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Rate of Return

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August 8, 2006

MISSOURI PUBLIC SERVICE COMMISSION UTILITY SERVICES DIVISION

DIRECT TESTIMONY

OF

MATTHEW J. BARNES

Missouri Public Bervice Commission

KANSAS CITY POWER AND LIGHT COMPANY

CASE NO. ER-2006-0314

Case No(s). 28 206 0314
Date W 1606 Rptr 45

Jefferson City, Missouri August 2006

Denotes Highly Confidential Information

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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 Barnes, of lawful age, on his oath states: that he has participated in the preparation of the foregoing Direct Testimony in question and answer form, consisting of 20 pages to be presented in the above case; that the answers in the foregoing Direct 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 3^{R0} day of August 2006.
D. SUZIE MANKIN Notary Public - Notary Seal State of Missouri County of Cole My Commission Exp. 07/01/2008

1	TABLE OF CONTENTS
2	DIRECT TESTIMONY OF
3	MATTHEW J. BARNES
4	KANSAS CITY POWER AND LIGHT COMPANY
5	CASE NO. ER-2006-0314
6	EXECUTIVE SUMMARY3
7	LEGAL PRINCIPLES4
8	CURRENT ECONOMIC CONDITIONS6
9	ECONOMIC PROJECTIONS8
10	BUSINESS OPERATIONS OF GPE AND KCP&L9
11	DETERMINATION OF THE COST OF CAPITAL12
12	CAPITAL STRUCTURE AND EMBEDDED COSTS13
13	COST OF COMMON EQUITY14
14	RATE OF RETURN FOR KCP&L19

1	DIRECT TESTIMONY
2	OF
3	MATTHEW J. BARNES
4	KANSAS CITY POWER AND LIGHT COMPANY
5	CASE NO. ER-2006-0314
6	Q. Please state your name.
7	A. My name is Matthew J. Barnes.
8	Q. Please state your business address.
9	A. My business address is P.O. Box 360, Jefferson City, Missouri, 65102.
10	Q. What is your present occupation?
11	A. I am employed as a Utility Regulatory Auditor III for the Missouri Public
12	Service Commission (Commission). I accepted the position of Utility Regulatory Auditor I
13	in June 2003 and have since been promoted.
14	Q. Were you employed before you joined the Commission's Staff (Staff)?
15	A. Yes, I was employed by the Missouri Department of Natural Resources
16	(MDNR). Prior to MDNR I was employed by the Missouri Department of Conservation as
17	an Auditor Aide.
18	Q. What is your educational background?
19	A. I earned a Bachelor of Science degree in Business Administration with an
20	emphasis in Accounting from Columbia College in December 2002. I earned a Masters in
21	Business Administration with an emphasis in Accounting from William Woods University in
22	May 2005.
23	O. Have you filed testimony in other cases before this Commission?

1	A. Yes. I filed Supplemental Direct Testimony in BPS Telephone Company
2	Case No. TC-2002-1076, Rebuttal Testimony in Sprint Nextel Case No. IO-2006-0086 and
3	Rebuttal Testimony in Alltel Missouri Inc. Case No. TM-2006-0272. The issue I covered in
4	BPS Telephone Company Case No. TC-2002-1076 was rate of return. This case was settled.
5	The issues I covered in Alltel Missouri Inc. Case No. TM-2006-0272 and Sprint
6	Nextel Case No. IO-2006-0086 was the spin-off of their regulated landline operations into a
7	new separate company. I analyzed indicative credit rating reports from the three major credit
8	rating agencies (Standard & Poor's, Moody's, and Fitch) that discussed the potential credit
9	rating, a reasonable dividend payout ratio and cash flows to the new spin-off companies. I
10	then used the indicative credit rating reports and compared the potential credit rating,
11	dividend payout ratio, and cash flows of the spin-off companies to a group of similar
12	telephone companies. These two cases were presented to the Commission and discussed
13	during an on-the-record presentation. Both cases were approved by the Commission.
14	Q. Have you participated in other rate cases in the past?
15	A. Yes. I participated in AmerenUE Case No. GR-2003-0517, Aquila, Inc. Case
16	No. ER-2004-0034, Empire ER-2004-0570, and Missouri American Water, Case
17	No. WR-2003-0500. I was involved in preparing the schedules and review of testimony for
18	the department manager and Auditor IV concerning rate of return.
19	Q. Have you made recommendations in any other cases before this Commission?
20	A. Yes, I have made recommendations on finance, merger and acquisition cases
21	before this Commission.
22	Q. Have you attended any schools, conferences or seminars specific to utility
23	finance and utility regulation?

- A. Yes. I attended The Rate Case Process in Missouri presented by Staff of the Missouri Public Service Commission in March 2005. I have also attended the Financial Research Institute seminars in 2003 and 2004 that covered topics such as rate of return, restructuring of electric utility companies and the future operations of utility companies.
 - Q. What is the purpose of your testimony in this case?
- A. I present the Staff's recommendation to the Commission of a fair and reasonable rate of return for the Missouri jurisdictional electric utility rate base of Kansas City Power and Light Company (KCP&L).
 - Q. Have you prepared a written analysis of the cost of capital for KCP&L?
- A. Yes. I am sponsoring a study entitled "An Analysis of the Cost of Capital for Kansas City Power and Light Company, Case No. ER-2006-0314" consisting of 21 schedules which are attached to this direct testimony (see Schedule 1 for a list of these schedules).

EXECUTIVE SUMMARY

- Q. Please provide an executive summary of your testimony.
- A. I present the Staff's recommendation that the Commission authorize an overall rate of return (ROR) of 7.60 percent to 7.65 percent for KCP&L. This rate-of-return recommendation is based on a recommended return on common equity of 9.32 percent to 9.42 percent applied to Great Plains Energy's (GPE) December 31, 2005, common equity ratio of 50.94 percent. The recommendation is driven by my comparable company analysis using the discounted cash flow (DCF) model. I believe the DCF model is the most reliable model available.

I used an embedded-cost-of-long-term-debt of ** ____ ** percent based on GPE's embedded-cost-of-long-term-debt provided in response to Data Request 0019.

I used GPE's actual consolidated capital structure, which includes all of GPE's operations, as of December 31, 2005 as the basis for the Staff's capital structure recommendation. I included the amount of GPE's non-regulated debt in developing the Staff's consolidated capital structure recommendation.

- Q. How did you determine the Staff's recommended cost of common equity?
- A. I determined the Staff's recommended cost of common equity by applying the DCF model to a comparable group of vertically-integrated electric utility companies. I then evaluated a number of factors to test the reasonableness of this recommendation. A complete and detailed explanation of the Staff's recommended cost of common equity starts on page 14, line 4 of this testimony.

LEGAL PRINCIPLES

- Q. What legal principles do you understand constitute the basis for the assessment of the justness and reasonableness of rate-of-return recommendations?
- A. I understand that the Bluefield Water Works and Improvement Company (1923) (Bluefield) and the Hope Natural Gas Company (1944) (Hope) cases have been cited as the two most influential cases for the legal framework to determine a fair and reasonable rate of return.
 - Q. What do you understand to be the teachings of the Bluefield case?
 - A. In the Bluefield case the Supreme Court ruled that a fair return would be:



- 1. A return "generally being made at the same time" in that "general part of the country;"
- 2. A return achieved by other companies with "corresponding risks and uncertainties;" and
- 3. A return "sufficient to assure confidence in the financial soundness of the utility."

The Court specifically stated:

A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties; but it has no constitutional right to profits such as are realized or anticipated in highly profitable enterprises or speculative ventures. The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to maintain and support its credit and enable it to raise the money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market and business conditions generally.

- Q. What do you understand to be the teachings of the *Hope* case?
- A. In the *Hope* case, the Court stated that:

The rate-making process . . . , i.e., the fixing of "just and reasonable" rates, involves a balancing of the investor and the consumer interests. Thus we stated . . . that "regulation does not insure that the business shall produce net revenues" . . . it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock By that standard the return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and to attract capital.

The *Hope* case restates the concept of comparable returns to include those achieved by other enterprises that have "corresponding risks." The Supreme Court also noted in this case that regulation does not guarantee profits to a utility company.

- Q. Do you have any further comments on the use of cost of capital models to determine a fair rate of return?
 - A. Yes, See Schedule A.

CURRENT ECONOMIC CONDITIONS

- Q. What are the main points of the current capital and economic environment that the Commission should consider in determining a reasonable authorized return on common equity (ROE) for KCP&L?
- A. The Federal Reserve (Fed) has been steadily raising the Fed Funds rate by 25 basis points at every Federal Open Market Committee (FOMC) meeting since June 30, 2004. This began after the Fed had kept the Fed Funds Rate at a 46-year low of 1.00 percent for a full year. The Fed has now raised the Fed Funds Rate seventeen consecutive times to its current level of 5.25 percent. According to a June 30, 2006, issue of the *Wall Street Journal*:

"The extent and timing of any additional" rate increases "will depend on the evolution of the outlook for both inflation and economic growth," the Fed said in a statement. By contrast, the Fed's last statement, on May 10, said "some further" rate increases "may yet be needed."

The language shift reflects Fed officials' decreased confidence that they know now what they'll do next, given how much rates already have risen, its view that the economy is slowing and its concern over an expected rise in inflation that it nonetheless hopes is temporary. The new language doesn't rule out another rate increase, but give the

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1 2 3	Fed added flexibility to base its decision more on coming economic data than on any previous guidance it gave to markets.
4 5 6	The Dow Jones Industrial Average, which was up about 80 points before the statement was released, soared to close 217.24 points higher, a gain of about 2%, its best day in more than three years.
7	Q. What has happened to long-term interest rates since the Fed started to increase
8	the Fed Funds rate from 1.00 percent?
9	A. Long-term interest rates have finally started to respond to the Fed's monetary
10	policy tightening. However, at this time it would be premature to label the increase in long-
11	term interest rates as a trend.
12	Q. How have utility bond yields responded to the tightening of U.S. monetary
13	policy?
14	A. A review of Schedules 5-1 and 5-3 shows that average utility bond yields fell
15	to an average annual yield of 5.39 percent during June 2005, which was the lowest yield in
16	the past 26 years. Utility bond yields have since increased to an average annual yield of
17	6.39 percent in May 2006.
18	Q. Would you explain the changes in utility bond yields and Thirty-Year U.S.
19	Treasury yields in a little more detail?
20	A. Cost of capital changes for utilities are closely reflected in the yields on public
21	utility bonds and yields on Thirty-Year U.S. Treasury Bonds (see attached Schedules 5-1
22	and 5-2). Schedule 5-3, attached to this direct testimony, shows how closely the Mergent's
23	"Public Utility Bond Yields" have followed the yields of Thirty-Year U.S. Treasury Bonds
24	during the period from 1980 to the present. The average spread for this period between these

two composite indices has been 151 basis points, with the spread ranging from a low of

- 80 basis points to a high of 304 basis points (see attached Schedule 5-4). Although there may be times when utility bond yield changes may lag the yield changes in the Thirty-Year U.S. Treasury Bond, these spread parameters show just how tightly correlated utilities' cost of capital is with the level of interest rates on long-term treasuries. For a detail explanation of historical economic conditions please see Schedule B.
 - Q. What is the significance of the current economic conditions to KCP&L and what conclusions should the Commission draw from it?
- A. The significance of the current economic conditions to KCP&L is that yields on public utility bonds and yields on Thirty-year Treasury bonds are low by recent historical standards. An example of recent historical standards is the double digit yields for long-term U.S. Government bonds and corporate bonds from the late 1970's to the mid 1980's. A lower interest rate environment means a lower cost of capital and a higher interest rate environment means a higher cost of capital for a utility. The current yields on U.S. Government bonds and corporate bonds are now more normal by historical standards. The Commission should take the lower and more normal yields on U.S. Government and corporate bonds into consideration when authorizing a rate of return for GPE. For a history of long-term investment grade Baa (Moody's equivalent of an S&P's BBB credit rating) corporate bond yields please see Schedule 5-5.

