting from revenue lead/lags and
15 expense lead/lags for various payment and revenue categories. These factors are used on
16 SCHEDULE 16 for the calculation of Cash Working Capital. The development of the
17 revenue and expense lags is discussed in the direct testimony of KCPL witness Ms.
18 Davidson.

19 **Q: What is the purpose of DEPR % - JURISDICTIONAL DEPRECIATION RATES?**

20 A: The DEPR% schedule reflects the jurisdictional depreciation/amortization rates approved
21 in the order approving the Regulatory Plan S&A. These rates are applied to Plant in
22 Service balances shown on SCHEDULE 11 to derive the annualized
23 depreciation/amortization expense shown on SCHEDULE 5.

1 **Format of Schedules**

2 **Q: Please explain the format of the schedules in the Revenue Requirement Model.**

3 A: The following columns are reflected on each schedule:

- 4 ▪ LINE NO;
- 5 ▪ ACCT NO;
- 6 ▪ DESCRIPTION;
- 7 ▪ ALLOCATION BASIS;
- 8 ▪ SYSTEM TOTAL, COL 601;
- 9 ▪ ADJUSTMENTS, COL 602;
- 10 ▪ ADJUSTED TOTAL, COL 603;
- 11 ▪ MISSOURI JURISDICTION, COL 604;
- 12 ▪ PROFORMA ADJUSTMENTS, COL 605; and
- 13 ▪ PROFORMA JURISDICTION, COL 606

14 **Q: Please describe the purpose of LINE NO.**

15 A: LINE NO is the line identifier used for cross-reference purposes.

16 **Q: Please describe the purpose of ACCT NO.**

17 A: ACCT NO is the FERC prime or sub-account number, as appropriate.

18 **Q: Please describe the purpose of DESCRIPTION.**

19 A: DESCRIPTION is the description of line.

20 **Q: Please describe the purpose of ALLOCATION BASIS.**

21 A: For amounts carried forward from another schedule, as indicated by a "TSFR" cross-
22 reference, this column reflects the schedule/line number from which the amount was
23 transferred. For input amounts, this column reflects the allocation factor by which the

1 “ADJUSTED TOTAL, COL. 603” amount is allocated between jurisdictions. The
2 allocation factors are presented on the schedule titled “ALLOCATORS.”

3 **Q: Please describe the purpose of SYSTEM TOTAL, COL 601.**

4 A: SYSTEM TOTAL, COL 601 reflects the amounts recorded on the financial books for the
5 period January through September 2005 and the amounts projected to be recorded for the
6 period October through December 2005.

7 **Q: Please describe the purpose of ADJUSTMENTS, COL 602.**

8 A: ADJUSTMENTS, COL 602 reflects the sum of the net adjustments made to each line
9 required to: (1) adjust the amount shown in SYSTEM TOTAL, COL 601 to a 100%
10 jurisdictional basis; (2) reflect “normal” levels of revenue and expenses that would have
11 occurred during a year with normal weather, etc.; or (3) reflect known and measurable
12 changes through September 2006, including the tax impact of interest synchronization.

13 **Q: Please describe the purpose of ADJUSTED TOTAL, COL 603.**

14 A: ADJUSTED TOTAL, COL 603 reflects the sum of columns COL 601 and COL 602.

15 **Q: Please describe the purpose of MISSOURI JURISDICTION, COL 604.**

16 A: MISSOURI JURISDICTION, COL 604 reflects the Missouri jurisdictional amount after
17 the appropriate allocation factors have been applied to the amounts shown in ADJUSTED
18 TOTAL, COL. 603.

19 **Q: Please describe the purpose of PROFORMA ADJUSTMENTS, COL 605.**

20 A: PROFORMA ADJUSTMENTS, COL 605 reflects the proforma jurisdictional revenue
21 increase requested along with the associated jurisdictional adjustments for bad debt
22 expense, income and other taxes, and the impact on cash working capital.

23 **Q: Please describe the purpose of PROFORMA JURISDICTION, COL 606.**

1 A: PROFORMA JURISDICTION, COL. 606 – Reflects the sum of COL 604 and COL 605.

2 Q: **To what extent is there a detailed breakdown of amounts shown in any of the**
3 **columns?**

4 A: Wherever the “ALLOCATION BASIS” column shows a “TSFR” (or “transferred”)
5 indication, a detailed breakdown of that amount is reflected on the supporting schedule
6 noted. The line number included in the cross-reference reflects the line number on the
7 supporting schedule that agrees with the amount on the “transferred to” schedule.

