**FILED** October 31, 2007 **Data Center Missouri Public Service Commission** 

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-2007-

Date Testimony Prepared: January 31, 2007

#### MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. ER-2007-\_\_\_\_

#### **DIRECT TESTIMONY**

**OF** 

CHRISTINE M. DAVIDSON

ON BEHALF OF

KANSAS CITY POWER & LIGHT COMPANY

Kansas City, Missouri January 2007

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# **DIRECT TESTIMONY**

# OF

# CHRISTINE M. DAVIDSON

Case No. ER-2007-\_\_\_\_

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 31 years,
15		the first 29 of which were spent in various supervisory and managerial positions in the
16		Accounting Department. For the past two years, I have been responsible for multiple
17		accounting-related analyses in the Regulatory Affairs Department. I was actively
18	:	involved in the preparation and reconciliation of KCPL's 2006 rate filing (Case No. ER-
1Ω		2006-0314) and the preparation of the current filing. As part of the 2006 rate filing, I

completed a lead/lag study for cash working capital. For the 2007 filing, KCPL reflected certain updates to the lead/lag factors about which I am filing testimony today.

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

A: Yes, I have filed written testimony in previous cases before the MPSC, including testimony in Case No. ER-2006-0314.

7 Q: What is the purpose of your testimony?

A:

Q:

A:

The purpose of my testimony is to support the amount of cash working capital included in rate base on Schedule 15 of the revenue requirement model, which is attached to the direct testimony of KCPL witness John P. Weisensee as part of Schedule JPW-1 ("Schedule 15").

Why is it necessary to calculate an amount of cash working capital?

Cash Working Capital is the amount of cash required by a utility to pay the day-to-day expenses incurred to provide utility service to its customers. A lead/lag study is generally used to analyze the cash inflows from payments received by the company and the cash outflows for disbursements paid by the company. When the utility receives payment from its retail customers for utility service less quickly than it makes the disbursements for utility expenses, then the company would have positive cash working capital requirements. Conversely, when the utility receives payment from its retail customers for utility service more quickly than it makes the disbursements for utility expenses, then the company would have negative cash working capital requirements.

1	Q:	How did you determine the amount of cash working capital?
2	A:	I applied lead/lag factors determined in Case No. ER-2006-0314 to appropriate cost of
3		service amounts, after first modifying certain factors for changes in circumstances.
4	Q:	Where are the factors used in this case identified?
5	A:	The factors used in this case are identified on Schedule CWC% of the revenue
6		requirement model, which is attached to the direct testimony of KCPL witness John P.
7		Weisensee as part of Schedule JPW-1 ("Schedule CWC%"). It is also attached to my
8		testimony as Schedule CMD-1.
9	Q:	What was the basis for these factors?
10	A:	The underlying basis for these factors was a cash working capital lead/lag study that I
11	٠.	completed for use in Case No. ER-2006-0314. KCPL later accepted changes to certain
12		factors proposed by the MPSC Staff in its filing in that case.
13	Q:	Which factors required updating from those determined in Case No. ER-2006-0314?
14	A:	I updated the factors for the revenue lag and Wolf Creek Refueling Outage.
15	Q:	Please explain why you updated the revenue lag factor.
16	A:	I made two modifications to the revenue factor. First, I computed the revenue factor
17		based solely on retail sales, restoring the separate factor for off-system sales revenues
18		used originally by KCPL in its filing in Case ER-2006-0314. Although this use of two
19		separate revenue-related factors is the way KCPL originally proposed the factors in Case
20		No. ER-2006-0314, the MPSC Staff computed a single blended revenue factor that
21		weighted the individual factors for retail sales and for off-system sales, using the Staff's
22		projected retail revenues and projected gross off-system sales. KCPL disagreed with this

technique, but in the interest of settling the cash working capital issue, agreed to accept it in that case.

**A**:

Q:

A:

Why do you believe it is inappropriate to use a factor for revenues that is weighted to include both retail revenues and off-system sales?