ECONOMIC PROJECTIONS

- Q. Do you have any information on economic projections?
- A. Yes. See Schedule C for projections on inflation, interest rates and gross domestic product (GDP).

BUSINESS OPERATIONS OF GPE AND KCP&L

- Q. Please describe GPE's and KCP&L's business operations.
- A. GPE's Form 10K Securities and Exchange Commission (SEC) filing for the 2005 calendar year provides a good description of GPE's and KCP&L's business operations:

Great Plains Energy, a Missouri corporation incorporated in 2001 and headquartered in Kansas City, Missouri, is a public utility holding company and does not own or operate any significant assets other than the stock of its subsidiaries. Great Plains Energy has four direct subsidiaries with operations or active subsidiaries:

- KCP&L is described below.
- KLT Inc. is an intermediate holding company that primarily holds, directly or indirectly, Innovative Energy Consultants Inc. (IEC) is an intermediate holding company that holds an indirect interest in Strategic Energy. IEC does not own or operate any assets other than its indirect interest in Strategic Energy. When combined with KLT Inc.'s indirect interest in Strategic Energy, the Company owns just under 100% of the indirect interest in Strategic Energy.
- Great Plains Energy Services Incorporated (Services) provides services at cost to Great Plains Energy and its subsidiaries, including consolidated KCP&L.

Great Plains Energy's wholly owned subsidiary, Great Plains Power Incorporated (GPP), focused on the development of wholesale generation. GPP sold all of its capital assets related to the siting and permitting process for construction of Iatan No. 2, a coal-fired generating plant, to KCP&L, at cost, during 2005. GPP was dissolved in 2005.

KCP&L, a Missouri corporation incorporated in 1922, is an integrated, regulated electric utility, which provides electricity to customers primarily in the states of Missouri and Kansas. KCP&L's wholly owned subsidiary, Home Service Solutions Inc. (HSS), sold its wholly owned subsidiary Worry Free Service, Inc. (Worry Free) in February 2005 and completed the disposition of its interest in R.S. Andrews Enterprises, Inc. (RSAE) in June 2003. After these sales, HSS has no active operations.

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KCP&L, headquartered in Kansas City, Missouri, engages in the generation, transmission, distribution and sale of electricity. KCP&L serves approximately 500,000 customers located in all or portions of 24 counties in western Missouri and eastern Kansas. Customers include approximately 440,000 residences, over 55,000 commercial firms, and over 2,200 industrials, municipalities and other electric utilities. KCP&L's retail revenues averaged approximately 82% of its total operating revenues over the last three years. Wholesale firm power, bulk power sales and miscellaneous electric revenues accounted for the remainder of utility revenues. KCP&L is significantly impacted by seasonality with approximately one-third of its retail revenues recorded in the third quarter. KCP&L's total electric revenues averaged approximately 45% of Great Plains Energy's revenues over the last three years. KCP&L's income from continuing operations accounted for approximately 88%, 86% and 67% of Great Plains Energy's income from continuing operations in 2005, 2004 and 2003, respectively.

GPE's total operating revenues were \$2,604,882,000 for the 12 months ended December 31, 2005, versus \$2,464,018,000 for the 12 months ended December 31, 2004. These 2005 revenues resulted in an overall net income applicable to common stock of \$162,310,000 and earnings per share (EPS) of \$2.15 as compared to the 2004 net income applicable to common stock of \$180,811,000 and an EPS of \$2.49. These revenues and net incomes were generated from total assets of \$3,833,726,000 at December 31, 2005, and \$3,798,901,000 at December 31, 2004. These figures were taken from GPE's Form 10K SEC filing for the 2005 calendar from KCP&L's company website at www.kcpl.com.

- Q. What are GPE's current credit ratings?
- A. GPE's current Standard & Poor's Corporation's (S&P) corporate credit rating is "BBB" with a Stable outlook, which is two notches above non-investment grade; i.e., junk, status. KCP&L's corporate credit rating is also rated "BBB" with a Stable Outlook. GPE's current Moody's corporate credit rating is Baa2, which is equivalent to S&P's BBB credit rating. Fitch does not rate GPE.

Direct Testimony of

Matthew J. Barnes 1 Q. 2 A. 3 4 5 6 7

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- How does S&P assign credit ratings to GPE and KCP&L?
- S&P's June 25, 2004 Great Plains Energy Research Report provides an explanation of their methodology of assigning credit ratings to GPE and KCP&L:

Standard & Poor's Ratings Services affirmed its ratings of Great Plains Energy, including the 'BBB' corporate credit rating, as well as the ratings of main subsidiary Kansas City Power & Light (KCP&L)...

Kansas City, Mo.-based Great Plains Energy Inc.'s ratings are based on the consolidated financial and business risk profiles of its family of companies. Through its subsidiaries, Great Plains is involved in vertically integrated electric operations through its main subsidiary, KCP&L, and in retail energy marketing and power supply coordination through its majority interest in Strategic Energy. Because there are no regulatory mechanisms or other structural barriers in Missouri and Kansas that sufficiently restrict access by the parent to the utility's cash flow, Standard & Poor's views the default risk of KCP&L and Great Plains as the same.

- O. Do you have historical financial information on GPE?
- A. Yes. Schedules 7 and 8 present historical capital structures and selected financial ratios from 2001 through 2005 for GPE. GPE's consolidated common equity ratio has ranged from a high of 50.94 percent to a low of 33.60 percent from 2001 through 2005. GPE's consolidated company earned ROE has been fairly strong the last five years with a low of 12.60 percent in 2001 to a high of 16.40 percent in 2003. GPE's consolidated company earned 2005 ROE was 13.30 percent. In a March 31, 2006, report in The Value Line Investment Survey: Ratings & Reports, Value Line estimates that GPE's consolidated company projected ROE will be 10.50 percent for 2006 and 9.50 percent for 2007.

GPE's consolidated company historical funds from operations (FFO) interest coverage ratios for the previous five years has ranged from a low of 3.1 times in 2001, to a high of 4.9 times in 2004. GPE's consolidated company year-end 2005 FFO interest

coverage ratio was 4.6 times. GPE's consolidated company FFO to average total debt ratios for the previous five years has ranged from a low of 18 percent in 2001, to a high of 24 percent in 2003 and 2005. GPE's consolidated company year-end 2005 FFO to average total debt ratios was 24 percent.

DETERMINATION OF THE COST OF CAPITAL

- Q. How do you determine a utility company's cost of capital?
- A. The total dollars of capital for the utility company are determined as of a specific point in time. This total dollar amount is then apportioned into each specific capital component, i.e. common equity, long-term debt, preferred stock and short-term debt. A weighted cost for each capital component is determined by multiplying each capital component ratio by the appropriate embedded cost or by the estimated cost of common equity component. The individual weighted costs are summed to arrive at a total weighted cost of capital. This total weighted average cost of capital (WACC) is synonymous with the fair rate of return for the utility company.
 - Q. Why is a total WACC synonymous with a fair rate of return?
- A. From a financial viewpoint, a company employs different forms of capital to support or fund the assets of the company. Each different form of capital has a cost and these costs are weighted proportionately to fund each dollar invested in the assets.

Assuming that the various forms of capital are within a reasonable balance and are costed correctly, the resulting total WACC, when applied to rate base, will provide the funds necessary to service the various forms of capital. Thus, the total WACC corresponds to a fair rate of return for the utility company.

Q.

CAPITAL STRUCTURE AND EMBEDDED COSTS

A. The capital structure I have used for this case is GPE's capital structure on a consolidated basis, as of December 31, 2005. Schedule 9 presents GPE's capital structure and associated capital ratios. The resulting capital structure consists of 50.94 percent

common stock equity, 47.44 percent long-term debt and 1.62 percent preferred stock.

What capital structure did you use for KCP&L?

The amount of long-term debt outstanding on December 31, 2005

was ** _____ ** and includes current maturities due within one year. The amount of long-term debt in the capital structure is shown on Schedule 10 attached to this direct testimony.

The amount of preferred stock outstanding on December 31, 2005 was ** as shown on Schedule 11.

I did not include GPE's short-term debt in the capital structure because as of December 31, 2005, GPE's Construction Work In Progress (CWIP) exceeded its short-term debt balance. Because CWIP is not included in rate base, the capital that supports the CWIP should not be included in the ROR recommendation.

- Q. What was the embedded cost of long-term debt for GPE as of December 31, 2005?
- A. The embedded cost of long-term debt for GPE as of December 31, 2005, was ** ___ ** percent.
- Q. What was the embedded cost of preferred stock for GPE as of December 31, 2005?

A. The embedded cost of preferred stock for GPE was ** ____ ** percent as of December 31, 2005.

COST OF COMMON EQUITY

- Q. How did you analyze those factors by which the cost of common equity for KCP&L may be determined?
- A. In order to calculate the cost of common equity for KCP&L, I performed a comparable company analysis of five companies. I have selected the DCF model (explained in detail in Schedule D) as the primary tool to determine the cost of common equity for KCP&L, but I also used the CAPM (explained in detail in Schedule E) to check the reasonableness of the DCF results. I also performed a company-specific analysis of GPE using both of these models because I believe that this can provide insight into KCP&L's cost of common equity even though GPE is a diversified company. Because GPE's stock is only one option in a vast universe of many investment opportunities, the analysis of GPE's cost of common equity as a possible proxy estimate for KCP&L's cost of common equity using GPE's specific inputs provides information on the value investors place on GPE's stock, not only as it relates to other utility companies, but also to all other investment opportunities available to the investor.
 - Q. Can you directly analyze KCP&L's cost of common equity?
- A. No. I can not directly analyze KCP&L's cost of common equity because it is not publicly traded and it does not pay a dividend.
 - Q. How did you analyze KCP&L's cost of common equity?