8 Q: **Is there further detailed breakdown of the amounts reflected in the**
9 **“ADJUSTMENTS, COL 602” column?**

10 A: Yes, the individual adjustments are listed on attached Schedule DAF-2 (HC). Each
11 adjustment has a unique adjustment number. The individual adjustments are grouped and
12 subtotaled consistent with the line number and line description shown on SCHEDULE 1,
13 SUMMARY OF OPERATING INCOME AND RATE BASE, to which they apply.

14 **Summary of Adjustments**

15 Q: **What is the purpose of SUMMARY OF ADJUSTMENTS?**

16 A: The SUMMARY OF ADJUSTMENTS attached as Schedule DAF-2 (HC), presents a
17 listing of all adjustments to the 2005 test year. The adjustments are organized and
18 subtotaled by the lines reflected on SCHEDULE 1, SUMMARY OF OPERATING
19 INCOME AND RATE BASE. Various KCPL witnesses will support, in their direct
20 testimony, the need for each of the adjustments. A listing of these witnesses is included
21 in Schedule DAF-3 (HC).

22 Q: **Are you sponsoring any of the adjustments listed in the Schedule DAF-2 (HC)?**

1 A: Yes, I am sponsoring Adj-1, Adj-2, Adj-3, Adj-4, Adj-10, Adj-12, Adj-13, Adj-14, Adj-
2 16, and Adj-19. These are the adjustments that are used to reflect the Company's
3 financial data on a 100% Missouri basis. The purpose of each of these adjustments is
4 described below as well as in Schedule DAF-2 (HC).

- 5 ▪ Adj-1 - Remove Missouri gross receipts tax from revenues. Remove Missouri
6 gross receipts tax from other tax expense.
- 7 ▪ Adj-2 - Adjust amortization of 2002 deferred ice storm costs as if 100% had been
8 deferred rather than just the Missouri jurisdictional portion.
- 9 ▪ Adj-3 - Adjust disallowed Wolf Creek plant to 100% Missouri jurisdictional
10 basis.
- 11 ▪ Adj-4 - Move bad debt expense above the line.
- 12 ▪ Adj-10 - Transfer Interest on Customer Deposits above the line.
- 13 ▪ Adj-12 - Adjust book depreciation and amortization expense to Missouri basis
14 depreciation/amortization using Missouri jurisdictional depreciation rates.
- 15 ▪ Adj-13 - Adjust book accumulated reserve for depreciation/ amortization to
16 Missouri basis.
- 17 ▪ Adj-14 - Adjust deferred income tax reserves to Missouri basis.
- 18 ▪ Adj-16 - ** [REDACTED]
19 [REDACTED] **
- 20 ▪ Adj-19 - Reverse book current and deferred income tax expense (provision and
21 amortization) and replace with Missouri jurisdictional current and deferred
22 income tax expense as calculated on Schedule 7.

23 Q: Are you sponsoring any other adjustments?

1 A: Yes, I am sponsoring Adj-44, which adjusts the Wolf Creek decommissioning accrual
2 amount. I will discuss this adjustment in greater detail later in my testimony. I am also
3 sponsoring Adj-97, which reverses the depreciation expense impact of Adj-12, and Adj-
4 98, which annualizes depreciation expense and which is described in my previous
5 discussion of Schedule 5. Additionally, I am sponsoring Adj-99, which adjusts taxable
6 income and the resulting income and other tax expense included in cost of service for the
7 synchronized interest expense calculated using the rate base and weighted cost of debt
8 assumptions in the Revenue Requirement Model.

9 **Class Cost of Service**

10 **Q: Did you prepare similar revenue requirement schedules to those described**
11 **previously for the Class Cost of Service Study?**

12 A: Yes, I prepared a similar group of jurisdictional schedules for the Class Cost of Service
13 Study. However, the schedules for the Class Cost of Service Study were prepared using
14 financial amounts for the 12 months ending September 30, 2005 consistent with the
15 requirements listed in Appendix I of the Regulatory Plan S&A. The allocated
16 jurisdictional amounts from MISSOURI JURISDICTION, COL 604 were the beginning
17 point for the Class Cost of Service analysis. COL 604 reflects the Missouri jurisdictional
18 amounts after appropriate allocation factors were applied to the adjusted system total.
19 The Class Cost of Service Study is being discussed in the direct testimony of KCPL
20 witness Lois Liechti.