I believe it is inappropriate because this filing is an application for approval to make changes in tariffs for electric service provided to KCPL's retail electric customers. All cash working capital should be measured based on the timing differences between when those retail electric customers reimburse KCPL for the net cost of providing service and when KCPL makes the net disbursements to provide those services. The revenues related to off-system sales (cash inflows) should be considered as a reduction of the disbursements (cash outflows) made for fuel, purchased power and other operating expenses.

Q: Is there another reason you believe a weighted revenue factor is inappropriate?

Yes. Retail revenues were adjusted throughout Case No. ER-2006-0314 for changes in weather normalization and customer growth. The appropriate level of off-system sales margins were a matter of contention throughout the case and were eventually decided by the Commission in its Order in the case. Additionally, different jurisdictional allocation factors were used for revenues and off-system sales and those allocation factors were also an issue eventually decided by the Commission. Unless a new weighted revenue factor is computed each time there is a change in either the amount or allocation factor, a weighted revenue factor will not correctly measure the difference between jurisdictional cash inflows and outflows. Use of separate factors allows revenues and off-system sales to

move independently of each other and allows the correct cash working capital to be calculated any time an underlying amount or allocation factor is revised.

What was the second change you made to the retail revenue factor?

I revised the retail revenue lead/lag factor to reflect the proper collection lag. The original retail revenue factor proposed by KCPL, and accepted by the MPSC Staff in Case ER-2006-0314, was 21.075 days. This was subsequently used by the Staff when computing its revenue factor weighted for both retail and off-system sales. The 21.075 days was made up of three components, service period lag, billing lag and collection lag. The original average service period and billing lags were retained in this case at 15.21 and 2.00 days, respectively. However, KCPL has reflected a change in the collection lag from 3.866 days to 7.867 days. This resulted in a total retail revenue lag of 25.075 days. The calculation of this retail revenue lag can be found on Schedule CMD-2.

### Why was this necessary?

\_ 1

Q:

A:

Q:

A:

Q:

A:

This was necessary to reflect a reduced level of receivable sales than was assumed in the 2006 case. During 2006, KCPL sold \$70 million of its receivables and expects to sell the same level of receivables during 2007. For 2006, this volume of sales equated to 63.28% of KCPL' receivables. The collection lag used in the 2006 case of 3.867 days anticipated that 81.95% of KCPL receivables would be sold, reflecting a higher level of receivable sales anticipated during the months of June through October 2006.

# How did this impact the calculation of the collection lag?

Reduced receivable sales resulted in a longer collection lag. Collection lag was calculated in two pieces relating to 1) receivables included in the accounts receivable sold under various agreements entered into by KCPL, and 2) receivables not included in the

accounts receivable sold. The agreements entered into by KCPL (collectively referred to as the "Receivable Sale Agreement") result in the sale of up to \$100 million of eligible receivables to an affiliate of The Bank of Tokyo-Mitsubishi UFJ, Ltd. To calculate the weighted collection lag, the following steps were performed:

- The amount of receivables expected to be sold throughout a normalized 12-month period was compared with total receivables for the period, excluding off-system sales.
  KCPL sold \$70 million of its receivables during 2006 and expects to sell the same amount during 2007.
- A percentage of receivables sold to total receivables was calculated for the eleven months ended November 2006 with a projection for December 2006. Based on its experience in 2006, KCPL expects to sell an average of 63.28% of its receivables from retail revenues. This percentage of revenues was given a 0 day collection lag because sold receivables are assumed to be collected when billed.
- 3) A collection lag was also calculated for the 36.72% of receivables not expected to be sold under the Receivable Sale Agreement. The collection lag for this group of revenues was based on a twelve-month average of Days Sales Outstanding, reflecting a 21.42 day lag.
- 4) A weighted collection lag of 7.867 days was calculated as  $(63.28\% \times 0 \text{ days}) + (36.72\% \times 21.42 \text{ days}) = 7.867 \text{ days}.$

