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Issue: Rate of Return
Witness: Matthew J. Barnes
Sponsoring Party: MoPSC Staff

Type of Exhibit: Rebuttal Testimony

Case No.: ER-2006-0314

Date Testimony Prepared: September 8, 2006

# MISSOURI PUBLIC SERVICE COMMISSION UTILITY SERVICES DIVISION

**REBUTTAL TESTIMONY** 

FILED

**OF** 

NOV 13 2006

**MATTHEW J. BARNES** 

Missouri Public Service Commission

### KANSAS CITY POWER AND LIGHT COMPANY

CASE NO. ER-2006-0314

Jefferson City, Missouri September 2006

\*\*Denotes Highly Confidential Information\*\*

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Case No(s). 22.2006-0314
Date 16-16-6 Rptr 4F

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1		REBUTTAL TESTIMONY
2		OF
3		MATTHEW J. BARNES
4		KANSAS CITY POWER AND LIGHT
5		CASE NO. ER-2006-0314
6	Q.	Please state your name.
7	Α.	My name is Matthew J. Barnes.
8	Q.	Are you the same Matthew J. Barnes who filed direct testimony in this
9	proceeding f	or the Staff of the Missouri Public Service Commission (Staff)?
10	Α.	Yes, I am. I filed direct testimony on August 8, 2006 on the cost of capital
11	and capital s	tructure recommendation being used by Staff in this case.
12	Q.	In your direct testimony, did you recommend a fair and reasonable rate of
13	return on the	Missouri jurisdictional electric utility rate base for Kansas City Power and Light
14	Company (K	.CP&L or Company)?
15	Α.	Yes, I did.
16	Q.	What is the purpose of your rebuttal testimony?
17	A.	The purpose of my rebuttal testimony is to respond to the direct testimony of
18	Dr. Samuel	C. Hadaway and Richard Baudino. Staff did not respond to Department of
19	Energy's (D	OE) witness Dr. Woolridge because Staff did not have any disagreements.
20	Dr. Hadaway	sponsored rate-of-return testimony on behalf of KCP&L. Mr. Baudino
21	sponsored 1	rate-of-return testimony on behalf of the Office of the Public Counsel
22	(Public Cour	nsel or OPC). I will address the issues of the cost of common equity to be
23	applied to K	CP&L for ratemaking purposes in this proceeding.

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 Q. Did Staff update KCP&L's rate-of-return as of the update period June 30,

A. Yes. Schedule 1 presents Staff's consolidated capital structure as of the update period June 30, 2006. The capital structure reflects the issuance of approximately \$150 million of common equity. The common equity ratio is 53.24 percent, the preferred stock ratio is 1.54 percent, and the long-term debt ratio is 45.22 percent. The short-term debt balance net of construction work in progress (CWIP) was negative as of the update period June 30, 2006. Since CWIP exceeds short-term debt in this case, Staff has not included this amount in its capital structure. In its direct filing, Staff previously recommended a common equity ratio of 50.94 percent, a preferred stock ratio of 1.62 percent, and a long-term debt ratio of 47.44 percent, based on the 12-months ended December 31, 2005.

- Q. Did the embedded cost of long-term debt change as of the update period June 30, 2006?
- A. Yes. The embedded cost of long-term debt as of the update period June 30, 2006 is 6.08 percent as shown on Schedule 2 page 2 of 2. The cost of long-term debt was provided by KCP&L in response to Data Request 0412. Staff previously recommend an embedded cost of long-term debt of \*\* \_\_\_\_ \*\* percent in direct testimony.
- Q. What embedded cost of long-term debt did Dr. Hadaway and Mr. Baudino use?
- A. Dr. Hadaway used a pro-forma embedded cost of long-term debt of 6.16 percent as of September 30, 2006. Mr. Baudino also used an embedded cost of

that a true-up would be available.

### DR. HADAWAY'S RECOMMENDED COST OF COMMON EQUITY FOR KCP&L

Please summarize Dr. Hadaway's recommended cost of common equity for

Q. Plea

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A. Dr. Hadaway's recommended cost of common equity is based on three variations of the DCF model and a check of reasonableness using a "risk premium" analysis. Dr. Hadaway arbitrarily dismissed his "traditional" constant growth DCF model results because of "historically low dividend yields and pessimistic analysts' growth forecasts." [Hadaway Direct, page 6.] The cost of equity has been at a long time low because interest rates have been at a historical low. The decline in the cost of equity is reflected in the constant growth DCF model, which is used extensively in the regulatory communities and the investment communities.