21 **Q: What adjustments were applied to arrive at the adjusted system total for the Class**
22 **Cost of Service?**

1 A: Similar adjustments to Adj-1, Adj-2, Adj-3, Adj-4, Adj-10, Adj-12, Adj-13, Adj-14, Adj-
2 16, Adj-19, Adj-97, Adj-98 and Adj-99 that I previously described were applied to arrive
3 at the adjusted system total amounts for the Class Cost of Service, except that they were
4 based on 12 months ended September 30, 2005. Additionally, adjustments were made to
5 weather-normalize retail revenues for that period along with associated adjustments to
6 fuel costs, bulk power sales and purchased power expense.

7 **Q: Does that conclude this portion of your testimony?**

8 A: Yes, it does.

9 **Q: Are there any other subjects on which you will testify?**

10 A: Yes, I will now discuss the development of the nuclear decommissioning accrual.

11 **II. NUCLEAR DECOMMISSIONING ACCRUAL**

12 **Purpose & Recommendation**

13 **Q: What is the purpose of this portion of your testimony?**

14 A: The purpose of this portion my testimony is to recommend a funding level for the
15 Missouri jurisdictional component of KCPL's trust fund for the decommissioning of the
16 Wolf Creek Nuclear Generating Station ("Wolf Creek").

17 **Q: Please summarize your recommendation regarding the appropriate funding level**
18 **for the Missouri jurisdictional component of KCPL's trust fund for the**
19 **decommissioning of Wolf Creek.**

20 A: I am recommending that the annual funding level for the Missouri jurisdictional
21 component of KCPL's trust fund for the decommissioning of Wolf Creek be set at
22 \$1,281,264 as shown in attached Schedule DAF-5. This funding level will begin in 2007

1 and will continue at the same level through the first quarter of 2045 unless the funding
2 level is changed in a future proceeding before the MPSC.

3 **Q: How does your recommended funding level compare to the existing funding level?**

4 A: The existing annual funding level for the Missouri jurisdictional component of KCPL's
5 decommissioning trust fund is \$2,303,856. The recommended annual funding level of
6 \$1,281,264 is \$1,022,592 less than the existing annual funding level. This reduction in
7 the funding level is reflected as part of Adjustment 44 as shown in my Schedule DAF-2
8 (HC).

9 **Q: Please outline the assumptions that were used to arrive at the appropriate accrual**
10 **level.**

11 A: The following factors must be considered in the determination of an appropriate accrual
12 level.

- 13 ▪ Decommissioning Cost Estimate;
- 14 ▪ Decommissioning Cost Escalation Rate;
- 15 ▪ Decommissioning Cost Timing;
- 16 ▪ Remaining Life of the Fund;
- 17 ▪ KCPL's Ownership Percentage;
- 18 ▪ Missouri Jurisdictional Allocation Factor;
- 19 ▪ Trust Fund Investment Mix;
- 20 ▪ Trust Fund Management Fees;
- 21 ▪ Taxes on Fund Earnings;
- 22 ▪ Earnings on Fund Investments;
- 23 ▪ Current Trust Fund Balance;

- Accrual Escalation Methodology; and
- IRS Tax Qualification of the Trust.

Decommissioning Cost Estimate

Q: What decommissioning cost estimate was used in the determination of the accrual level and what was the basis for the cost estimate?

A: A decommissioning cost estimate of \$517,601,292 in 2005 dollars was used. This cost estimate was based on a study dated August 2005 performed by TLG Services, Inc. (“TLG”). TLG is a recognized industry leader in the area of nuclear decommissioning cost analysis. The \$517,601,292 cost estimate is based on the immediate dismantlement and site restoration alternative for decommissioning. The TLG study was filed with the MPSC on August 30, 2005.

Decommissioning Cost Escalation Rate

Q: What decommissioning cost escalation rate did you use in the determination of the accrual level?

A: I used a cost escalation rate of 4.40% per year to escalate the 2005 decommissioning cost estimate of \$517,601,292 from 2005 dollars to the appropriate year dollars for when the decommissioning costs will occur.

Q: What index or formula was the basis for your recommended cost escalation rate?