<b>\</b> '	Q:	is there an additional reason that you believe it more appropriate to div one
2		million of anticipated accounts receivable sales rather than the maximum level
3		allowed under the agreements?
4	A:	Yes. When preparing it's rate filing in Case No. ER-200-0314, KCPL used the
5		maximum level of receivable sales allowed under the Receivable Sale Agreement as the
6		basis to calculate both its retail revenue collection lag and the banking fees related to
7		such sales. Although the Staff used the shorter weighted collection lag resulting from the
8		higher level of sales in its cash working capital calculation, it allowed only the actual
9		banking fees incurred based on the smaller level of sales. When this inconsistency was
10		pointed out to Staff, they agreed that the inconsistency should be addressed in the next
11		case. To resolve the inconsistency, KCPL recommends that the actual level of
12		receivables expected to be sold be used in both calculations.
13	Q:	Did you modify any other lead/lag factors from those determined in Case ER-2006-
14		0314?
15	A:	Yes, I modified the lead/lag factor applicable to the Wolf Creek Refueling Outage.
16	Q:	Why was the modification necessary?
17	A:	On September 8, 2006, the Financial Accounting Standards Board issued a new FASB
18	٠.	Staff Position, FSP AUG AIR-1 ("FSP"), Accounting for Planned Major Maintenance
19		Activities. This FSP is described by KCPL witness John P. Weisensee in his direct
20		testimony. KCPL adopted this FSP in the fourth quarter of 2006.

	Q:	what impact did the adoption of the FSP have on the related cash working capital
2		factor?
3	A:	Under the provisions of the FSP, KCPL will defer the operations and maintenance
4		expenses incurred during each Wolf Creek refueling outage and amortize them to
5		expense over the subsequent eighteen months until the next outage. As shown on
6		Schedule CMD-3, the eighteen-month amortization period results in a difference of 292.5
7		days between the cash disbursement for refueling outage expenses and inclusion of such
8		costs in expenses recovered as part of cost of service.
9	Q:	Did you make any other changes to the cash working capital lead/lag factors
10		determined in Case No. ER-2006-0314?
11	A:	No, I did not.
12	Q:	Were there any additional changes in KCPL's processes, other than those described
13		above, which would cause any of the other lead/lag factors to require modification
14		from those used in Case ER-2006-0314?
15	A:	No, there were not.
16	Q:	How were the resulting lead/lag factors used?
17	A:	Lags for both retail revenues and payments were posted to the summary Schedule
18		CWC% (defined above) included herein as Schedule CMD-1. On this summary
19		schedule, the net revenue/payment lag for each payment group was calculated and the
20		result was divided by 365 days to arrive at a net lead/lag factor. These factors were
21		subsequently applied to the applicable cost of service amounts on Schedule 16 of the
22		revenue requirement model, which is attached to the direct testimony of KCPL witness

John P. Weisensee as Schedule JPW-1 ("Schedule 16"), where individual components of

- cash working capital were calculated. The total resulting cash working capital amount
  was then carried forward to Schedule 15.
- 3 Q: Does that conclude your testimony?
- 4 A: Yes, it does.

# BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Application of Kansas City  Power & Light Company to Modify Its Tariffs to  Continue the Implementation of Its Regulatory Plan  Continue the Implementation of Its Regulatory Plan  Continue the Implementation of Its Regulatory Plan
AFFIDAVIT OF CHRISTINE M. DAVIDSON
STATE OF MISSOURI ) ) ss COUNTY OF JACKSON )
Christine M. Davidson, being first duly sworn on her oath, states:
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.
2. Attached hereto and made a part hereof for all purposes is my Direct Testimony
on behalf of Kansas City Power & Light Company consisting of nine (9) pages and Schedules
CMD-1 through CMD-3, all of which having been prepared in written form for introduction into
evidence in the above-captioned docket.
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
Subscribed and sworn before me this 31 day of January 2007.  M: Co C A. Well  Notary Public
My commission expires: Feb. 4 2007  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