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- Matthew J. Barnes 1 Α. I decided to do an analysis of the cost of common equity for a comparable 2 group of vertically-integrated electric utility companies because these companies have 3 similar electric operations that are comparable to KCP&L. I also analyzed GPE's cost of common equity even though it isn't currently classified as a vertically-integrated electric 4 5 utility. 6 Q. How did you determine which companies were comparable electric utility 7 companies? 8 Α. I first relied on Standard & Poor's (S&P) current classification system, which 9 specifies companies that they consider to be vertically-integrated electric utilities. This 10 information was published by S&P on August 11, 2005, in its yearly CreditStats. Because 11 KCP&L is a vertically-integrated electric utility, this helps ensure the selection of companies 12 that are similar in risk profile to that of KCP&L's business operations. Schedule 12 presents 13 a list of the eleven electric utility companies that S&P currently classifies as vertically-14 integrated electric utility companies. I then applied the following criteria to these eleven 15 companies in order to select my ultimate proxy group:
 - 1. Stock publicly traded: This criterion eliminated two companies;
 - 2. Information printed in Value Line: This criterion didn't eliminate any companies;
 - 3. Ten years of data available: This criterion eliminated one additional company;
 - 4. At least investment grade credit rating: This eliminated one company;
 - 5. Two sources for projected growth available with one of those being from Value Line: This criterion eliminated one additional company.
 - 6. No Missouri Operations: This eliminated one additional company.
 This resulted in a group of five publicly-traded electric utility companies. The comparables are listed on Schedule 13.

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Q. How did you determine the cost of common equity of each of the comparables?

A. I calculated a DCF cost of common equity for each of the comparables. The first step was to calculate a growth rate. I reviewed the actual dividends per share (DPS), earnings per share (EPS), and book values per share (BVPS) as well as projected EPS growth rates for the comparables. Schedule 14-1 lists the annual compound growth rates for DPS, EPS, and BVPS for the past ten years. Schedule 14-2 lists the annual compound growth rates for DPS, EPS, and BVPS for the past five years. Schedule 14-3 presents the averages of the growth rates shown in Schedules 14-1 and 14-2. Schedule 15 presents the average historical growth rates and the projected growth rates for the comparables. The projected EPS growth rates were obtained from three outside sources; I/B/E/S Inc.'s Institutional Brokers Estimate System, Standard & Poor's Corporation's Earnings Guide, and The Value Line Investment Survey: Ratings and Reports. The three projected EPS growth rates were averaged to develop an average projected growth rate of 4.73 percent, which was averaged with the historical growth rates to produce a historical and projected growth rate of 2.26 percent. Because of the volatility of historical growth rates, I chose to rely primarily on the projected growth rates to arrive at a growth rate range for the comparables of 4.70 percent to 4.80 percent.

The next step was to calculate an expected yield for each of the comparables. The yield term of the DCF model is calculated by dividing the amount of DPS expected to be paid over the next twelve months by the market price per share of the firm's stock. Even though a strict technical application of the model requires the use of a current spot market price, I have chosen to use a monthly average market price for each of the comparables. I

used this averaging technique to minimize the effects on the dividend yield which can occur due to daily volatility in the stock market. Schedule 16 presents the average high / low stock price for the period of February 1, 2006, through May 31, 2006, for each comparable. Column 1 of Schedule 17 indicates the expected dividend for each comparable over the next 12 months as projected by The Value Line Investment Survey: Ratings & Reports, March 31, May 12, and June 2, 2006. Column 3 of Schedule 17 shows the projected dividend yield for each of the comparables. The dividend yield for each comparable was averaged to calculate the projected dividend yield for the comparables of 4.62 percent.

As illustrated in Column 5 of Schedule 17, the average cost of common equity based on the projected dividend yield added to the average of historical and projected growth is 6.88 percent. However, this is not my recommendation because in this case, the historical growth rates are somewhat volatile. As a result, I decided to place almost complete weight on the projected growth rates that I analyzed. Giving complete weight to the projected growth rates, my DCF proxy group cost of common equity estimation is 9.32 percent to 9.42 percent.

- Q. How did you verify the reasonableness of your DCF model-derived cost of common equity for the comparable company group?
 - A. I performed a CAPM cost-of-common-equity analysis for the comparables.
 - Q. What did you use for your risk-free rate?
- A. For purposes of this analysis, the risk-free rate I used was the yield on Thirty-Year U.S. Treasury Bonds. I determined the appropriate rate to be the average yield for the month of June 2006. The average yield of 5.16 percent was provided on the St. Louis Federal Reserve website.

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For the second variable, beta, I researched Value Line in order to find the betas for my comparable group of companies. Schedule 18 contains the appropriate betas for the comparables.

The final term of the CAPM is the market risk premium $(R_m - R_f)$. The market risk premium represents the expected return from holding the entire market portfolio less the expected return from holding a risk-free investment.

- Q. Please explain your application of the CAPM using historical return differences.
- A. The first risk premium used was based on the long-term, arithmetic average from 1926 to 2005, which was 6.50 percent. The second risk premium was based on the long-term, geometric average from 1926 to 2005, which was determined to be 4.90 percent. The third risk premium was based on a short-term, geometric average from 1996 to 2005, which was determined to be 1.48 percent. These risk premiums were taken from Ibbotson Associates, Inc.'s Stocks, Bonds, Bills, and Inflation: 2006 Yearbook.

Schedule 18 presents the CAPM analysis of the comparables using historical actual return spreads to estimate the required equity risk premium. The CAPM analysis produces an estimated cost of common equity of 10.43 percent for the comparables when using the long-term arithmetic average risk premium period; using the long-term geometric average produces an estimated cost of common equity of 9.13 percent and using the short-term risk premium period produces an estimated cost of common equity of 6.36 percent. The longterm arithmetic average risk premium CAPM results would support a higher cost of common equity. The long-term geometric average risk premium CAPM results supports a cost of common equity similar to what is currently produced in performing a DCF analysis.

1	Q. Would you summarize your cost of common equity analysis for KCP&L?
2	A. I performed a DCF and CAPM cost of common equity analysis on a group of
3	five comparable companies. The results are summarized below.
4 5	DCF CAPM (Historical)
6	Q. Based on your analysis, what is your recommended return on common equity
7	for KCP&L in this proceeding?
8	A. I recommend a return on common equity in the range of 9.32 percent to
9	9.42 percent based on the results of my comparable-company-DCF analysis.
10 11	RATE OF RETURN FOR KCP&L Q. How are the returns you developed for each capital component used in the
12	ratemaking approach you have adopted for KCP&L?
13	
ļ	A. The cost of service ratemaking method was adopted in this case. This
14	approach develops the public utility's revenue requirement. The cost of service (revenue
15	requirement) is based on the following components: operating costs, rate base and a return
16	allowed on the rate base (see Schedule 20).
17	It is my responsibility to calculate and recommend a rate of return that should be
18	authorized on the Missouri jurisdictional electric utility rate base of KCP&L. Under the cost
19	of service ratemaking approach, a weighted cost of capital in the range of 7.60 to
20	7.65 percent was developed for KCP&L's electric utility operations (see Schedule 21). This
21	rate was calculated by applying an embedded cost of long-term debt of ** ** percent
22	an embedded cost of trust preferred stock of ** ** percent and a cost of common
23	equity range of 9.32 percent to 9.42 percent to a capital structure consisting of 47.44 percent

long-term debt, 1.62 percent preferred stock and 50.94 percent common equity. Therefore, from a financial prospective I am recommending that KCP&L's electric utility operations be allowed to earn a return on its original cost rate base in the range of 7.60 to 7.65 percent.

It is my expert opinion that, through my analysis I have developed a fair and reasonable return, which, when applied to KCP&L's jurisdictional rate base, will allow KCP&L the opportunity to earn the revenue requirement developed in this rate case.

- Q. Does this conclude your prepared direct testimony?
- A. Yes, it does.

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MATTHEW J. BARNES

TESTIMONY SCHEDULES A THROUGH E

KANSAS CITY POWER AND LIGHT COMPANY

CASE NO. ER-2006-0314

Q. Is your recommendation of the cost of common equity consistent with a fair rate of return on common equity?

A. Yes. It is my expert opinion that my recommendation as to the case of common equity is consistent with a fair rate of return on common equity. It is generally recognized that authorizing an allowed return on common equity based on a utility's cost of common equity is consistent with a fair rate of return. It is for this very reason that the discounted cash flow (DCF) model is widely recognized as an appropriate model to utilize in arriving at a reasonable recommended return on equity that should be authorized for a utility. The concept underlying the DCF model is to determine the cost of common equity capital to the utility, which reflects the current economic and capital market environment. For example, a company may achieve a return on common equity that is higher than its cost of common equity. This situation will tend to increase the share price. However, this does not mean that this past achieved return is the barometer for what would be a fair authorized return in the context of a rate case. It is the lower cost of capital that should be recognized as a fair authorized return. If a utility continues to be allowed a return on common equity that is not reflective of today's current low-cost-of-capital environment, then this will result in the possibility of excessive returns.

The authorized return should provide a fair and reasonable return to the investors of the company, while ensuring that ratepayers do not support excessive earnings that could result from the utility's monopolistic powers. However, this fair and reasonable rate does not necessarily guarantee revenues or the continued financial integrity of the utility.

It should be noted that a reasonable return may vary over time as economic conditions, such as the level of interest rates, and business conditions change. Therefore, the past, present and projected economic and business conditions must be analyzed in order to calculate a fair and reasonable rate of return.

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Q. Please discuss the historical economic conditions in which GPE has operated.

One of the most commonly accepted indicators of economic conditions is the Α. discount rate set by the Federal Reserve Board (Federal Reserve or Fed). The Federal Reserve tries to achieve its monetary policy objectives by controlling the discount rate (the interest rate charged by the Federal Reserve for loans of reserves to depository institutions) and the Federal (Fed) Funds Rate (the overnight lending rate between banks). However, recently the Fed Funds Rate has become the primary means for the Federal Reserve to achieve its monetary policy, and the discount rate has become more of a symbolic interest rate. This explains why the Federal Reserve's decisions now focus on the Fed Funds rate and this is reflected in the discussion of interest rates. It should also be noted that on January 9, 2003, the Federal Reserve changed the administration of the discount window. Under the changed administration of the discount window an eligible institution does not need to exhaust other sources of funds before coming to the discount window, nor are there restrictions on the purposes for which the borrower can use primary credit. This explains why the discount rate jumped from 0.75 percent to 2.25 percent on January 9, 2003, when the Fed Funds rate didn't change. Therefore, discount rates before January 9, 2003, are not comparable to discount rates after January 9, 2003.

At the end of 1982, the U.S. economy was in the early stages of an economic expansion, following the longest post-World War II recession. This economic expansion began when the Federal Reserve reduced the discount rate seven times in the second half of 1982 in an attempt to stimulate the economy. This reduction in the discount rate led to a reduction in the prime interest rate (the rate charged by banks on short-term loans to borrowers with high credit ratings) from 16.50 percent in June 1982, to 11.50 percent in

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December 1982. The economic expansion continued for approximately eight years until July 1990, when the economy entered into a recession.

In December 1990, the Federal Reserve responded to the slumping economy by lowering the discount rate to 6.50 percent (see Schedules 2-1 and 2-2). Over the next yearand-a-half, the Federal Reserve lowered the discount rate another six times to a low of 3.00 percent, which had the effect of lowering the prime interest rate to 6.00 percent (see Schedules 3-1 and 3-2).