A: There are a number of indices like the Consumer Price Index (“CPI”) or the Gross Domestic Product (“GDP”) Deflator that are often used to measure changes in prices or inflation. Unfortunately, none of these indices specifically relates to inflation in nuclear decommissioning costs. The Nuclear Regulatory Commission (“NRC”), however, has identified three main cost drivers (labor cost, energy cost, and burial cost) in nuclear

decommissioning costs and has incorporated these into a formula for escalating nuclear decommissioning costs. The NRC uses its formula to estimate current year decommissioning costs by escalating a 1986 generic reference reactor decommissioning cost estimate. I used the NRC formula to develop a future nuclear decommissioning cost escalation rate for escalating the 2005 cost estimate.

Q: Please describe the NRC Formula.

A: The NRC Cost Adjustment Formula can be found in *NUREG-1307, Revision 11, "Report on Waste Burial Charges – Changes in Decommissioning Waste Disposal Costs at Low-Level Waste Burial Facilities."* The NRC Cost Adjustment Formula is:

$$\text{Estimated Cost in Current Year} = [\text{1986 \$ Cost}] * [65\% L_x + 13\% E_x + 22\% B_x]$$

Where:

L_x = Labor Cost Escalation from January 1986 to Current Year

E_x = Energy Cost Escalation from January 1986 to Current Year

B_x = Burial Cost Escalation from January 1986 to Current Year

In addition, the Energy Cost Escalation (E_x) is a weighted average of two components, namely, Industrial Electric Power (P_x) and Light Fuel Oil (F_x). The formula for E_x is:

$$E_x = 58\% P_x + 42\% F_x$$

I adapted this NRC Cost Adjustment Formula to escalate the 2005 TLG Wolf Creek decommissioning cost estimate to the appropriate year dollars for when the decommissioning costs will occur.

Q: What was your source for the Labor and Energy components of the NRC Formula?

A: I utilized a long range forecast published by Global Insight titled, *The U.S Economy, The 30-Year Focus, Fourth-Quarter 2005*, as the source for the cost escalation estimates for

1 the Labor and Energy components of the adapted NRC formula. Global Insight is a well-
2 known and respected source of economic forecasts, and its *30-Year Focus* contains
3 projections for numerous indices including the Labor and Energy components of the
4 NRC Formula. Global Insight's forecast typically contains four scenarios: Trend,
5 Cyclical, Optimistic, and Pessimistic. The Trend scenario is the baseline forecast and is
6 the scenario that I utilized as the basis for the inflation estimates. The Global Insight
7 forecast includes projections for future years through 2035. I utilized the 2035 figures as
8 a proxy for the years 2036 through 2049 in order to develop projections through the
9 midpoint of decommissioning.

10 **Q: How did you estimate the burial cost escalation rate?**

11 A: Unfortunately, the Global Insight forecast does not include a projection of burial costs.
12 *NUREG-1307, Revision 11*, however, contains some historical indices for burial costs at
13 the Washington and South Carolina low-level waste storage sites. While neither of the
14 storage sites will be available to accept low-level waste from Wolf Creek after 2008, the
15 historical burial cost indices for these sites can serve as reasonable proxies for future
16 burial cost escalation at other sites.

17 **Q: Please describe the results of your analysis for the NRC Formula.**

18 A: For the Labor and Energy components I calculated the geometric mean of the Global
19 Insight projections for 2005 through 2049 and used these geometric means in the NRC
20 formula. For the Burial component I calculated the geometric means for 1995 through
21 2004 (PWR/Compact/Direct Disposal) for the Washington and South Carolina sites,
22 respectively, and averaged the geometric means for the two sites. The results for the
23 various components of the NRC formula are:

1	Labor (L_x)	3.7%
2	Energy (E_x) Electricity (P_x)	2.1%
3	Fuel Oil (F_x)	0.7%
4	Burial (B_x)	8.1%

5 The resulting nuclear decommissioning cost escalation estimate calculated by plugging
6 the figures above into the NRC formula is 4.40%. The calculation is shown below:

7
$$\text{NRC Rate} = 65\% L_x + 13\% E_x + 22\% B_x$$

8
$$\text{NRC Rate} = 65\% L_x + 13\% * (58\% P_x + 42\% F_x) + 22\% B_x$$

9
$$\text{NRC Rate} = [65\% * 3.7\%] + [13\% * ((58\% * 2.1\%) + (42\% * 0.7\%))] + [22\% * 8.1\%]$$