Dr. Hadaway's "traditional" constant growth DCF model analysis results in a cost of common equity estimate of 9.40 percent, which is at the high end range of Staff's proposed return on common equity of 9.32 percent to 9.42 percent, which compares to his recommendation of 11.50 percent.

- Q. Instead of accepting the lower results of his "traditional" constant-growth DCF model, what did Dr. Hadaway do?
- A. Instead of accepting the lower results of his "traditional" constant-growth DCF model, Dr. Hadaway instead looked to other variations of the DCF model to justify an end-result oriented cost of common equity recommendation of 11.50 percent. In one of Dr. Hadaway's variations of the DCF model, he decided to rely entirely on his estimate of an average nominal GDP growth (Real GDP plus Inflation) of 6.6 percent as being the growth that investors in electric utility stocks would expect. He used this growth rate for all of the

companies in his reference group. Apparently he believes that all electric utility companies will grow at this unsustainable growth rate. He also used a two-stage DCF analysis that incorporated the same average long-term nominal growth rate of 6.60 percent. If one were to assume that substituting the average nominal GDP growth for the growth of the industry in either the two-stage or constant growth DCF, the assumption that the economy is going to grow at a 6.60 percent nominal rate is overstated. Dr. Hadaway's average nominal GDP growth rate dates back to 1947, which includes an anomalous period of nominal GPD growth from the mid 1970's to mid 1980's. During these years the average nominal GDP growth was in the low teens compared to his recent 10-year average of 5.20%. This explains why Dr. Hadaway's nominal GDP growth rate is skewed upward to 6.60 percent.

Q. Please explain in more detail why Dr. Hadaway's nominal GDP growth rate is skewed upward?

A. Dr. Hadaway's nominal GDP growth rate is also skewed upward because he uses an average that includes periods that were anomalous or unusually high. Including periods that are unusually high, such as the late 1970's to mid 1980's, in the data group skews the results upward. This is the reason his average nominal GDP growth rate is 6.60 percent. Staff believes Dr. Hadaway should have used a median rather than the mean to determine the appropriate nominal GDP growth rate in his DCF model because this would have minimized the anomalous years that are included in his mean.

Q. Did Staff calculate the median nominal GDP growth rate using the same data that Dr. Hadaway used?

A. Yes. Staff used the same data that Dr. Hadaway used from the Federal Bank of St. Louis website: <a href="http://stlouisfed.org">http://stlouisfed.org</a> to determine the median nominal GDP growth rate.

The following are the calculations:

4	Staff's Calculation		Dr. Hadaway's Calculation
5	10-Year Median	5.4%	5.2%
6	20-Year Median	5.6%	5.6%
7	30-Year Median	6.2%	7.1%
8	40-Year Median	6.8%	7.5%
9	50-Year Median	6.6%	7.1%
10	57-Year Median	<u>6.4%</u>	<u>7.1%</u>
11	Median	6.3%	Mean $6.6\%$
12	Mean	6.2%	

The median is 30 basis points lower than Dr. Hadaway's average nominal GDP growth rate of 6.6 percent. Staff calculated the mean for the medians to test the median result of 6.3 percent. Staff arrived at a mean for the medians of 6.2 percent. This indicates that the median of 6.3 percent eliminated any anomalous periods that are included in Dr. Hadaway's mean of 6.6 percent.

- Q. If Dr. Hadaway applied the 6.3 percent median nominal GDP growth rate to his DCF model, what would be his results?
- A. If Dr. Hadaway applied the 6.3 percent median nominal GDP growth rate to his DCF model he would have arrived at 11.20 (11.50 .30) percent for his ROE recommendation compared to his 11.50 percent.
- Q. Did Dr. Hadaway make any adjustments to his return on equity (ROE) recommendation?
- A. Yes, Dr. Hadaway makes a 50 basis point adjustment upward from 11.00 percent to 11.50 percent "because KCP&L faces considerably higher construction risks than for the average company in the reference group." [Hadaway Direct, page 4]

April 1, 2005:

### Rebuttal Testimony of Matthew J. Barnes

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Standard & Poor's considers the proposed regulatory plan as providing an adequate framework for rate relief both during and after the construction period. Although the agreement would freeze rates through 2006, it also incorporates an option to implement an interim power cost adjustment clause and the ability to file for annual rate cases for 2007 through 2009 without the risk of intervention by signatories to the agreement. Also noteworthy is the plan's explicit use of Standard & Poor's credit ratios as guidelines for awarding rate relief. Specifically, the plan calls for adjustments to the amortization of KCPL's regulatory assets to support funds from operations (FFO) interest coverage and FFO to total debt of 3.8x and 25%, respectively.