In 1993, perhaps the most important factor for the U.S. economy was the passage of the North American Free Trade Agreement (NAFTA). NAFTA created a free trade zone consisting of the United States, Canada and Mexico. The rate of economic growth for the fourth quarter of 1993 was one the Federal Reserve believed could not be sustained without experiencing higher inflation. In the first quarter of 1994, the Federal Reserve took steps to try to restrict the economy by increasing interest rates. As a result, on March 24, 1994, the prime interest rate increased to 6.25 percent. On April 18, 1994, the Federal Reserve announced its intention to raise its targeted interest rates, which resulted in the prime interest rate increasing to 6.75 percent. The Federal Reserve took action again on May 17, 1994, by raising the discount rate to 3.50 percent. The Federal Reserve took three additional restrictive monetary actions, with the last occurring on February 1, 1995. These actions raised the discount rate to 5.25 percent, and in turn, banks raised the prime interest rate to 9.00 percent.

The Federal Reserve then reversed its policy in late 1995 by lowering its target for the Fed Funds Rate by 0.25 percentage points on two different occasions. This had the effect of lowering the prime interest rate to 8.50 percent. On January 31, 1996, the Federal Reserve lowered the discount rate to a rate of 5.00 percent.

The actions of the Federal Reserve from 1996 through 2000 were primarily focused on keeping the level of inflation under control, and it was successful. The inflation rate, as measured by the *Consumer Price Index - All Urban Consumers* (CPI), had never been higher than 3.70 percent during this period. The increase in CPI stood at 4.20 percent for the twelve months ending May 31, 2006 (see attached Schedules 4-1, 4-2 and 6).

The unemployment rate was 4.60 percent as of May 2006 (see Schedule 6), which is low by historical standards. A lower unemployment rate probably provides the Fed with some comfort to continue to raise the Fed Funds rate if it believes it is needed to contain inflation.

The combination of low inflation and low unemployment had led to a prosperous economy from 1993 through 2000 as evidenced by the fact that real gross domestic product (GDP) of the United States increased every quarter during this period. However, GDP actually declined for the first three quarters of 2001, indicating there was a contraction in the economy during these three quarters. This contraction of GDP for more than two quarters in a row meets the textbook definition of a recession. According to the National Bureau of Economic Research, the recession began in March of 2001 and ended eight months later. Since the recession ended, GDP had been low up until the second quarter of 2003, but since the second quarter of 2003, GDP has been fairly healthy. GDP grew at a rate of 5.60 percent for the second quarter of 2006 (see attached Schedule 6).

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Q. What are the inflationary estimations and expectations for 2006 through 2008?

A. The Value Line Investment Survey: Selection & Opinion, May 24, 2006, estimates inflation to be 2.7 percent for 2006, 2.4 percent for 2007 and 2.2 percent for 2008. The Congressional Budget Office, The Budget and Economic Outlook: Fiscal Years 2007-2016, issued January 2006, states that inflation is expected to be 2.8 percent for 2006, 2.2 percent for 2007 and 2.2 percent for 2008 (see attached Schedule 6).

- Q. What are the interest rate forecasts for 2006, 2007 and 2008 and the current interest rates?
- A. Short-term interest rates, those measured by three-month U.S. Treasury Bills, are estimated to be 4.8 percent in 2006, 4.8 percent in 2007 and 4.6 percent in 2008 according to Value Line's predictions. Value Line expects the long-term Thirty-Year U.S. Treasury Bonds to average 5.2 percent in 2006, 5.3 percent in 2007 and 5.5 percent in 2008. The current rate for three-month U.S. Treasury Bills was 4.79 percent as of June 1, 2006, noted on the St. Louis Federal Reserve website, http://research.stlouisfed.org/fred2/series/TB3MS/22. The current rate for Thirty-Year U.S. Treasury Bonds was 5.23 percent as of July 6, 2006, as noted on the CBS MarketWatch website, http://www.marketwatch.com/tools/marketsummary/default.asp?site=mktw.
 - Q. What are the growth estimates and expectations for real GDP?
- A. GDP is a benchmark utilized by the Commerce Department to measure economic growth within the U.S. borders. Real GDP is measured by the actual GDP, adjusted for inflation. Value Line stated that real GDP growth is expected to increase by 3.5 percent in 2006, 3.0 percent in 2007 and 3.1 percent in 2008. The Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2007-2016*, stated that real GDP is expected to

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increase by 3.6 percent in 2006, 3.4 percent in 2007 and 3.1 percent in 2008 (see attached Schedule 6).

- Q. Please summarize the expectations of the economic conditions for the next few years.
- In summary, when combining the previously mentioned sources, inflation is Α. expected to be in the range of 2.2 to 2.8 percent, increase in real GDP in the range of 3.1 to 3.6 percent and long-term interest rates are expected to range from 5.2 to 5.5 percent.

Selected excerpts from The Value Line Investment Survey: Selection & Opinion, July 14, 2006, follow:

> We think we'll get the proverbial soft landing. Following the slower rate of GDP growth indicated for the just-ended quarter, we would expect the economy to grow at a similar rate in the third and the fourth quarters. Growth is likely to stay in that range, or even ease a bit further in the first half of 2007 as the effects of higher interest rates and near-record oil prices are increasingly felt within the economy.

> The Federal Reserve may not have much room to maneuver. The Fed now has raised interest rates at 17 Federal Open Market Committee meetings in a row, dating back to June 2004, taking rates from 1.00% to 5.25% in the process. However, those hikes were enacted in a period of strengthening business activity. Now, growth is slowing, and the Fed must be careful not to raise rates too high and risk bringing on a recession. Hopefully, inflation, which heads the list of Fed concerns, will ease in the current half in response to slowing economic growth.

> We would pay close attention to the signals coming out of the Fed. Recent months have seen a number of Federal Reserve officials warn of rising inflationary pressures. Those warnings typically have preceded rate increases. Should those officials now begin to suggest that slowing GDP growth may be starting to reduce the pricing pressures within the economy, the chances for a relaxation in Fed monetary policies would increase.

> Investor concerns remain high. Not only is the market worried about the Fed and inflation, but it is also fearful about increasing tensions with North Korea and Iran.

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As things stand, S&P sees U.S. real gross domestic product (GDP) slowing from the 5.6% rate of growth reported in the first quarter of this year to a 2.3% rate in the fourth quarter. For all of 2006, we expect GDP to advance 3.4%, and we project that it will slow to a near-trend rate of 2.4% in 2007. We think consumers will ease up on their spending, but the slack will be made up for on the capital spending side. What's more, exports should increase, in our view, as the U.S. dollar begins weakening once again after the Fed's rate-tightening program ends. In all, we don't see a recession in 2006 and think there is only a 25% chance of one occurring in 2007.1

Standard and Poor's: The Outlook. "The Markets Are Never Wrong." The Outlook's Market Insight: 10 pars. Online. Internet. July 7, 2006. Available FTP: http://www.outlook.standardandpoors.com. Directory: NASApp/NetAdvantage/mkt/OutlookMarketInsight.do?subtype=OWMO&pc=NET&tracking=NET&context=C ompany&docId=10226001.

Q. Please describe the DCF model.

A. The DCF model is a market-oriented approach for deriving the cost of common equity. The cost of common equity calculated from the DCF model is inherently capable of attracting capital. This results from the theory that security prices adjust continually over time, so that an equilibrium price exists and the stock is neither undervalued nor overvalued. It can also be stated that stock prices continually fluctuate to reflect the required and expected return for the investor.

The constant-growth form of the DCF model was used in this analysis. This model relies upon the fact that a company's common stock price is dependent upon the expected cash dividends and upon cash flows received through capital gains or losses that result from stock price changes. The interest rate which discounts the sum of the future expected cash flows to the current market price of the common stock is the calculated cost of common equity. This can be expressed algebraically as:

where k equals the cost of equity. Since the expected price of a stock in one year is equal to the present price multiplied by one plus the growth rate, equation (1) can be restated as:

Present Price = Expected Dividends + Present Price
$$(1+g)$$
 (2)
 $(1+k)$ $(1+k)$

where g equals the growth rate and k equals the cost of equity. Letting the present price equal P_0 and expected dividends equal D_1 , the equation appears as:

$$P_0 = \frac{D_1}{(1+k)} + \frac{P_0(1+g)}{(1+k)}$$
(3)

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The cost of equity equation may also be algebraically represented as:

 $k = \frac{D_1}{P_0} + g \tag{4}$

Thus, the cost of common stock equity, k, is equal to the expected dividend yield (D_1/P_0) plus the expected growth in dividends (g) continuously summed into the future. The growth in dividends and implied growth in earnings will be reflected in the current price. Therefore, this model also recognizes the potential of capital gains or losses associated with owning a share of common stock.

The discounted cash flow method is a continuous stock valuation model. The DCF theory is based on the following assumptions:

- 1. Market equilibrium;
- 2. Perpetual life of the company;
- 3. Constant payout ratio;
- 4. Payout of less than 100% earnings;
- 5. Constant price/earnings ratio;
- 6. Constant growth in cash dividends;
- 7. Stability in interest rates over time;
- 8. Stability in required rates of return over time; and
- 9. Stability in earned returns over time.

Flowing from these, it is further assumed that an investor's growth horizon is unlimited and that earnings, book values and market prices grow hand-in-hand. Although the entire list of the above assumptions is rarely met, the DCF model is a reasonable working model describing an actual investor's expectations and resulting behaviors.

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Q. Please describe the CAPM.

A. The CAPM describes the relationship between a security's investment risk and its market rate of return. This relationship identifies the rate of return which investors expect a security to earn so that its market return is comparable with the market returns earned by other securities that have similar risk. The general form of the CAPM is as follows:

$$k = R_f + \beta (R_m - R_f)$$

where:

the expected return on equity for a specific security;

 $R_f =$ the risk-free rate;

beta; and

 $R_m - R_f =$ the market risk premium.

The first term of the CAPM is the risk-free rate (R_f). The risk-free rate reflects the level of return that can be achieved without accepting any risk. In reality, there is no such risk-free asset, but it is generally represented by U.S. Treasury securities.

The second term of the CAPM is beta (β). Beta is an indicator of a security's investment risk. It represents the relative movement and relative risk between a particular security and the market as a whole (where beta for the market equals 1.00). Securities with betas greater than 1.00 exhibit greater volatility than do securities with betas less than 1.00. This causes a higher beta security to be less desirable to a risk-averse investor and therefore requires a higher return in order to attract investor capital away from a lower beta security.

The final term of the CAPM is the market risk premium (R_m - R_f). The market risk premium represents the expected return from holding the entire market portfolio less the expected return from holding a risk-free investment.