10
$$\text{NRC Rate} = 4.40\%$$

11 **Decommissioning Cost Timing**

12 **Q: What is the assumed timing of the decommissioning costs?**

13 **A:** The 2005 TLG Wolf Creek decommissioning study shows a schedule of
14 decommissioning costs beginning in 2025 and continuing through 2033. This cost
15 schedule is based on the assumption that decommissioning occurs at the expiration of
16 Wolf Creek’s current operating license in 2025. For purposes of this analysis, however,
17 it is assumed that Wolf Creek Nuclear Operating Corporation (“WCNOC”) will apply for
18 and receive from the NRC a 20-year license extension for Wolf Creek. WCNOC has
19 submitted to the NRC a letter indicating its intent to apply for a license extension in 2006.
20 If WCNOC does make the application in 2006, as expected, the NRC could rule on the
21 extension in 2008. If all goes as planned and the license is extended 20 years, the
22 decommissioning schedule would be assumed to begin in 2045 and continue through
23 2053.

1 **Remaining Life of the Fund**

2 **Q: What is the remaining life of the trust fund?**

3 A: Accruals for the trust fund will continue until Wolf Creek's operating license expires. As
4 I noted previously, for the purposes of this analysis, it is assumed that Wolf Creek will be
5 granted a 20-year license extension. The extended operating license, thus, would expire
6 in 2045. The remaining investments in the fund, however, will continue to generate
7 earnings throughout the decommissioning process until 2053 when decommissioning is
8 complete and all funds are exhausted.

9 **KCPL's Ownership Percentage**

10 **Q: What is KCPL's ownership percentage in Wolf Creek?**

11 A: KCPL owns 47% of Wolf Creek.

12 **Missouri Jurisdictional Allocation Factor**

13 **Q: What Missouri jurisdictional allocation factor did you use in the determination of**
14 **the accrual level?**

15 A: I used a Missouri jurisdictional allocation factor of 55.96% in the accrual calculation.

16 **Q: What is basis for the Missouri jurisdictional allocation factor?**

17 A: Because of the unique nature of the decommissioning funding, the appropriate
18 jurisdictional allocation factor is the weighted average of the jurisdictional demand
19 allocation factors applicable to the jurisdiction in question throughout the entire life of
20 Wolf Creek, both historical and future. The weather-normalized jurisdictional demand
21 allocation factor used elsewhere in this case was used as a proxy for future jurisdictional
22 demand allocation factors.

23 **Trust Fund Investment Mix**

1 **Q: What trust fund investment mix did you use in the determination of the accrual**
2 **level?**

3 A: I used an assumed investment mix of 45% corporate equities and 55% fixed income. The
4 55% fixed income is made up of 30% corporate bonds, 10% long-term government
5 bonds, 15% intermediate-term government bonds, and 0% treasury bills. This mix is
6 consistent with the investment guidelines agreed to by KCPL and the Fund Manager.
7 These investment guidelines, in the view of KCPL, and of the Fund Manager, provide for
8 a portfolio that maintains an appropriate balance between minimizing risk and
9 maximizing return. I have assumed that this investment mix will remain in place until
10 2025. After 2025, I have gradually shifted the investment mix described above to one at
11 the start of decommissioning in 2045 that consists of 10% corporate equities,
12 10% corporate bonds, 10% long-term government bonds, 20% intermediate-term
13 government bonds, and 50% treasury bills. During the period of decommissioning,
14 2045-2053, I have gradually shifted the investment mix to consist of 100% treasury bills.
15 These shifts in the investment mix were intended to provide for a portfolio that minimizes
16 the risk of loss and improves the liquidity of the fund as the need for the
17 decommissioning funds approaches and occurs.

18 **Q: Do KCPL and the Fund Manager periodically monitor and review the**
19 **appropriateness of the investment guidelines?**

20 A: Yes, and these reviews will continue to occur as time goes on and circumstances change.
21 For instance, in the past the investment guidelines were altered in order to facilitate the
22 fund's move out of municipal bonds when a change in the tax rate on the fund earnings
23 reduced the relative attractiveness of municipal bonds. Future changes in the investment

guidelines might occur when the expected outcome, either positive or negative, of license extension process becomes more certain.

Trust Fund Management Fees

Q: What are the estimated trust fund management fees?

