

Exhibit No.:  
Issue: Cash Working Capital  
Witness: Christine M. Davidson  
Type of Exhibit: Direct Testimony  
Sponsoring Party: Kansas City Power & Light Company  
Case No.: ER-2006-\_\_\_\_  
Date Testimony Prepared: January 27, 2006

**MISSOURI PUBLIC SERVICE COMMISSION**

**CASE NO. ER-2006-\_\_\_\_**

**DIRECT TESTIMONY**

**OF**

**CHRISTINE M. DAVIDSON**

**ON BEHALF OF**

**KANSAS CITY POWER & LIGHT COMPANY**

**Kansas City, Missouri  
January 2006**

**DIRECT TESTIMONY**  
**OF**  
**CHRISTINE M. DAVIDSON**

**Case No. ER-2006-\_\_\_\_\_**

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

2   A:   My name is Christine M. Davidson. 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") as a Senior  
6       Regulatory Analyst.

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

8   A:   My responsibilities include assistance in general regulatory matters and in preparation of  
9       the jurisdictional cost of service included in KCPL's rate filings.

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

11  A:   I have a Bachelor of Science degree with a major in accounting from Kansas State  
12       University and a Master of Science degree with an emphasis in accounting from the  
13       University of Missouri – Kansas City. I am a Certified Public Accountant with a license  
14       to practice in both Kansas and Missouri. I have been employed by KCPL for 30 years,  
15       the first 29 of which were spent in various supervisory and managerial positions in the  
16       Accounting Department. For the past year, I have been responsible for multiple  
17       accounting-related analyses in the Regulatory Affairs Department. Most recently, I have  
18       been assisting in the preparation of KCPL's February 2006 rate filing. As part of that

1 effort, I completed an updated lead/lag study for cash working capital about which I am  
2 filing testimony today.

3 **Q: Have you previously testified in a proceeding at the Missouri Public Service**  
4 **Commission ("MPSC") or before any other utility regulatory agency?**

5 A: Yes, I have filed written testimony in previous cases before the MPSC.

6 **Q: What is the purpose of your testimony?**

7 A: The purpose of my testimony is to support the amount of cash working capital included  
8 in rate base on Schedule 15 of the revenue requirement model, which is attached to the  
9 direct testimony of KCPL witness Don A. Frerking as part of Schedule DAF-1  
10 ("Schedule 15").

11 **Q: How did you determine the amount of cash working capital?**

12 A: I completed a lead/lag study and applied resulting lead/lag factors to appropriate cost of  
13 service amounts.

14 **Q: Please explain briefly the process you followed to complete the lead/lag study.**

15 A: I analyzed cash related transactions in three groups: 1) accounts payable transactions,  
16 2) other cash-related transactions excluding revenues, and 3) revenues.

17 **Q: How did you analyze accounts payable transactions?**

18 A: 1) For each payment group used by the MPSC staff in recent rate cases, I identified  
19 the financial accounts that would be charged/credited to that payment group when  
20 recording KCPL transactions.

21 2) Information Technology ("IT") wrote separate queries on the PeopleSoft  
22 Accounts Payable database for each payment group that isolated all payment transactions  
23 for that payment group using the accounts identified in 1) above. Transactions not

1 identified to a specific payment group were placed in a group titled "Other Cash  
2 Vouchers." Queries were run for the twelve-month period October 2004 through  
3 September 2005.

4 3) The IT query indicated, among other information, the invoice date (or check  
5 request date if internally generated) and the date the check cleared the bank. The IT  
6 query then subtracted the invoice date from check-cleared date, indicating the number of  
7 days of payment lag, excluding service period.

8 4) I analyzed each payment group separately. I sampled actual invoices to identify  
9 the applicable service period. Transactions with dissimilar service periods were  
10 segregated into sub-groups. Where appropriate, such as for sales taxes, payments were  
11 further segregated by state to allow separate analysis and calculation of lag periods. An  
12 average service period was determined by dividing each total service period by 2.

13 5) After each payment group was segregated as necessary, invoices sampled and  
14 service period identified, I calculated the total number of lag days for both average  
15 service period and payment lag for each payment group. Where a payment group had  
16 multiple service periods, such as coal (*i.e.*, fuel vs. fuel transportation), I calculated a  
17 weighted lag.