AN ANALYSIS OF THE COST OF CAPITAL

FOR

KANSAS CITY POWER & LIGHT COMPANY CASE NO. ER-2006-0314 SCHEDULES

BY

MATTHEW J. BARNES

UTILITY SERVICES DIVISION

MISSOURI PUBLIC SERVICE COMMISSION

AUGUST 2006

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

List of Schedules

Schedule	
Number	Description of Schedule
1	List of Schedules
2-1	Federal Reserve Discount Rate and Federal Reserve Funds Rate Changes
2-2	Graph of Federal Reserve Discount Rate and Federal Reserve Funds Rate Changes
3-1	Average Prime Interest Rates
3-2	Graph of Average Prime Interest Rates
4-1	Rate of Inflation
4-2	Graph of Rate of Inflation
5-1	Average Yields on Mergent's Public Utility Bonds
5-2	Average Yields on Thirty-Year U.S. Treasury Bonds
5-3	Graph of Average Yields on Mergent's Public Utility Bonds and Thirty-
	Year U.S. Treasury Bonds
5-4	Graph of Monthly Spreads Between Yields on Mergent's Public Utility
	Bonds and Thirty-Year U.S. Treasury Bonds
5-5	Moody's Baa Corporate Bond Yields
6	Economic Estimates and Projections, 2006-2008
7	Historical Capital Structures for Great Plains Energy
8	Selected Financial Ratios for Great Plains Energy
9	Capital Structure as of December 31, 2005 for Great Plains Energy
10	Embedded Cost of Long-Term Debt as of December 31, 2005 for Great Plains Energy
11	Embedded Cost of Preferred Stock as of December 31, 2005 for Great Plains Energy
12	Criteria for Selecting Comparable Electric Utility Companies
13	Comparable Electric Utility Companies for Kansas City Power and Light Company
14-1	Ten-Year Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates
	for the Comparable Electric Utility Companies and Great Plains Energy
14-2	Five-Year Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates
	for the Comparable Electric Utility Companies and Great Plains Energy
14-3	Average of Ten and Five-Year Dividends Per Share, Earnings Per Share & Book Value Per Share
	of Growth Rates for the Comparable Electric Utility Companies and Great Plains Energy
15	Historical and Projected Growth Rates for the Comparable Electric Utility Companies and
	Great Plains Energy
16	Average High / Low Stock Price for February 2006 through May 2006
	for the Comparable Electric Utility Companies and Great Plains Energy
17	Discount Cash Flow (DCF) Estimated Costs of Common Equity for the Comparable
	Electric Utility Companies and Great Plains Energy
18	Capital Asset Pricing Model (CAPM) Costs of Common Equity Estimates
	Based on Historical Return Differences Between Common Stocks and Long-Term U.S. Treasuries
	for the Comparable Electric Utility Companies and Great Plains Energy
19	Selected Financial Ratios for the Comparable Electric Utility Companies and Great Plains Energy
20	Public Utility Revenue Requirement or Cost of Service
21	Weighted Cost of Capital as of December 31, 2005 for Kansas City Power and Light Company

Federal Reserve Discount Rate Changes

Date	Federal Reserve Discount Rate	Federal Reserve Funds Rate	Date	Federal Reserve Discount Rate	Federal Reserve Funds Rate
07/19/82	11.50%	1 01100 11010	01/31/96	5.00%	5.25%
07/31/82	11.00%		03/25/97	0.0070	5.50%
08/14/82	10.50%		12/12/97	5.00%	0.0074
08/26/82	10.00%		01/09/98	5.00%	
10/10/82	9.50%		03/06/98	5.00%	
11/20/82	9.00%		09/29/98	0.0070	5.25%
12/14/82	8.50%		10/15/98	4.75%	5.00%
01/01/83	8.50%		11/17/98	4.50%	4.75%
12/31/83	8.50%		06/30/99	4.50%	5.00%
04/09/84	9.00%		08/24/99	4.75%	5.25%
11/21/84	8.50%		11/16/99	5.00%	5.50%
12/24/84	8.00%		02/02/00	5.25%	5.75%
05/20/85	7.50%		03/21/00	5.50%	6.00%
03/07/86	7.00%		05/19/00	6.00%	6.50%
04/21/86	6.50%		01/03/01	5.75%	6.00%
07/11/86	6.00%		01/04/01	5.50%	6.00%
08/21/86	5.50%		01/31/01	5.00%	5.50%
09/04/87	6.00%		03/20/01	4.50%	5.00%
08/09/88	6.50%		04/18/01	4.00%	4.50%
02/24/89	7.00%		05/15/01	3.50%	4.00%
07/13/90	1.0070	8.00%	06/27/01	3.25%	3,75%
10/29/90		7.75%	08/21/01	3.00%	3.50%
11/13/90		7.50%	09/17/01	2.50%	3.00%
12/07/90		7.25%	10/02/01	2.00%	2.50%
12/18/90		7.00%	11/06/01	1.50%	2.00%
12/19/90	6.50%	1.0070	12/11/01	1.25%	1.75%
01/09/91	0.0070	6.75%	11/06/02	0.75%	1.25%
02/01/91	6.00%	6.25%	01/09/03	2.25%**	1.25%
03/08/91	0.0070	6.00%	06/25/03	2.00%	1.00%
04/30/91	5.50%	5.75%	06/30/04	2.25%	1.25%
08/06/91	0.0070	5.50%	08/10/04	2.50%	1.50%
09/13/91	5.00%	5.25%	09/21/04	2.75%	1.75%
10/31/91	0.007	5.00%	11/10/04	3.00%	2.00%
11/06/91	4.50%	4.75%	12/14/04	3.25%	2.25%
12/06/91		4.50%	02/02/05	3.50%	2.50%
12/20/91	3.50%	4.00%	03/22/05	3.75%	2.75%
04/09/92		3.75%	05/03/05	4.00%	3.00%
07/02/92	3.00%	3.25%	06/30/05	4.25%	3.25%
09/04/92		3.00%	08/09/05	4.50%	3.50%
01/01/93		0.00%	09/20/05	4.75%	3.75%
12/31/93	No Changes	No Changes	11/01/05	5.00%	4.00%
02/04/94		3.25%	12/13/05	5.25%	4.25%
03/22/94		3.50%	01/31/06	5.50%	4.50%
04/18/94		3.75%	03/28/06	5.75%	4.75%
05/17/94	3.50%	4.25%	05/10/06	6.00%	5.00%
08/16/94	4.00%	4.75%	06/29/06	6.25%	5.25%
11/15/94	4.75%	5.50%	33,23,33		
02/01/95	5.25%	6.00%			
07/06/95		5.75%			
12/19/95		5.50%			

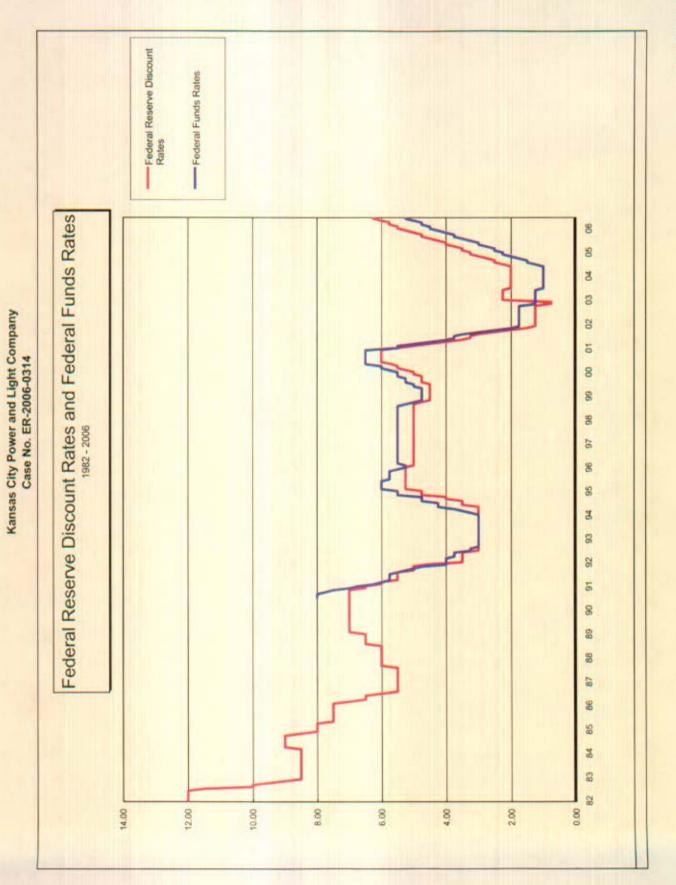
Federal Reserve Discount rate Federal Reserve Funds rate

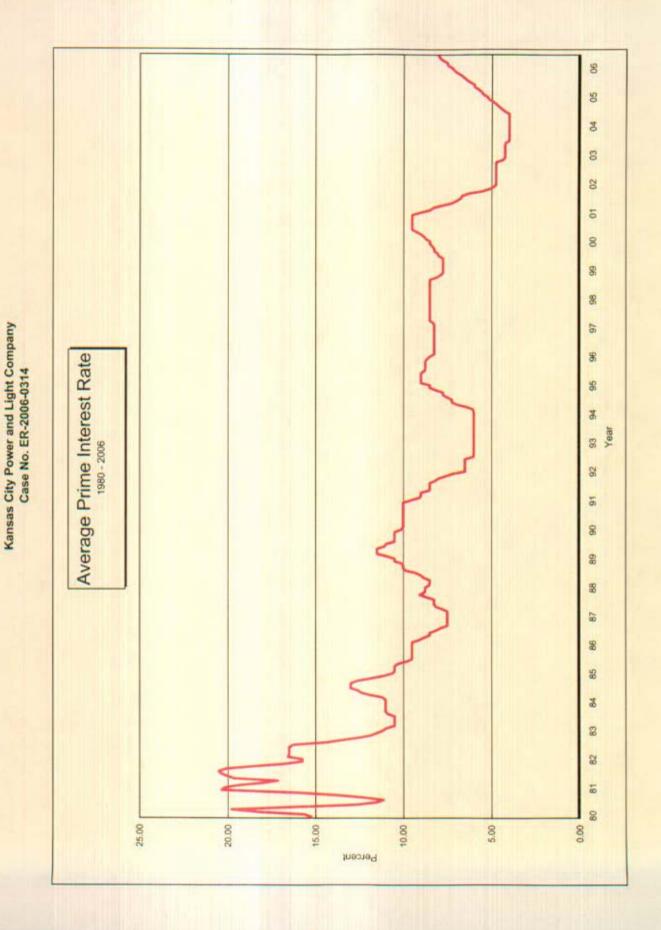
http://www.newyorkfed.org/markets/statistics/dlyrates/fedrate.html http://www.newyorkfed.org/markets/statistics/dlyrates/fedrate.html

Note: Interest rates as of December 31 for each year are underlined.

^{*} Staff began tracking the Federal Funds Rate.

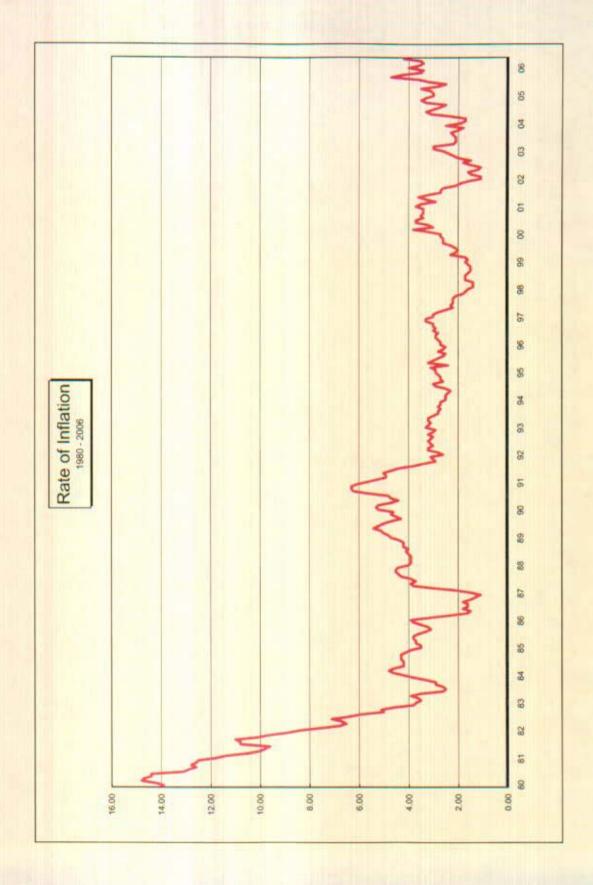
**Revised discount window program begins. Reflects rate on primary credit. This revised discount window policy results in incomparability of the discount rates after January 9, 2003 to discount rates before January 9, 2003.