A: The trust fund management fees consist of a fixed fee of \$35,000 per year plus a variable fee of 21 basis points based on the market value of the fund. The fixed fee component can be converted to a percentage by dividing the Missouri portion of the annual fixed fee by the estimated average trust fund balance over the remaining life of the fund. This yields an average annual fixed fee of one (1) basis point that, when added to the variable fee of 21 basis points, results in a total fee of 22 basis points.

Taxes on Fund Earnings

Q: What are the assumed taxes on the fund earnings?

A: The treasuries, government bonds, corporate bonds, and corporate equities in the trust fund are subject to Federal tax at a rate of 20% and are not subject to State tax. Any municipal bonds in the trust would be subject to neither Federal nor State taxes.

Earnings on Fund Investments

Q: What trust earnings rate did you assume in the determination of the accrual level?

A: I calculated an assumed trust fund earnings rate at the initial investment mix described above to be 6.48% after the taxes and fees also described above. The components of this calculation are shown below.

	<u>Investment Mix</u>	<u>Return After Fees & Taxes</u>
Corporate Equities	45%	8.94%
Corporate Bonds	30%	4.66%

1	Long-Term Govt Bonds	10%	4.30%
2	Int-Term Govt Bonds	15%	4.18%
3	US Treasury Bills	<u>0%</u>	<u>2.82%</u>
4	Total	<u>100%</u>	<u>6.48%</u>

5 **Q: What was the source for your trust fund earnings rate assumptions?**

6 A: I utilized the historical total return data published by Ibbotson Associates titled, *Stocks,*
7 *Bonds, Bills, and Inflation (SBBI) Valuation Edition 2005 Yearbook*, as the source for my
8 analysis of the expected return for the various investment instruments in the portfolio.
9 Ibbotson Associates is a well-known and respected source for historical investment return
10 data. The 2005 Ibbotson Yearbook contains return data for the years 1926 to 2004. I
11 calculated both arithmetic and geometric means for the all of the available data. The
12 returns that I assumed for the various investment instruments were the average of the
13 results of those 1926-2004 arithmetic and geometric mean calculations. In addition, I
14 analyzed 20-, 30-, 40-, and 50-year moving averages of the data as a way to check the
15 reasonableness of my assumed returns. Based on these analyses, I determined that my
16 return assumptions for the various investment instruments provided reasonable
17 expectations of long-term future returns.

18 **Q: Does the NRC provide any guidance on what it expects future earnings levels to be**
19 **on decommissioning trust funds?**

20 A: Yes, the NRC has an assumption for a “real” rate of return on future trust earnings that it
21 uses in its minimum funding calculation. The NRC requires nuclear unit operators to file
22 a minimum funding calculation biennially in order to provide assurance that adequate
23 funds will be available at license expiration to decontaminate the unit.

1 **Q: What is the NRC’s “real” rate of return assumption, and how does it compare to the**
2 **future earnings rate that you have assumed?**

3 A: The NRC’s “real” rate of return assumption is 2%. My 6.48% earnings rate assumption
4 on the initial investment mix, less my 4.40% decommissioning cost escalation rate
5 assumption, produces an approximate “real” rate of return of 2.08%, which is reasonably
6 close to the NRC’s 2% assumption.

7 **Current Trust Fund Balance**

8 **Q: What was the Missouri jurisdictional trust fund balance at the end of 2005?**

9 A: The market value of the Missouri jurisdictional portion of the KCPL’s decommissioning
10 trust fund at the end of 2005 was \$62,661,000. The balance is \$63,236,964 if you add the
11 January 2006 deposit for the fourth-quarter 2005 accruals. This end-of-2005 balance
12 includes \$5,225,868 of unrealized net gain. Assuming an effective tax rate of 20%, the
13 tax on the unrealized net gain would be \$1,045,174. Thus, the net after-tax market value
14 of the Missouri jurisdictional portion of the trust would be \$62,191,790.

15 **Accrual Escalation Methodology**

16 **Q: What accrual escalation methodology was used in the determination of the accrual**
17 **level?**

18 A: A level annual amount of funding is assumed.

19 **IRS Tax Qualification of the Trust**

20 **Q: What is meant by the term “tax qualification” as it relates to nuclear**
21 **decommissioning trust funds?**

22 A: A “tax-qualified” nuclear decommissioning trust fund is a fund that meets certain criteria
23 as defined in Section 468A of the Internal Revenue Code (“Section 468A”). Tax-

1 qualified nuclear decommissioning trust funds are afforded favorable tax treatment as
2 compared to non-qualified funds. There are two main tax advantages provided by a tax-
3 qualified fund. The first is that deposits made into the trust fund can be treated as
4 current-year tax deductions. The second is that earnings on the investments in the trust
5 fund are taxed at an applicable federal tax rate of 20% as compared to a 35% federal tax
6 rate on earnings in a non-qualified fund.

