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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO.: ER-2009-____

DIRECT TESTIMONY

OF

SAMUEL C. HADAWAY

ON BEHALF OF

AQUILA INC., dba KCP&L GREATER MISSOURI OPERATIONS

September 2008

*** Designates "Highly Confidential" Information Has Been Removed.
Certain Schedules Attached to This Testimony Designated "(HC)" Have Been Removed
Pursuant To 4 CSR 240-2.135.

DIRECT TESTIMONY

OF

SAMUEL C. HADAWAY

Case No. ER-2009-

- 1 I. INTRODUCTION AND SUMMARY OF RECOMMENDATIONS
- 2 Q. Please state your name and business address.
- 3 A. My name is Samuel C. Hadaway and my business address is FINANCO, Inc., 3520
- 4 Executive Center Drive, Austin, Texas 78731.
- 5 Q. On whose behalf are you testifying?
- A. I am testifying on behalf of Aquila, Inc., dba KCP&L Greater Missouri Operations
 Company ("GMO" or the "Company").
- 8 Q. Please state your educational background and describe your professional

9 **training and experience.**

10 A. I have a bachelor's degree in economics from Southern Methodist University, as well 11 as M.B.A. and Ph.D. degrees with concentrations in finance and economics from the 12 University of Texas at Austin ("UT Austin"). For the past 25 years, I have been an 13 owner and full-time employee of FINANCO, Inc. FINANCO provides financial 14 research concerning the cost of capital and financial condition for regulated 15 companies as well as financial modeling and other economic studies in litigation 16 support. In addition to my work at FINANCO, I have served as an adjunct professor 17 in the McCombs School of Business at UT Austin and in what is now the McCoy College of Business at Texas State University. In my prior academic work, I taught 18 19 economics and finance courses and I conducted research and directed graduate

22	Q.	Please outline and describe the testimony you will present.
21		the Company's requested capital structure and overall rate of return.
20	А.	The purpose of my testimony is to estimate GMO's required ROE of and to support
19	Q.	What is the purpose of your testimony?
18		financial issues.
17		numerous other state commissions on rate of return on equity ("ROE") and related
16	A.	Yes, I have. I have testified before the Missouri Public Service Commission and
15		Commission or before any other utility regulatory agency?
14	Q.	Have you previously testified in a proceeding at the Missouri Public Service
13		Appendix A.
12		bodies and in state and federal courts is contained in my resume, which is included as
11		A list of my publications and testimony I have given before various regulatory
10		Management Association.
9		I have served as a vice president and on the board of directors of the Financial
8		Rate of Return Analysts Forum, and various other professional and legislative groups.
7		made presentations before the New York Society of Security Analysts, the National
6		structure, utility financial condition, and cost allocation and rate design issues. I have
5		cases. I have taught courses at various utility conferences on cost of capital, capital
4		and served as the Commission's chief financial witness in electric and telephone rate
3		Texas where I supervised the Commission's finance, economics, and accounting staff,
2		Director of the Economic Research Division at the Public Utility Commission of
1		students in the areas of investments and capital market research. I was previously

1	A.	My testimony is divided into five additional sections. Following this introduction, in
2		Section II, I discuss the impact of GMO's proposed regulatory adjustment mechanism
3		on ROE. I conclude that no additional adjustment to ROE is necessary due to this
4		regulatory proposal. In Section III, I present and explain the Company's requested
5		capital structure and overall cost of capital. In Section IV, I review various methods
6		for estimating the cost of equity. In this section, I discuss the discounted cash flow
7		("DCF") model, as well as risk premium methods and other approaches often used to
8		estimate the cost of capital. In Section V, I review general capital market costs and
9		conditions, and discuss recent developments in the electric utility industry that affect
10		the cost of capital. In Section VI, I discuss the details of my cost of equity studies
11		and provide a summary table of my ROE results.
12	Q.	Please describe the general approach in your cost of equity studies.
13	A.	First, my recommendation is premised upon the fair rate of return principles
14		established by the U.S. Supreme Court in Federal Power Comm'n v. Hope Natural
15		Gas Co., 320 US 591, 603 (1944) ("Hope") and Bluefield Water Works &
16		Improvements Co. v. Public Service Commission, 262 US 679, 693 (1923)
17		("Bluefield"). That is to say, a utility's return authorized by a regulatory body, such as
18		the Missouri Public Service Commission, should be commensurate with returns on
19		investments in other enterprises having corresponding risks.
20		The return should also be sufficient to assure confidence in the financial
21		integrity of the utility so as to maintain its credit, and to attract capital so that it is able
าา		to properly discharge its public duties. Given these legal principles, I have used