Rate of Inflation

Source: U.S. Dept of Labor, Bureau of Labor Statistics, Consumer Price Index - All Urban Consumers, Change for 12-Month Period, Bureau of Labor Statistics, http://www.bls.gov/schedule/archives/cpi.nr.htm.



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

Average Yields on Mergent's Public Utility Bonds

MoVeer Rain (%) MoVeer Rain (%) MoVeer Rain (%) MoVeer 8.25 8
Mo/Year Rate (%) Mo/Year Rate May Lan 1996 7.20 Jan 2000 Feb 7.37 Feb May Apr 7.98 May Apr May 8.07 Jan 8.07 Jan 8.07 Jan 8.07 Jan Aug 8.07 Jan 8.07 Jan 8.07 Jan Aug 8.07 Jan Jan Aug 8.07 Jan
Rate (%) MoV value Rate (%) MoV value Rate (%) MoV value Rate (%) MoV value (%) MoV va
Moor Many Many Many Many Many Many Many Many
2252222255
Jan 2004 Mar Apr May Jun Jun Aug

Source Mergent Bond Record for June 2006 PU Bonds (page 8)

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

Average Yields on Thirty-Year U.S. Treasury Bonds

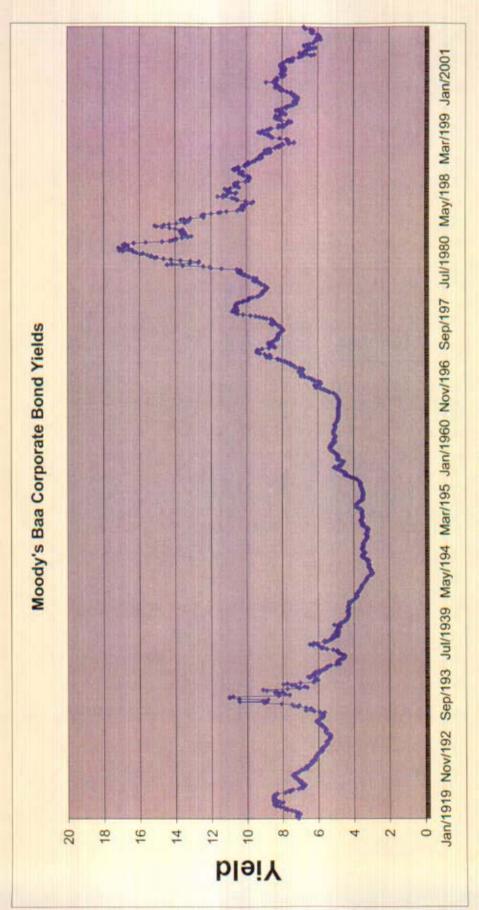
Kate (%)	4.93	4.74	5.14	5.42	5.41	322	200	4 30	4.86	4,89	4.86	4.73	4.55	4.78	4.65	4.49	4.29	4.41	4.46	4.47	4.67	4.73	4,66	4 59	4.58	4.73	5.06	5.20	5.16																			
Jan 2004	Feb	Mar	Apr	May	unc	no.	7	den	8	Nov	Dec	Jan 2005	Feb	Mar	Apr	May	unn	Jul.	Aug	Sep	DO .	NON	Dec	Jan 2006	Feb	Mar	Apr	May	Jun																			
Rate (%) 6.63	623	6.05	5.85	6.15	5.83	0.00	27.5	283	5.80	5.78	5,49	200	5.45	200	5.65	5.78	299	5.61	5.48	5.48	5.32	5.12	5.48	5.44	5.39	5.71	5.67	5.64	5.52	5.38	5.08	4.76	4.93	4.95	4.92	000	4.80	4 90	4.53	4.37	4.93	5.30	5.14	5.16	5.13	5.08		
Jan 2000	Feb	Mar	Apr	May	uno.	10.	Aug	den	oct.	Nov	Dec	Jan 2001	Feb	Mar	Apr	May	non	Jul	Aug	Sep	Odd	NOV	Dec	Jan 2002	Feb	Mar	Apr	May	nne	7	Aug	Sep	o o	Nov	Dec	Enth Colum	Mar	Ane	May	Jun	John Committee of the C	Aug	Sep	oct	Nov	Dec		
Hate (%)	6.24	6.60	67.9	6.93	7.06	2007	0.04	COV.	6.81	6.48	6.55	6.83	699	6.93	50.2	6.94	6.77	6.51	6.58	6.50	6.33	6.11	5.99	5.81	5.89	5.95	5.92	5.93	5.70	5.68	5.54	6.20	5.01	220	90'6	0,10	5.58	5.55	5.81	6.04	5.98	6.07	6.07	6.26	6.15	6.35		
Jan 1996	Feb	Mar	Apr	May	unc	7	Sec.	O O	000	Nov	Dec	Jan 1997	Feb	Mar	Apr	May	Jun	975	Aug	Sep	Oct	Nov	Dec	Jan 1998	Feb	Mar	Apr	May	- In	P	Aug	Sep	See	Nov	Dec	East 19079	New York	Acr	May	150	Jol	Aug	Sep	8	Nov	Dec		
7.58	7.85	7.97	7.96	7.89	1.84	29.	130	7	7.53	7.61	7.44	3.	7.09	6.82	6.85	6.92	6.81	6.63	6.32	6.00	26.9	6.21	6.25	6.29	6.49	6.91	7.27	7.41	7.40	7.58	7.49	7.71	36	808	1,87	7.60	7.45	7.36	6.95	6.57	6.72	6.86	6.55	6.37	6.26	90'9		
Jan 1992	Feb	Mar	Apr	May	unc	In.	Aug	cen	000	Nov	Dec	Jan 1993	Feb	Mar	Apr	May	non-	Jol	Aug	Sep	Odd	Nov	Dec	Jan 1994	Feb	Mac	Apr	May	Jun	P	Aug	Sep	0	Nov	Dec	East 1950	Mar	Acr	May	Jun	Joe .	Aug	Sep	Oct	Nov	Dec		
8.83	8.43	8.63	8.95	9.23	00.6	0 0	9.32	9.00	8.89	8.02	10.6	8.93	106	21.6	9.03	8.83	8.27	8.08	8.12	8.15	8.00	7.90	7.90	8.26	8.50	8.56	8.76	8.73	8.46	8.50	8.86	9 03	8.86	200	8.24	8 02	20 M	8.21	8.27	8.47	8.45	8.14	7.95	7.93	7.92	7.70		
Jan 1988	Feb	Mar	Apr	May	unn	7.	Aug	den	B	Nov	Dec	Jan 1989	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan 1990	Feb	Mar	Apr	May	Jun	P,	Aug	Sep	8	Nov	Dec	East 1961	Mar	Ace	May	Jun	Joe .	Aug	Sap	od	Nov	Dec		
11.75	11.95	12.38	12.65	13.43	13.44	13.21	12.54	12.29	11.98	11.56	11.52	11.45	11,47	11,81	11.47	11.05	10.44	10.50	10.56	10.61	10.50	10.06	450	9.40	8.93	7.96	7.39	7.52	7.57	727	7.33	7.62	7.70	7.52	737	1.00	1 55	R 25	8.78	8.57	8.64	8.97	89.6	19'61	8.95	9.12		
Jen 1984	Feb	Mar	Apx	May	Jun	7	Aug	dos	Dog	Nov	Doc	Jan 1985	Feb	Mar	Apr	May	Jun	70	Aug	Sep	Oct	Nov	Dec	Jan 1986	Feb	Mar	Apr	May	Jun	304	Aug	Sep	000	Now	Dec	Jan 1967	Mar	Are	May	Jun	7	Aug	Sep	Oct	Nov	Dec		
10.60	12.13	12.34	11.40	10.36	188	10.24	11.00	11.34	11.59	12.37	12.40	12.14	12.80	12.69	13.20	13.60	12.96	13.59	14.17	14.67	14.68	13.35	13.45	14.22	14.22	13.53	13.37	13.24	13.92	13.55	12.77	12.07	11.17	10.54	10.52	10.63	10.00	10.48	10.53	10.93	11.40	11.82	11.63	11.58	11.75	11.88		
Jan 1980	Feb	Mar	Apr	Way	you	2	Aug	Cep	000	Nov	Dec	Jan 1981	Feb	Mar	Apr	Way	uni	N	grag.	Sep	DO.	Nov	Dec	Jan 1982	Feb	Mar	Apr	May	lun	lui	Aug	Sep	Det	Nov	Dec	Jan 1983	90	Ane	May	inu	Total Control	Aud	Sep	Dog	Nov	Dec		

- Mergent's Public Utility Bond Average Yields on Mergent's Public Utility Bonds and Thirty-Year U.S. Treasury Bonds (1980 - 2006) Kansas City Power and Light Company Case No. ER-2006-0314 14.00 8.00 6.00 18.00 16.00 12.00 10.00 4.00 2.00 Percent

SCHEDULE 5-4

Monthly Spreads Between Yields on Mergent's Public Utility Bonds and Thirty-Year U.S. Treasury Bonds (1986 - 2006) 3.04 High Spread Low Spread Year (Average) 1.51 3.5 3.0 2.5 0.5 0.0 1.5 1.0 Percentage Point

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



Source: http://research.stlouisfed.org/fred2/series/BAV119/Max7cs=Large&crb=on&cosd=1919-01-01&coed=2006-06-01