- Q. Have Fitch or Moody's responded positively to the Stipulation and Agreement?
- A. Fitch does not currently rate KCP&L. Moody's issued a Credit Report dated January 17, 2006 that mentions the rating outlook for KCP&L:

The stable outlook reflects continued stable and improving cash flow credit metrics and the expectation that the company will be able to fully recover its increased investments under the comprehensive energy plan in its upcoming rate case.

Based on these two reports it is apparent that the two credit rating agencies responded positively to the Stipulation and Agreement and that any risk associated with construction should be mitigated by the use of amortization that allows for additional cash flow to the Company and the opportunity to maintain an investment grade credit rating. Dr. Hadaway recommends a 50 basis point upward adjustment "because KCP&L faces considerably higher construction risks than for the average company in the reference group." Nowhere does Dr. Hadaway explain the rationale for this upward adjustment and, in particular, the need for it considering the reduced risk resulting from the Regulatory Plan relating to KCP&L's construction program. The benefit of the amortization developed in the Regulatory Plan was directly created to address the increased risk from the increased construction activity of the

Company. However, KCP&L, after receiving the benefits of the Regulatory Plan to address the increased construction risk, is requesting an additional 50 basis points increase in return on equity. Therefore the Commission should ignore Dr. Hadaway's recommendation that

KCP&L's ROE should be adjusted upward 50 basis points due to construction risk.

Q. Is there another witness that describes the amortization in the Stipulation and Agreement?

A. Yes. Please see Staff witness Steve M. Traxler's direct testimony that describes the amortization and credit metrics in more detail.

Q. Staff previously mentioned that if Dr. Hadaway applied a 6.3 percent median nominal GDP growth rate to his DCF model, he would have arrived at 11.20 percent for his ROE recommendation. What would Dr. Hadaway's ROE recommendation arrive at if he did not make an adjustment upward of 50 basis points due to construction risk?

A. If Dr. Hadaway did not make an adjustment upward of 50 basis points due to construction risk he would have arrived at 10.70 (11.20 - .50) percent for his ROE recommendation.

Q. Does Staff recommend the Commission adopt any adjustments made to Dr. Hadaway's DCF model?

A. No. Staff does not recommend the Commission adopt any adjustments made to Dr. Hadaway's DCF model. Staff was merely pointing out the flaws in Dr. Hadaway's constant growth and multistage DCF models using an average nominal GDP growth as a growth rate for KCP&L. In fact, the Commission should completely ignore Dr. Hadaway's use of a multi-stage DCF model as this does not apply to a mature utility such as KCP&L, and instead rely on his single-stage constant growth DCF model that initially produced an

ROE of 9.40 percent, which is two basis points lower than Staff's high-end range of

2 9.42 percent. Staff believes the single-stage constant growth DCF model is the appropriate

model to use for a mature utility company when determining a reasonable return on equity.

### MR. BAUDINO'S RECOMMENDED COST OF COMMON EQUITY FOR KCP&L

Q. Please explain the difference between Mr. Baudino's rate of return recommendation and Staff's rate of return recommendation.

A. Mr. Baudino's recommends an ROE of 9.90 percent. Staff recommends an ROE of 9.32 percent to 9.42 percent. The difference between OPC and Staff's recommendation is that Mr. Baudino selects companies for his proxy group that are diversified and/or have non-regulated operations. Mr. Baudino began with a group of 65 electric and combination electric/gas utility companies from the July 2006 AUS Utility Reports. He then selected criteria to arrive at 21 companies that he believes are comparable to KCP&L. Staff used S&P's CreditStats that classify 11 electric utility companies as vertically integrated and then selected criteria to arrive at five companies that are comparable to KCP&L.