1 These methods and the underlying economic models are applied to an investment 2 grade company reference group of other electric utilities generally similar to GMO. 3 Q. Please explain your analysis in arriving at a recommended ROE for GMO. 4 A. My ROE estimate is based on alternative versions of the constant growth and 5 multistage growth DCF model. It is confirmed by my risk premium analysis and my 6 review of economic conditions and interest rates expected to prevail during the 7 coming year. Because GMO is a wholly-owned subsidiary of Great Plains Energy 8 Incorporated ("GPE") and does not have publicly traded common stock or other 9 independent market data, its cost of equity cannot be estimated directly. For this 10 reason, I apply the DCF model to a large reference group of investment grade electric 11 utilities selected from the *Value Line Investment Survey*. To be included in my group, 12 the reference companies must have at least a triple-B (investment grade) bond rating; 13 they must derive at least 70 percent of revenues from regulated utility sales; they must 14 have consistent financial records not affected by recent mergers or restructuring; and 15 they must have a consistent dividend record with no dividend cuts within the past two 16 years. The companies in my comparable group are summarized in Schedule SCH-1. 17 To test my DCF results, I conducted a risk-premium analysis based on ROEs 18 allowed by state regulators relative to Moody's average utility debt costs. In this 19 analysis, I also included the forecasted higher interest rates of Standard and Poor's 20 ("S&P") for the coming year. S&P forecasts that long-term Government and 21 corporate interest rates will increase from current levels by 40 to 50 basis points 22 during 2009. Under current market and economic conditions, the combination of

1		DCF and risk premium models, tempered by consensus forecasts about future interest
2		rates, provides the best approach for estimating GMO's fair cost of equity capital.
3	Q.	What ROE range is indicated by your DCF and risk premium analyses?
4	A.	My reference group analysis indicates that a DCF range of 10.8 percent to 11.2
5		percent is appropriate. My risk premium analysis, which serves as a check of
6		reasonableness for the DCF results, indicates that an ROE of 11.10 percent is
7		appropriate, with other risk premium approaches indicating an ROE of 11.49 percent.
8	Q.	What are your overall conclusions from your ROE analysis?
9	А.	Based on the combination of quantitative model results and my review of current
10		economic, market, and electric utility industry conditions, I estimate GMO's cost of
11		equity at 10.75 percent. This estimate is consistent with capital market trends and
12		projections and is a reasonable estimate of capital costs that will prevail during the
13		period that the rates from this case are in effect.
14		II. <u>IMPACT OF GMO'S RAM ON ROE</u>
15	Q.	Have you considered the effect of GMO's Rate Adjustment Mechanism
16		("RAM") on the Company's business risk and its required ROE?
17	A.	Yes. I have considered the effect of GMO's RAM from several perspectives, and I
18		have concluded from my analysis that no adjustment to ROE should be made. Most
19		important, GMO's RAM makes GMO's business risk profile more similar to the risk
20		profiles of the comparable companies that I used to estimate ROE. Schedule SCH-2
21		shows that 26 of 30 (87 percent) of the comparable companies have fuel and
22		purchased power adjustment mechanisms, and that of the four companies without
23		mechanisms, one (Ameren) has a request pending. In this regard, without its RAM,

1		GMO's business risk profile would be higher t	than that of the average comparable			
2		company. Other factors also indicate a higher risk profile for GMO. For example, in				
3	Schedule SCH-3, I show that GMO's projected construction program relative to					
4		existing net plant is about twice as large as that	at of the average comparable company.			
5		The combination of these factors demonstrate	s that GMO's business risk profile is at			
6		least as high as that of the comparable group a	and that ROE should not be reduced to			
7		account for the effects of GMO's RAM.				
8		III. <u>GMO CAPITAL STRUCTURE AND</u>	OVERALL RATE OF RETURN			
9	Q.	Please summarize the Company's requested	d capital structure and overall rate of			
10		return.				
11	A.	A. The following tables identify the requested capital structure components and the				
12	resulting overall rate of return for Missouri Public Service ("MPS"), St. Joseph Light					
13	& Power ("SJLP") and St. Joseph Light & Power Steam ("SJLP Steam"):					
14	<u>MPS</u>					
15		Requested Capital Str	ructure			
16		Capital Components Ratio Cost V	Weighted Cost			
17		Debt 45.47% 6.83%	3.10%			
18		Preferred stock 0.71% 4.29%	0.03%			
19		<u>Common Equity</u> 53.82% 10.75%	5.79%			
20		TOTAL 100.00%	<u>8.92%</u>			
21		SJLP and SJLP Steam				
22		Requested Capital Str	ructure			
23		Capital Components Ratio Cost V	Weighted Cost			
24		Debt 45.47% 7.62%	3.47%			
25		Preferred stock 0.71% 4.29%	0.03%			
26		Common Equity 53.82% 10.75%	5.79%			
27		TOTAL 100.00%	<u>9.29%</u>			