			Ecc	Economic Estimates and Projections, 2006-2008	stimates	s and Proj	ections,	2006-20	80						
		Inflation Rate	tate		Real GDP	4	2	Unemployment	ent	N-E	3-Mo. T-Bill Rate	tate	30-Ye	30-Year T-Bond Rate	Rate
Source	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008	2006	2007	2008
Value Line Investment Survey - Selection & Opinion (03-24-06, page 1109)	2.70%	6 2.40%		3.50%	3.00%	3.10%	4.70%	4.90%	4.80%	4.80%	4.80%	4.60%	5.20%	5.30%	5.50%
The Budget and Economic Outlook FY2007-2016	2.80%	. 2.20%	2.20%	3.60%	3.40%	3.10%	5.00%	5.00%	5.20%	4.50%	4.50%	4.40%	NIA	NIA	NIA
Current rate	4.20%			5.60%			4.60%			4.79%			5.23%		
Notes: N.A. = Not Available. Value Line data for 2006-2008 are estimated. CBO data for 2006 and 2007 are forecasted, data for 2008 is projected.	ted. sd, data for 2008	is projecter	¥												
Sources of Current Rates: Inflation:	The Bureau of Labor Statistics, Consumer Price Index - All Urban Consumers, 12-Month Period Ending, May 31, 2006 (see first paragraph)	of Labor Sta	itistics, Cons	numer Price I	ndex - All (Urban Consu	mers, 12-Mor	of Period	Ending, May	31, 2006 (see	first para	graph).			
GDP:	U.S. Department of Commerce, Bureau of Economic Analysis for the Quarter Ending June 29, 2006 (see first paragraph) http://www.bea.gov/beainewsreingdpnewsreiessa.htm	a cow/bear	merce, Bure	au of Econor	nic Analys	is for the Qui	arter Ending	June 29, 20	306 (see first	paragraph).					
Unemployment:	The Bureau of Labor Statistics, Economy Situation Summary - Unemployment Rate, May 2006. http://www.bis.gov/news.release/empst.red.htm	of Labor Sta	elease/empsi	ned htm	n Summar	y - Unemploy	ment Rate, N	May 2006.							
3-Month Treasury:	St. Louis Federal Reserve website for June 1, 2006 http://research.shousfed.org/fred2/seres/TB3MS/ZZ	stlouisfed.	we website for	r June 1, 200	9										
30-Yr. T-Bond:	CBS MarketWatch website on July 6, 2006. http://www.marketwatch.com/hods.marketsummary/defauit.asp?site=mktw	Vatch webs vrketwatch.c	ate on July 6	2006. cetsummaryid	efault.asp?	stermktw							I		
Other Sources (2006 - 2008):	ValueLine Investment Survey Se	vestment S	urvey Select	lection & Opinion, May 24, 2006, page 1109	, May 24.	2006, page 11	601	1007 1016	9000	100					
	The Congressional Budget Unice, the Budget and Economic Outdook. Fiscal tears 2007-2016, January 2000, page 40. http://www.cbo.gov/fipdoca/702/701-26-BudgetOutlook.pdf	o govillpdoc	s/76xx/doc70	27/01-26-8ud	getOutlook	pdf	INCOLUMN TANK	2007-100	agual à con	on office of					

	Histo	rical Consolidated C	Historical Consolidated Capital Structures for Great Plains Energy	Great Plains Energy		
			(Millions of Dollars)			
Capital Components	2001	2002	2003	2004	2005	5-Year Average
Common Equity	\$778,812.0	\$939,470.0	\$957,294.0	\$1,141,594.0	\$1,229,711.0	\$1,009,376.2
Preferred Stock	39,000.0	39,000.0	39,000.0	39,000.0	39,000.0	\$39,000.0
Long-Term Debt	1,344,953.0 *	1,332,388.0	1,346,936.0	1,295,612.0	1,145,155.0	\$1,293,008.8
Short-Term Debt	155,139.0	0.0	33,750.0	0.0	0.0	\$37,777.8
Total	\$2,317,904.0	\$2,310,858.0	\$2,376,980.0	\$2,476,206.0	\$2,413,866.0	\$2,379,162.8
Capital Components	2001	2002	2003	2004	2005	5-Year Average
Common Equity	33.60%	40.65%	40.27%	46.10%	50.94%	42.31%
Preferred Stock	1.68%	1.69%	1.64%	1.57%	1.62%	1.64%
Long-Term Debt	58.02%	27.66%	26.67%	52.32%	47.44%	54.42%
Short-Term Debt	%69.9	%00.0	1.42%	%00.0	%00.0	1.62%
Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Source: Great Plains Energy's SEC 10-K for 12/31/2002	ergy's SEC 10-K for	12/31/2002.				
Great Plains En	Great Plains Energy's SEC 10-K for 12/31/2003.	2/31/2003.				
Great Plains Eng Response to Sta	Great Plains Energy's SEC 10-K for 12/31/2005. Response to Staff Data Request 0019.	12/31/2005.				
Note: *Includes current maturities of long-term debt.	maturities of long-term	n debt.				

SCHEDULE 8

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

Selected Financial Ratios for Great Plains Energy

Financial Ratios	2001	2002	2003	2004	2005
Return on Common Equity	12.60%	13.60%	16.40%	15.50%	13.30%
Earnings Per Corrunor Share	\$1.59	\$2.04	\$2.27	\$2.46	\$2.18
Cash Dividends Per Common Share	\$1.66	\$1.66	\$1.66	\$1.66	\$1.66
Common Dividend Payout Ratio	104.40%	81.37%	73.13%	67.48%	76.15%
Year-End Market Price Per Common Share	\$25.20	\$22.88	\$31.82	\$30.28	\$27.96
Year-End Book Value Per Common Share	\$12.59	\$13.58	\$13.82	\$15.35	\$16,35
Year-End Market-to- Book Ratio	2.00 ×	1.68 ×	2.30 ×	x 76.1	x 17.1
Funds From Operations (FFO) Interest Coverage Ratio	3.1 ×	3.9 ×	4.9 x	4.4 ×	¥.6 ×
FFO/Average Total Debt	18%	20%	24%	23%	24%
Corporate Credit Rating (Standard & Poor's Corporation)	N.R.	888	888	888	888

Common Dividend Payout Ratio = Common Dividends Paid / Earnings Per Common Share.

Year-End Market-to-Book Ratio = Year-End Market Price Per Common Share / Year-End Book Value Per Common Share.

Sources: Standard and Poor's CreditStats, August 11, 2005.
Standard and Poor's Stock Guide, January 2003, January 2004, January 2006, and January 2006.
Value Line Investment Survey for Great Plains Energy, March 31, 2006.
Response to Staff Data Request 0031.

Notes: *2005 Year-end Book Value Per Common Share is an estimate.

Capital Structure as of December 31, 2005 Great Plains Energy

Capital Component	Am	Dollar ount (000's)	Percentage of Capital
Common Stock Equity	\$	1,229,711	50.94%
Preferred Stock	\$	39,000	1.62%
Long-Term Debt	\$	1,145,155	47.44%
Short-Term Debt	\$		0.00%
Total Capitalization	\$	2,413,866	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 December 31, 2005 is based on the net basence of long-term debt, including current maturities (total principal amount of long-term debt outstanding less unamortized expenses and discounts) shown on Schedule 10. This balance also includes the amount of non-regulated debt. These balances were provided in KCP&L's response to DR 0019.

 Short-term debt balance net of construction work in progress (CWIP) was negative as of December 31, 2005. 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. 0019.

SCHEDULE 10 and 11

HAS BEEN DEEMED

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IN ITS ENTIRETY

Criteria for Selecting Comparable Electric Utility Companies

(1)	(2)	(3)	(4)	(5)	(6)		(7)
	Stock	Information	10-Years	At Least Investment	Two Sources for Projected Growth	No	Comparable Company
Vertically Integrated	Publicly	Printed In	of Data	Grade Credit	Available with One	Missouri	Met All
Electric Utility Companies(Ticker)	Traded	Value Line	Available	Rating	from Value Line	Operations	Criteria
Cen. Vermont Pub. Serv.(CV)	Ycs	Yes	Yes	No			
El Paso Electric(EE)	Yes	Yes	No				
Empire Dist. Electric(EDE)	Yes	Yes	Yes	Yes	Yes	No	
Green Mountain Power(GMP)	Yes	Yes	Yes	Yes	No		
Hawaiian Electric(HE)	Yes	Yes	Yes	Yes	Yes	Yes	Service Yes
IDACORP, Inc.(IDA)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
PacifiCorp(N.A.)	No						
Pinnacle West Capital(PNW)	Yes	Yes	Yes	Yes	Yes	' Yes '	Yes See
Portland General Electric Co.(N.A.)	No			· · · · · · · · · · · · · · · · · · ·			
Puget Energy Inc.(PSD)		Yes J	Yes	Yes	Yes	Yes	Yes 🦸
Southern Co.(SO)	Yes	Yes	Yes	Yes	Yes	Yer	Na Yea 🛠

Sources: Columns 1, 2 and 5 = Standard & Poor's RatingsDirect.

Columns 3, 4 and 6 = The Value Line Investment Survey: Ratings & Reports.

Columns 6 = May 2006 Earnings Guide and I/B/E/S Inc/s Institutional Brokers Estimate System, June 15, 2006.

Notes: N.A. = Not available because not publicly traded.

Comparable Electrical Utility Companies for Kansas City Power & Light

	Ticker	
Number	Symbol	Company Name
1	HE	Hawaiian Electric Industries, Inc.
2	IDA	IDACORP, Inc.
3	PNW	Pinnacle West Capital
4	PSD	Puget Energy Inc.
5	SO	Southern Co.

Ten-Year Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates for the Six Comparable Electric Utility Companies and Great Plains Energy

	***************************************	10-Year Annual Compound Growth Rates		Average of 10 Year Annual Compound
Company Name	DPS	EPS	BVPS	Growth Rates
Hawaiian Electric Industries, Inc.	0.50%	1.50%	2.00%	1.33%
IDACORP, Inc.	-3.00%	-2.50%	2.50%	-1.00%
Pinnacle West Capital	11.00%	2.00%	5.00%	6.00%
Puget Energy Inc.	-6.00%	-3.50%	-1.00%	-3.50%
Southern Co.	<u>2.00%</u>	<u>2.50%</u>	<u>1.00%</u>	<u>1.83</u> %
Average	0.90%	<u>0.00%</u>	1.90%	0.93%
Standard Deviation	5.77%	2.49%	1.96%	3.16%
Great Plains Energy	1.50%	4.00%	0.00%	1.83%

Source: The Value Line Investment Survey: Ratings & Reports, March 31, May 12, and June 2, 2006.

Five-Year Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates for the Five Comparable Electric Utility Companies and Great Plains Energy

	***************************************	5-Year Annual Compound Growth Rates	***************************************	Average of 5 Year Annual Compound
Company Name	DPS	EPS	BVPS	Growth Rates
Hawaiian Electric Industries, Inc.	0.00%	1.00%	3.00%	1.33%
IDACORP, Inc.	-6.00%	-11.00%	3.00%	-4.67%
Pinnacle West Capital	6.50%	-4.50%	4.00%	2.00%
Puget Energy Inc.	-11.50%	-7.50%	0.50%	-6.17%
Southern Co.	1.00%	2.00%	<u>-1.00%</u>	0.67%
Average	-2.00%	<u>-4.00%</u>	1.90%	-1.37%
Standard Deviation	6.19%	4.95%	1.85%	3.37%
Great Plains Energy	0.00%	7.00%	0.00%	2.33%

Source: The Value Line Investment Survey: Ratings & Reports, March 31, May 12, and June 2, 2006.