LINE NO.	DESCRIPTION	ALLOCATION BASIS	(A) REVENUE LAG	(B) EXPENSE LAG	(C) NET LAG	(D) CWC FACTOR
					(A-B)	(C/365)
CMC-009	Operations and Maintenance Expense	ACCICAL	25.08	30.00	(4.92)	-1.3479%
CWC-010	Cash Vouchers, excl itemizations below	ASSIGN	25.06 25.06	13.81	11.27	3.0877%
CWC-011	WCNOC Operations & Nucl fuel	ASSIGN		(292.51)	317.59	87.0110%
CWC-012	Wolf Creek Refueling Outage Accruai	ASSIGN	25.08	20.8793	4.20	1.1509%
CWC-013	Purchased Coal & Freight	ASSIGN	25.08		(3.54)	-0.9699%
CWC-014	Purchased Gas & Transportation	ASSIGN	25.08	28.62	16.58	4.5425%
CWC-015	Purchased Oil & Transportation	ASSIGN	25.08	8.50		-1.5452%
CWC-016	Purchased Power	ASSIGN	25.08	30.72	(5.64)	-3.2329%
CWC-017	Bulk Power Sales & Other Rev	ASSIGN	25.08	36.88	(11.80)	
CWC-018	Pension Fund Payments	ASSIGN	25.08	51.74	(26.66)	-7.3041%
CWC-019	Other Post Employment Benefits (OPEB)	ASSIGN	25.08	178.44	(153.36)	-42.0164%
CWC-020	Injuries & Damages	ASSIGN	25.08	185.00	(159.92)	-43.8137%
CWC-021						
CWC-022	Payroll-Related O&M					0.40700/
CWC-023	Federal, State & City Income Tax Withheld	ASSIGN	25.08	13.63	11.45	3.1370%
CWC-024	FICA Taxes Withheld - Employee	ASSIGN	25.08	13.77	11.31	3.0986%
CWC-025	Other Employee Withholdings	ASSIGN	25.08	13.63	11.45	3.1370%
CWC-026	Net Payroll	ASSIGN	25.08	13.854	11.23	3.0756%
CWC-027	Accrued Vacation	ASSIGN	25.08	344.83	(319.75)	-87.6027%
CWC-028						
CWC-029	Taxes					
CWC-030	Ad Valorem / Property	ASSIGN	25.08	208.84	(183.76)	-50.3452%
CWC-031	FICA Taxes - Employers	ASSIGN	25.08	13.77	11.31	3.0986%
CWC-032	Unemployment Taxes - FUTA / SUTA	ASSIGN	25.08	71.00	(45.92)	-12.5808%
CWC-033	KS-City Franchise Taxes	ASSIGN	25.08	(77.00)	102.08	27.9671%
CWC-034	MO Gross Receipts Taxes - 6%	ASSIGN	25.08	20.53	4.55	1.2466%
CWC-035	MO Gross Receipts Taxes - 4%	ASSIGN	25.08	20.53	4.55	1.2466%
CWC-036	MO Gross Receipts Taxes - Other Cities	ASSIGN	25.08	20.53	4.55	1.2466%
CWC-037	Sales Taxes-MO	ASSIGN	25.08	22.00	3.08	0.8438%
CWC-038	Sales Taxes-KS	ASSIGN	25.08	22.00	3.08	0.8438%
CWC-039	Use Taxes	ASSIGN	25.08	22.00	3.08	0.8438%
CWC-040						
CWC-041	•					
CWC-042	Currently Payable Income taxes	ASSIGN	25.08	45.63	(20.55)	-5.6288%
CWC-043	Interest Expense	ASSIGN	25.08	86.55	(61.47)	-16.8411%
CWC-044						
CWC-045						
CWC-046				% of Gross PR		
CWC-047	Total Gross Payroll (projected 12 MO ended 12-20	006)	203,812,513			
CWC-048	Less : Gross Payroll paid by WCNOC	,	39,888,065			
CWC-049	Gross Payroll - Incurred Internally		163,924,448			
CWC-050						
CWC-050	Payroll Withholdings - Incurred Internally -% base	d on 2005 CWC etc	dv			
	Fayron vylomologings - incurred internally -% base Federal, State & City Income Tax Withheld	J J 11 2000 0110 010	32,764,100	19.9873%		
CWC-052			11,807,315	7.2029%		
CWC-053	FICA Taxes Withheld - Employee		27,671,470	16.8806%		
CWC-054	Other Employee Withholdings		72,242,886	44.0708%		
CWC-055	Total Withholdings		12,242,000			