18 6) Payment lags were posted to a summary sheet for each payment group. This  
19 summary sheet is included in KCPL's Revenue Requirements Model, which is attached  
20 to the direct testimony of KCPL witness Don A. Frerking as Schedule DAF-1, as  
21 Schedule CWC%-Cash Working Capital Percents ("CWC%"). For ease of reference, I  
22 have attached a copy of this schedule to this testimony as Schedule CMD-1.

1 **Q: What was the range of payment lags that you calculated for these cash transactions**  
2 **through the accounts payable system?**

3 A: As shown on Schedule CMD-1, payment lags ranged from 8.5 days for oil purchases to  
4 200.42 days for property taxes. The two largest groups of costs, "Purchased Coal &  
5 Freight" and "Other Cash Vouchers," resulted in calculated payment lags of 21.08 days  
6 and 39.15 days, respectively.

7 **Q: What was included in other cash-related transactions, excluding revenues?**

8 A: Other cash-related transactions, excluding revenues, included net payroll, annual  
9 accruals, bulk power sales, pensions, income taxes and interest expense.

10 **Q: How did you determine a payment lag for net payroll?**

11 A: I scheduled each pay date during the twelve-month period and calculated the days from  
12 the end of the pay period to the paycheck date. The sum of the total days lag was divided  
13 by the number of pay periods to determine a weighted payment lag. When added to the  
14 average service period lag, this resulted in a total lag for net payroll of 14.44 days. Most  
15 paychecks are deposited through direct deposit so no check float was included.

16 **Q: What was included in the "annual accrual" category and how did you analyze it?**

17 A: Annual accruals included Accrued Vacation Reserve and Wolf Creek Refueling Outage.  
18 Service periods and payment lags were calculated separately for each accrual. Vacations  
19 are earned and accrued in one year and taken in the subsequent year. The Wolf Creek  
20 refueling outage costs are accrued beginning with the month following the end of the  
21 prior refueling outage. As actual costs are incurred during the 18-month cycle, the  
22 accrual is reversed by a like amount. I analyzed the timing and reversals of accruals  
23 related to the spring 2005 refueling cycle. Payment lags for accrued vacations and

1 accrued Wolf Creek Refueling Outage costs were calculated as 344.83 days and  
2 215.07 days, respectively.

3 **Q: How did you analyze bulk power sales?**

4 A: I calculated service periods and payment lags using a schedule of bulk power sales  
5 transactions received from Accounting for the twelve-month period October 2004  
6 through September 2005. Because the benefit from bulk power sales accrues to the  
7 ratepayer as a reduction of cash requirements, all lags were reflected on the summary as  
8 negative amounts. This negative lag was (36.88) days.

9 **Q: How did you determine the lead/lag for pension expense?**

10 A: In the Stipulation and Agreement approved by the MPSC in Case No. EO-2005-0329, the  
11 signatory parties agreed that KCPL had a net prepaid position for pensions to be drawn  
12 down before KCPL must fund the entire amount of pension costs allowed for ratemaking.  
13 Therefore, pensions are considered funded at the time expensed and a 0 day lag was  
14 attributed to pension expense.

15 **Q: How did you determine the lead/lag for income tax expense?**

16 A: KCPL is required to make estimated income tax payments each quarter based on the  
17 proportionate year to date cumulative percentage of taxable income to an annualized  
18 amount of taxable income. Accordingly, a service period of 365 days/4 or 91.25 days  
19 was established with a corresponding average service period of 91.25/2 or 45.63 days.

20 **Q: How did you calculate a lead/lag for interest expense?**

21 A: Instead of using actual cash payments of interest during the twelve-month period, I used  
22 the annualized interest expense based on long-term debt outstanding at September 30,  
23 2005. I multiplied the annualized interest amount by the frequency of payment and

1 calculated a weighted average service period. Because all amounts were paid by wire  
2 transfer on the date due, there was no payment lag other than service period. The  
3 payment lag for interest expense was 86.55 days.

4 **Q: What did you do with the results of the analysis of other cash transactions,**  
5 **excluding revenues?**

6 A: As with the payment lags for accounts payable transactions, I posted these lag days on the  
7 summary sheet included as Schedule CMD-1.