Average of Ten- and Five-Year Dividends Per Share, Earnings Per Share & Book Value Per Share Growth Rates for the Five Comparable Electric Utility Companies and Great Plains Energy

	10-Year	5-Year	Average of
	Average	Average	5-Year &
	DPS, EPS &	DPS, EPS &	10-Year
Company Name	BVPS	BVPS	Averages
Hawaiian Electric Industries, Inc.	1.33%	1.33%	1.33%
IDACORP, Inc.	-1.00%	-4.67%	-2.83%
Pinnacle West Capital	6.00%	2.00%	4.00%
Puget Energy Inc.	-3.50%	-6.17%	-4.83%
Southern Co.	1.83%	0.67%	1.25%
Average	0.93%	-1.37%	-0.22%
Great Plains Energy	1.83%	2.33%	2.08%

Historical and Projected Growth Rates for the Five Comparable Electric Utility Companies and Great Plains Energy

	(1)	(2)	(3)	(4)	(5)	(6)
		Projected				
	Historical	5-Year	Projected	Projected		Average of
	Growth Rate	EPS Growth	5-Year	3-5 Year	Average	Historical
	(DPS, EPS and	IBES	EPS Growth	EPS Growth	Projected	& Projected
Company Name	BVPS)	(Mean)	S&P	Value Line	Growth	Growth
Hawaiian Electric Industries, Inc.	1.33%	3.38%	3.00%	3.00%	3.13%	2.23%
IDACORP, Inc.	-2.83%	4.67%	5.00%	4.50%	4.72%	0.95%
Pinnacle West Capital	4.00%	7.20%	7.00%	6.00%	6.73%	5.37%
Puget Energy Inc.	-4.83%	3.50%	4.00%	5.00%	4.17%	-0.33%
Southern Co.	1.25%	4.75%	5.00%	5.00%	4.92%	3.08%
Average	-0.22%	4.70%	4.80%	4.70%	4.73%	2,26%
Great Plains Energy	2.08%	2.50%	2.00%	Nil	2.25%	2.17%

Proposed Range of Growth for Comparables:

4.70%-4.80%

Column 5 = [(Column 2 + Column 3 + Column 4)/3]

Column 6 = [(Column 1 + Column 5)/2]

Sources: Column 1 = Average of 10-Year and 5-Year Annual Compound Growth Rates from Schedule 13-3.

Column 2 = I/B/E/S Inc.'s Institutional Brokers Estimate System, June 15, 2006.

Column 3 = Standard & Poor's Earnings Guide, June 2006.

Column 4 = The Value Line Investment Survey: Ratings and Reports, March 31, May 12, and June 2, 2006.

Average High / Low Stock Price for February 2006 through May 2006 for the Five Comparable Electric Utility Companies and Great Plains Energy

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Feb	2006	March	n 2006	April	2006	May	2006	Average High/Low
	High	Low	High	Low	High	Low	High	Low	Stock
	Stock	Price							
Company Name	Price	(2/06 - 6/06)							
Hawaiian Electric Industries, Inc.	\$27.050	\$25.910	\$27.260	\$26.350	\$27.440	\$26.200	\$27.050	\$25.690	\$26.619
IDACORP, Inc.	\$33.280	\$30.500	\$33.100	\$30.700	\$34.180	\$32.000	\$35.200	\$32.270	\$32.654
Pinnacle West Capital	\$42.650	\$40.890	\$41.010	\$38.760	\$41.060	\$38.980	\$40.490	\$38.310	\$40.269
Puget Energy Inc.	\$21.670	\$20.750	\$21.680	\$20.700	\$21.430	\$20.130	\$21.290	\$20.280	\$20.991
Southern Co.	\$34.850	\$33.020	\$34.100	\$32.340	\$33.250	\$31.130	\$32.450	\$30.480	\$32.703
Great Plains Energy	\$29.130	\$28.010	\$28.620	\$27.700	\$29.250	\$27.910	\$29.000	\$27.280	\$28.363

Notes:

Column 9 = [(Column 1 + Column 2 + Column 3 + Column 4 + Column 5 + Column 6 + Column 7 + Column 8) / 8].

Sources: S & P Stock Guides: March 2006, April 2006, May 2006 and June 2006.

Discounted Cash Flow (DCF) Estimated Costs of Common Equity for the Five Comparable Electric Utility Companies and Great Plains Energy

	(1)	(2)	(3)	(4)	(5)
--	-----	-----	-----	-----	-----

	Eveneted	Average High/Low	Projected	Average of Historical	Estimated Cost of
	Expected Annual	Stock	Dividend	& Projected	Common
Company Name	Dividend	Price	Yield	Growth	Equity
Hawaiian Electric Industries, Inc.	\$1.24	\$26.619	4.66%	2.23%	6.89%
IDACORP, Inc.	\$1.20	\$32.654	3.67%	0.95%	4.62%
Pinnacle West Capital	\$2.08	\$40.269	5.17%	5.37%	10.53%
Puget Energy Inc.	\$1.00	\$20.991	4.76%	-0.33%	4.43%
Southern Co.	\$1.58	\$32.703	4.83%	3.08%	7.91%
Average			4.62%	2.26%	6.88%
Great Plains Energy	\$1.66	\$28.363	5.85%	2.17%	8.02%

Proposed Dividend Yield:

4.62%

Proposed Range of Growth:

4.70% - 4.80%

Estimated Proxy Cost of Common Equity: 9.32%-9.42%

GPE Company-Specific Using

Average Projected Growth

8.10%

GPE Company-Specific Using

IBES Average Growth

8.35%

Notes: Column 1 = Estimated Dividends Declared per share represents the average projected dividends for 2006 and 2007

Column 3 = (Column 1 / Column 2).

Column 5 = (Column 3 + Column 4).

Sources: Column 1 = The Value Line Investment Survey: Ratings and Reports, March 31, May 12, June 2, 2006.

Column 2 = Schedule 15.

Column 4 = Schedule 14.

Capital Asset Pricing Model (CAPM) Costs of Common Equity Estimates Based on Historical Return Differences Between Common Stocks and Long-Term U.S. Treasuries for the Five comparable Electric Utility Companies and Great Plains Energy

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			Arithmetic	Geometric	Geometric	Arithmetic	Geometric	Geometric
			Average	Average	Average	CAPM	CAPM	CAPM
			Market	Market	Market	Cost of	Cost of	Cost of
	Risk	Company's	Risk	Risk	Risk	Common	Common	Common
	Free	Value Line	Premium	Premium	Premium	Equity	Equity	Equity
Company Name	Rate	Beta	(1926-2005)	(1926-2005)	(1996-2005)	(1926-2005)	(1926-2005)	(1996-2005)
Hawaiian Electric Industries, Inc.	5.16%	0.70	6.50%	4.90%	1.48%	9.71%	8.59%	6.20%
IDACORP, Inc.	5.16%	0.95	6.50%	4.90%	1.48%	11.34%	9.82%	6.57%
Pinnacle West Capital	5.16%	0.95	6.50%	4.90%	1.48%	11.34%	9.82%	6.57%
Puget Energy Inc.	5.16%	0.80	6.50%	4.90%	1.48%	10.36%	9.08%	6.34%
Southern Co.	5.16%	0.65	6.50%	4.90%	1.48%	9.39%	8.35%	6.12%
Average		0.81				10.43%	9.13%	6.36%
Great Plains Energy	5.16%	0.90	6.50%	4.90%	1.48%	11.01%	9.57%	6.49%

Sources:

- Column 1 = The appropriate yield is equal to the average 30-year U.S. Treasury Bond yield for June 2006 which was obtained from the St. Louis Federal Reserve website at http://research.stlouisfed.org/fred2/series/GS30/22.
- Column 2 = Beta is a measure of the movement and relative risk of an individual stock to the market as a whole as reported by the Value Line Investment Survey: Ratings & Reports, March 31, May 12, and June 2, 2006.
- Column 3 = The Market Risk Premium represents the expected return from holding the entire market portfolio less the expected return from holding a risk free investment. The appropriate Market Risk Premium for the period 1926 2005 was determined to be 6.50% based on an arithmetic average as calculated in Ibbotson Associates, Inc.'s Stocks, Bonds, Bills, and Inflation: 2006 Yearbook.
- Column 4 = The Market Risk Premium represents the expected return from holding the entire market portfolio less the expected return from holding a risk free investment. The appropriate Market Risk Premium for the period 1926 2005 was determined to be 4.90% based on a geometric average as calculated in Ibbotson Associates, Inc.'s Stocks, Bonds, Bills, and Inflation: 2006 Yearbook.
- Column 5 = The Market Risk Premium represents the expected return from holding the entire market portfolio less the expected return from holding a risk free investment. The appropriate Market Risk Premium for the period 1996 2005 was determined to be 2.29% as calculated in Ibbotson Associates, Inc.'s Stocks, Bonds, Bills, and Inflation: 2006 Yearbook.

Column 6 = (Column 1 + (Column 2 * Column 3)).

Column 7 = (Column 1 + (Column 2 * Column 4)).

Column 8 = (Column 1 + (Column 2 * Column 5)).

Selected Financial Ratios for the Five Comparable Electric Utility Companies and Great Plains Energy

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
			Funds	Funds			2006	
		2005	From	From		2005	Projected	
	2005	Long-Term	Operations	Operations	Market-	Return on	Return on	
	Common Equity	Debt	Interest	to Total	to-Book	Common	Common	Bond
Company Name	Ratio	Ratio	Сочегаде	Debt	Value	Equity	Equity	Rating
Hawaiian Electric Industries, Inc.	53.30%	45.20%	4.00 x	19.0%	1.79 x	9.70%	10.00% *	BBB+
IDACORP, Inc.	50.00%	50.00%	2.80 x	12.0%	1.36 x	6.20%	7.50% *	BBB+
Pinnacle West Capital	56.80%	43.20%	N.A. x	15.0%	1.21 x	6.50%	8.50% *	BBB+
Puget Energy Inc.	45.60%	54.40%	2.90 x	14.0%	1.17 x	7.20%	8.00% *	BBB-
Southern Co.	44.30%	53.20%	5.30 x	N.A.	2.26 x	14.90%	14.00% *	Α
Average	50.00%	49.20%	3.75 x	15.0%	1.56 x	8.90%	9.60%	BBB+
Great Plains Energy	50.90%	47.50%	4.60 x	23.6%	1.74 x	13.30%	10.50% *	BBB

Sources:

The Value Line Investment Survey Ratings & Reports, March 31, May 12, and June 2, 2006: for columns (1), (2), (6) and (7). Standard & Poor's RatingsDirect and Response to Staff Data Request 0031 for columns (3), (4). AUS Utility Reports, July 2006 for column (5).

Note: * Estimated.

Public Utility Revenue Requirement

or

Cost of Service

The formula for the revenue requirement of a public utility may be stated as follows:

Equation 1: Revenue Requirement = Cost of Service

Oξ

Equation 2:

RR = O + (V - D)R

The symbols in the second equation are represented by the following factors :

RR = Revenue Requirement 0 = Prudent Operating Costs, including Depreciation and Taxes = Gross Valuation of the Property Serving the Public = Accumulated Depreciation = Rate Base (Net Valuation) (V-D) (V-D)R = Return Amount (\$\$) or Earnings Allowed on Rate Base R = iL+dP+kE or Overall Rate of Return (%) = Embedded Cost of Debt = Proportion of Debt in the Capital Structure = Embedded Cost of Preferred Stock = Proportion of Preferred Stock in the Capital Structure = Required Return on Common Equity (ROE)

= Proportion of Common Equity in the Capital Structure

SCHEDULE 21

HAS BEEN DEEMED

HIGHLY CONFIDENTIAL

IN ITS ENTIRETY