7 **Q: Did the Energy Policy Act of 2005 include any modifications to the special rules for**
8 **nuclear decommissioning and Section 468A?**

9 A: Yes, the Energy Policy Act of 2005 included a number of modifications to the special
10 rules for nuclear decommissioning. Among the modifications were amendments to
11 Section 468A which governs the tax qualification of nuclear decommissioning trust
12 funds. These amendments are effective for taxable years beginning after December 31,
13 2005.

14 **Q: What were the requirements for tax qualification under Section 468A prior to the**
15 **changes resulting from the Energy Policy Act of 2005?**

16 A: In order to ensure the continued tax qualification of the fund, any change in the funding
17 levels had to be filed with and approved by the Internal Revenue Service ("IRS"). The
18 IRS required a statement in an order of the state commission (a) approving the schedule
19 of decommissioning cost accruals; (b) finding that the decommissioning cost accruals
20 were included in cost of service and were included in rates for ratemaking purposes; and
21 (c) finding that the earnings rate assumed for the trust takes into consideration the tax rate
22 change and the removal of the investment restrictions resulting from the Energy Policy
23 Act of 1992.

1 **Q: How have the requirements for tax qualification changed as a result of the changes**
2 **to Section 468A?**

3 A: There is no longer a cost of service requirement for tax-qualified funds. Previously,
4 deposits into a tax-qualified fund were limited by the amount included in cost of service
5 for ratemaking purposes so long as that amount did not provide greater than level funding
6 (i.e., not front-loaded). Regarding the allowed level of funding into a tax-qualified fund,
7 the revised Section 468A only states that “the amount which a taxpayer may pay into the
8 Fund for any taxable year shall not exceed the ruling amount applicable to such taxable
9 year.”

10 **Q: What was the rationale for the elimination of the cost of service requirement?**

11 A: The cost of service requirement was primarily eliminated to allow nuclear owners in
12 states that now have deregulated generation to maintain the tax-qualified status of their
13 trust funds in the absence of cost of service-based regulation.

14 **Q: How will the IRS determine the allowable level of funding to a tax-qualified fund if**
15 **it no longer has a state commission-ordered cost of service amount for**
16 **decommissioning funding upon which to rely?**

17 A: Because the elimination of the cost of service requirement has only recently become
18 effective it is not yet evident how the IRS will rule when it does not have state
19 commission-ordered funding amount.

20 **Q: Given the elimination of the cost of service requirement for tax-qualification of the**
21 **fund, what language would you request that the MPSC put in its order regarding**
22 **the amount of decommissioning funding in cost of service for ratemaking purposes?**

1 A: KCPL respectfully requests that the MPSC use the same language in the order approving
2 the decommissioning funding level that was required prior to the changes to
3 Section 468A. Because of the uncertainty at this time regarding potential IRS treatment,
4 use of the prior Section 468A language provides the greatest assurance of continued tax-
5 qualified decommissioning funding.

6 **Other Issues**

7 **Q: Are there any other issues that you would like to address regarding the funding for**
8 **the decommissioning of Wolf Creek?**

9 A: Yes, I would like to emphasize that this analysis of the funding level is based on the
10 assumption that Wolf Creek will be granted a license extension. If, for whatever reason,
11 Wolf Creek does not receive a license extension, then the required annual funding level
12 will increase dramatically from what I have recommended here. It is important to
13 remember that the main objective of the nuclear decommissioning trust fund is to provide
14 assurance that an adequate funds are available to accomplish decommissioning activities
15 at the time they are needed. The decommissioning funds are segregated and can only be
16 used for decommissioning expenses. It is thus in all parties' best interest to ensure that
17 there is an adequate level decommissioning funding. It is especially important that the
18 funding levels be kept at least at the level that I have recommended in this testimony until
19 such time that Wolf Creek has an approved license extension from the NRC.

20 **Q: Does that conclude your testimony?**

21 A: Yes, it does.