8 **Q: How was the lead/lag on revenues calculated?**

9 A: The lead/lag on revenues was calculated with separate service period, billing and  
10 collection lags. The average service period and billing lags were calculated and reflect  
11 lags of 15.21 and 2.00 days, respectively.

12 **Q: How did you calculate the service lag?**

13 A: The service lag was measured from the middle of the month for which service was billed  
14 and was calculated as 365 days divided by 12 months divided by 2, or 15.21 days.

15 **Q: How did you calculate the billing lag?**

16 A: The billing lag was measured as the time delay between reading a meter and processing  
17 a bill, which was calculated as 2 days since meters were read on day 1, the meter  
18 readings uploaded into KCPL's Customer Information System on day 2 and bills mailed  
19 on day 3.

20 **Q: How did you calculate the collection lag?**

21 A: Collection lag was calculated in two pieces relating to 1) receivables included in the  
22 accounts receivable sale, and 2) receivables not included in the accounts receivable sale.  
23 Accounts receivable sales pertain to various agreements KCPL has entered into which

1 result in the sale of up to \$100 million of eligible receivables to an affiliate of The Bank  
2 of Tokyo-Mitsubishi UFJ, Ltd.

3 1) The amount of receivables expected to be sold throughout a normalized 12-month  
4 period was compared with total receivables for the period, excluding bulk power sales.  
5 Under the current Receivable Sale Agreement, KCPL may sell up to \$70 million of  
6 eligible receivables during the months of November through May and up to \$100 million  
7 during the months of June through October.

8 2) Weighted and non-weighted percentage of receivables sold to total receivables  
9 were calculated for the twelve months ended November 2005. Under the current  
10 Agreement, KCPL expects to sell an average of 81.95% of its retail revenues. This  
11 percentage of revenues was given a 0 day collection lag.

12 3) A collection lag was also calculated for the 18.05% of revenues not included in  
13 the Receivable Sale Agreement. The collection lag for this group of revenues was based  
14 on a twelve-month average of Days Sales Outstanding, reflecting a 21.42 day lag.

15 4) The two collection lags were weighted based on the percentages noted above,  
16 resulting in an overall weighted collection lag of 3.86 days that was applied to total retail  
17 revenues.

18 **Q: What was the total resulting lag for retail revenues including service period, billing**  
19 **lag and collection lag?**

20 **A:** The total combined revenue lag, including service, billing and collection lags, was  
21 21.07 days.



1   **Q:    How were the results of your lead/lag study used?**

2   A:    Lags for both revenues and payments were posted to the summary Schedule CWC%  
3        (defined above) included herein as Schedule CMD-1. On this summary schedule, the net  
4        revenue/payment lag for each payment group was calculated and the result was divided  
5        by 365 days to arrive at a net lead/lag factor. These factors were subsequently applied to  
6        the applicable cost of service amounts on Schedule 16 of the revenue requirement model,  
7        which is attached to the direct testimony of KCPL witness Don A. Frerking as Schedule  
8        DAF-1 ("Schedule 16"), where individual components of cash working capital were  
9        calculated. The total resulting cash working capital amount was then carried forward to  
10       Schedule 15.

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

12   A:    Yes, it does.

In the Matter of the Application of Kansas City )  
Power & Light Company to Modify Its Tariff to ) Case No. ER-2006-\_\_\_\_  
Begin the Implementation of Its Regulatory Plan )

**STATE OF MISSOURI            )**  
   **) ss**  
**COUNTY OF JACKSON        )**

1. My name is Christine M. Davidson. I work in Kansas City, Missouri, and I am employed by Kansas City Power & Light Company as a Senior Regulatory Analyst.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

  
Christine M. Davidson

Nicol A. Wong  
Notary Public

**NICOLE A. WEHRY**  
**Notary Public - Notary Seal**  
**STATE OF MISSOURI**  
**Jackson County**  
**My Commission Expires: Feb. 4, 2007**

KANSAS CITY POWER & LIGHT CO.  
MISSOURI REVENUE REQUIREMENT  
CASH WORKING CAPITAL PERCENTS  
2005 TEST YEAR INCL KNOWN & MEASURABLE CHANGES TO 9-30-06