#### KANSAS CITY POWER & LIGHT CO.

# MISSOURI REVENUE REQUIREMENT CALCULATION OF CASH WORKING CAPITAL RETAIL REVENUE LAG 2006 TEST YEAR INCL KNOWN & MEAS TO 9-30-07

Retail Revenue Lag = the elapsed time between the delivery of electricity to customers and the customer's payment

1. Service Lag: measured from the middle of the month for which service is billed

365 days / 12 months / 2 = 15.208 days

2. Billing Lag: the time delay between reading a meter and processing a bill

#### 2.000 days

\* meters are read on day 1, reads are uploaded to CIS on day 2, bills are mailed on day 3

# 3. Collection Lag: the time delay between mailing bills and receipt of revenues

#### 7.867 days

\* All A/R sold by KCPL to KCREC, KCREC sells \$70 million of A/R to BTM

\*\* % of A/R Sold = 63.28%

Days	Weighted			
Collection	Applicable	Collection		
Lag	%	Lag		
21.423	36.72%	7.867		
. 0	63.28%	0		
	,	7.867 days		

4. Float Lag: the time delay between the receipt of payments and availability of funds

#### 0.000 days

\* Same day availability under A/R sale

25.075 days

#### KANSAS CITY POWER & LIGHT CO.

# MISSOURI REVENUE REQUIREMENT SCHEDULE OF COSTS INCURRED FOR WOLF CREEK REFUELING OUTAGE 2006 TEST YEAR INCL KNOWN & MEAS TO 9-30-07

	524900 Operations	530900 Maintenance	Takan	Deventore	Load days	Weighted _
Period	Expense	Expense	Total	Percentage	Lead days	Weighted
Jan-05	-	691.84	691.84	0.00%	1,178	0.05
Feb-05		3,574.20	3,574.20	0.02%	1,148	0.27
Mar-05		2,933.78	2,933.78	0.02%	1,118	0.21
Apr-05		, -	•	0.00%	1,088	-
May-05	-	128,548.80	128,548.80	0.83%	1,058	8.79
Jun-05	6,703.71	, -	6,703.71	0.04%	1,028	0.45
Jul-05	(702.74)	(247.63)	(950.37)	-0.01%	998	(0.06)
Aug-05	702.74	11,374.67	12,077.41	0.08%	968	0.76
Sep-05	-	3,163.52	3,163.52	0.02%	938	0.19
Oct-05	3,210.13	11,415.10	14,625.23	0.09%	908	0.86
Nov-05	5,745.33	23,019.95	28,765.28	0.19%	878	1.63
Dec-05	121,356.44	86,474.91	207,831.35	1.34%	848	11.39
Jan-06	29,312.84	421,824.79	451,137.63	2.92%	818	23.86
Feb-06	8,663.35	80,110.41	88,773.76	0.57%	788	4.52
Mar-06	81,501.75	203,949.13	285,450.88	1.85%	758	13.99
Apr-06	13,289.71	527,104.12	540,393.83	3.49%	728	25.43
May-06	74,810.13	23,631.16	98,441.29	0.64%	698	4.44
Jun-06	91,460.27	12,634.13	104,094.40	0.67%	668	4.50
Jul-06	39,164.84	564,225.81	603,390.65	3.90%	638	24.89
Aug-06	311,991.04	232,872.74	544,863.78	3.52%	608	21.42
Sep-06	469,919.73	1,263,283.12	1,733,202.85	11.20%	578	64.76
Oct-06	2,372,631.66	6,599,612.73	8,972,244.39	58.00%	548	317.85
Nov-06	760,550.72	848,196.36	1,608,747.08	10.40%	518	53.87
Dec-06	10,928.75	19,254.57	30,183.32	0.20%	488	0.95
Jan-07		-	-	0.00%		-
GRAND TOTAL	4,401,240.40	11,067,648.21	15,468,888.61	100.00%	•	585.01
	-, 1, = 1 - 1 - 1	,,,-			•	x 1/2
				CWC lead (I	ag) days	292.51