- Q. What is Mr. Baudino's projected growth rate for his proxy group?
- A. Mr. Baudino's projected growth rate for his selected comparable electric and electric/gas combination utility companies is 5.47 percent.
- Q. Please explain why is Mr. Baudino's projected growth rate for his selected comparable group is 74 basis points higher than Staff's projected growth rate?
- A. Some of the companies in Mr. Baudino's proxy group have projected growth rates in the double digits. As an example, Value Line has projected earnings per share growth of 11.36 percent for FirstEnergy Corporation. This obviously increases

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Mr. Baudino's average growth rate for his proxy group. Two other utility companies in Mr. Baudino's proxy group, Northeast Utilities and PPL Corporation, have earnings per share and dividend per share growth rates of at least 11 percent. If Mr. Baudino were to exclude the companies that have high projected growth rates his average growth rate for his proxy group would be lower. The reason these growth rates are overstated is due to the companies experiencing restructuring, merger and acquisitions, and divestures.

- Q. What is Staff's projected growth rate for the five comparable electric utility companies?
- A. Staff's projected growth rate for the five comparable electric utility companies is in the range of 4.70 percent to 4.80 percent.
- Q. Staff mentioned earlier in this testimony that they did not respond to DOE's witness Dr. Woolridge because Staff did not have any disagreements. What did Dr. Woolridge recommend in this case?
- A. Dr. Woolridge recommended an ROE of 9.00 percent for KCP&L. This is 32 basis points lower that Staff's recommendation. Dr. Woolridge represents the ratepayer in this case, so one would expect a recommendation lower than Staff's.
  - Q. Please summarize the party's ROE recommendations.
  - A. The following table lists the recommendation of each party:

	DOE	Staff	OPC	KCP&L
ROE	9.00%	9.32%-9.42%	9.90%	11.50%

#### **SUMMARY AND CONCLUSIONS**

Q. Please summarize the conclusions of your rebuttal testimony.

### Rebuttal Testimony of Matthew J. Barnes

- 1 A. My conclusions regarding the cost of common equity are listed below. 2 1. The use of a multi-stage DCF model by Dr. Hadaway for a utility that 3 is mature should be ignored. The Commission should adopt the singlestage DCF model as the appropriate model to determine the ROE for 4 5 KCP&L. Dr. Hadaway's 6.60 percent nominal GDP growth rate as 6 applied in his multi-stage DCF model is inappropriate. An investor would 7 not expect a regulated mature electric utility company to grow at the same 8 rate as the economy; 9 2. My cost of common equity as stated in Schedule 3 attached to this 10 rebuttal testimony, which is 9.32 percent to 9.42 percent, would produce a 11 fair and reasonable rate of return of 7.78 percent to 7.83 percent for
  - Q. Does this conclude your rebuttal testimony?
  - A. Yes, it does.

KCP&L.

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### BEFORE THE PUBLIC SERVICE COMMISSION

### **OF THE STATE OF MISSOURI**

In the Matter of the Application of Kansas City ) Power & Light Company for Approval to Make ) Certain Changes in its Charges for Electric Service ) to Begin the Implementation of Its Regulatory Plan.
AFFIDAVIT OF MATTHEW J. BARNES
STATE OF MISSOURI ) ) ss. COUNTY OF COLE )
Matthew J. Barnes, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Rebuttal Testimony in question and answer form, consisting of $/2$ pages to be presented in the above case; that the answers in the foregoing Rebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true and correct to the best of his knowledge and belief.
Matthew J. Barnes
Subscribed and sworn to before me this day of September 2006.
D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri County of Cole My Commission Exp. 07/01/2008

### Kansas City Power and Light Company Case No. ER-2006-0314

#### Capital Structure as of June 30, 2006 Great Plains Energy

Capital Component	Dollar Amount (000's)		Percentage of Capital
Common Stock Equity	\$	1,347,348	53.24%
Preferred Stock	\$	39,000	1.54%
Long-Term Debt		\$1,144,553	45.22%
Short-Term Debt	\$		0.00%
Total Capitalization	\$	2,530,901	100.00%

#### Electric Financial Ratio Benchmark Total Debt / Total Capital

Standard & Poor's Corporation's RatingsDirect, Revised Financial Guidelines as of June 2, 2004

BBB Credit Rating based on a "6" Business Profile

48% to 58%

Notes: 1. Long-term Debt at June 30, 2008 includes current maturities of long-term debt. This balance also includes the amount of non-regulated debt. These balances were provided in KCP&L's response to DR 0412.

 Short-term debt balance net of construction work in progress (CWIP) was negative as of June 30, 2006. Therefore, no short-term debt is included in the capital structure.

Source: Kansas City Power and Light's response to Staff's Data Request No. 0412. KCP&L's June 30, 2006 10-Q filed with the SEC.

### SCHEDULES 2 and 3

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