LINE NO.	DESCRIPTION	ALLOCATION BASIS	(A) REVENUE LAG	(B) EXPENSE LAG	(C) NET LAG (A-B)	(D) CWC FACTOR (C/365)
CWC-009	Operations and Maintenance Expense					
CWC-010	Cash Vouchers, excd Itemizations below	ASSIGN	21.07	39.15	(18.08)	-4.9534%
CWC-011	WCNOC Operations & Nud fuel	ASSIGN	21.07	13.81	7.26	1.9890%
CWC-012	Wolf Creek Refueling Outage Accrual	ASSIGN	21.07	215.07	(194.00)	-53.1507%
CWC-013	Purchased Coal & Freight	ASSIGN	21.07	21.08	(0.01)	-0.0027%
CWC-014	Purchased Gas & Transportation	ASSIGN	21.07	28.62	(7.55)	-2.0885%
CWC-015	Purchased Oil & Transportation	ASSIGN	21.07	8.50	12.57	3.4438%
CWC-016	Purchased Power	ASSIGN	21.07	26.09	(5.02)	-1.3753%
CWC-017	Bulk Power Sales & Other Rev	ASSIGN	(21.07)	(36.88)	15.81	4.3315%
CWC-018	Pension Fund Payments	ASSIGN	21.07	-	21.07	5.7728%
CWC-019	Other Post Employment Benefits (OPEB)	ASSIGN	21.07	20.36	0.71	0.1945%
CWC-020	Payroll-Related O&M					
CWC-021	Federal, State & City Income Tax Withheld	ASSIGN	21.07	14.34	6.73	1.8438%
CWC-022	FICA Taxes Withheld - Employee	ASSIGN	21.07	14.31	6.76	1.8521%
CWC-023	Other Employee Withholdings	ASSIGN	21.07	15.40	5.67	1.5534%
CWC-024	Net Payroll	ASSIGN	21.07	14.44	6.63	1.8164%
CWC-025	Accrued Vacation	ASSIGN	21.07	344.83	(323.76)	-88.7014%
CWC-026						
CWC-027	Taxes					
CWC-028	Ad Valorem / Property	ASSIGN	21.07	200.42	(179.35)	-49.1370%
CWC-029	FICA Taxes - Employers	ASSIGN	21.07	14.42	6.65	1.8219%
CWC-030	Unemployment Taxes - FUTA / SUTA	ASSIGN	21.07	68.28	(47.21)	-12.9342%
CWC-031	KS-City Franchise Taxes	ASSIGN	21.07	47.67	(26.60)	-7.2877%
CWC-032	MO Gross Receipts Taxes - 6%	ASSIGN	21.07	(11.94)	33.01	9.0426%
CWC-033	MO Gross Receipts Taxes - 4%	ASSIGN	21.07	19.21	1.86	0.5096%
CWC-034	MO Gross Receipts Taxes - Other Cities	ASSIGN	21.07	13.46	7.61	2.0849%
CWC-035	Sales Taxes-MO	ASSIGN	21.07	23.54	(2.47)	-0.6767%
CWC-036	Sales Taxes-KS	ASSIGN	21.07	24.24	(3.17)	-0.8685%
CWC-037	Use Taxes	ASSIGN	21.07	73.65	(52.58)	-14.4055%
CWC-038						
CWC-039	Currently Payable Income taxes	ASSIGN	21.07	45.63	(24.56)	-6.7274%
CWC-040	Interest Expense	ASSIGN	21.07	86.55	(65.48)	-17.9397%
CWC-041						
CWC-042						
CWC-043						
CWC-044						
CWC-045	Total Gross Payroll (12 MO ended 9-2005)		186,132,468			
CWC-046	Less : Gross Payroll paid by WCNOC		35,428,157			
CWC-047	Gross Payroll - Incurred internally		150,704,311			
CWC-048						
CWC-049	Payroll Withholdings - Incurred Internally			21,740.7%		
CWC-050	Federal, State & City Income Tax Withheld		32,764,100			
CWC-051	FICA Taxes Withheld - Employee		11,807,315	7.5348%		
CWC-052	Other Employee Withholdings		27,671,470	18.3614%		
CWC-053	Total Withholdings		72,242,886	47.9368%		

% of Gross PR

CMD-1