28 Q. What is the basis for the Company's requested capital structure?

1	A.	The requested capital structure for MPS, SJLP, and SJLP Steam is consistent with
2		Great Plains Energy's projected capital structure at March 31, 2009. These data are
3		presented in more detail in Schedule SCH-4, with the March 31, 2009 summary
4		shown on page 6 of that schedule. Using the parent company's consolidated capital
5		structure is appropriate for MPS, SJLP, and SJLP Steam as divisions of a wholly-
6		owned subsidiary of Great Plains Energy and is consistent with the approach taken by
7		Kansas City Power & Light ("KCP&L"), another regulated utility subsidiary of GPE,
8		in its 2006 and 2007 rate cases (Case No. ER-2006-0314 and Case No. ER-2007-
9		0291, respectively).
10	Q.	What is the basis for the Company's requested cost of preferred stock and cost
11		of debt?
12	A.	The cost of preferred stock for MPS, SJLP, and SJLP Steam reflects Great Plains
13		Energy's cost of preferred stock as shown on page 10 of Schedule SCH-4. The cost
14		of debt for MPS and SJLP was determined based upon the cost of each entity's
15		directly-issued debt, as well as the cost of assigned portions of debt previously issued
16		at the parent-company, i.e., Aquila Inc., level. The amount of such debt assigned to
17		each entity was determined by multiplying the respective projected March 31, 2009
18		rate bases by the debt percentages shown in the table on the preceding page, then
19		subtracting any directly-issued debt. The calculation of the total debt assigned is
20		shown on page 13 of Schedule SCH-4. The assignment of specific debt issues to
21		MPS and SJLP as of March 31, 2009 is shown on page 14 of Schedule SCH-4, and
22		the resulting weighted average costs of debt for MPS and SJLP are reflected on pages
23		15 and 16, respectively, of that same schedule.

1	Q.	Was the methodology to assign debt and to calculate the cost of debt consistent				
2		with the approach used in past rate cases for MPS and SJLP?				
3	A.	Yes, it was.				
4	Q.	You have indicated that the requested capital structure for MPS, SJLP, and				
5		SJLP Steam is based upon Great Plains Energy's projected capital structure as				
6		of March 31, 2009. What are the key differences between Great Plains Energy's				
7		actual capital structure as of December 31, 2007 and the requested capital				
8		structure, projected as of March 31, 2009?				
9	A.	The actual Great Plains Energy capital structure as of December 31, 2007, is shown				
10		on page 2 of Schedule SCH-4. The key differences between the actual capital				
11		structure and the requested capital structure, projected as of March 31, 2009, are as				
12		follows:				
13		Long-Term Debt				
14		Net Long-Term Debt is projected to increase by \$1,397 million, the largest				
15		components of which consist of the following:				
16		(a) KCP&L issued \$350 million of 10-year senior unsecured notes in March 2008				
17		to finance construction expenditures.				
18		(b) KCP&L issued \$23.4 million of EIRR bonds in May 2008 to finance a portion				
19		of the Company's qualifying environmental equipment at Iatan 1 and 2.				
20		(c) Great Plains acquired Aquila in July 2008 which will have a projected				
21		outstanding debt balance of \$1,023 million as of March 2009.				

1		Equity				
2		Equity is projected to increase by ** million, the largest components of				
3		which are as follows:				
4		(a) ** million in additional equity issued through public offerings by				
5		Great Plains Energy.				
6		(b) Approximately \$1,026 million of equity issued by Great Plains Energy related				
7		to the Aquila acquisition.				
8		IV. <u>ESTIMATING THE COST OF EQUITY CAPITAL</u>				
9	Q.	What is the purpose of this section of your testimony?				
10	A.	The purpose of this section of my testimony is to present a general definition of the				
11		cost of equity and to compare the strengths and weaknesses of several of the most				
12		widely used methods for estimating the cost of equity. Estimating the cost of equity				
13		is fundamentally a matter of informed judgment. The various models provide a				
14		concrete link to actual capital market data and assist with defining the various				
15		relationships that underlie the ROE estimation process.				
16	Q.	Please define the term "cost of equity capital" and provide an overview of the				
17		cost estimation process.				
18	A.	The cost of equity capital is the profit or rate of return that equity investors expect to				
19		receive. In concept it is no different than the cost of debt or the cost of preferred				
20		stock. The cost of equity is the rate of return that common stockholders expect, just				
21		as interest on bonds and dividends on preferred stock are the returns that investors in				
22		those securities expect. Equity investors expect a return on their capital				
23		commensurate with the risks they take, consistent with returns that are available from				

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1 other similar investments. Unlike returns from debt and preferred stocks, however, 2 the equity return is not directly observable in advance and, therefore, it must be estimated or inferred from capital market data and trading activity. 3 4 An example helps to illustrate the cost of equity concept. Assume that an 5 investor buys a share of common stock for \$20 per share. If the stock's expected 6 dividend is \$1.00, the expected dividend yield is 5.00 percent (1.00 / 20 = 5.07 percent). If the stock price is also expected to increase to \$21.20 after one year, this 8 \$1.20 expected gain adds an additional 6.0 percent to the expected total rate of return 9 (\$1.20 / \$20 = 6.0 percent). Therefore, when buying the stock at \$20 per share, the 10 investor expects a total return of 11.00 percent: 5.0 percent dividend yield, plus 6.0 11 percent price appreciation. In this example, the total expected rate of return at 11.00 12 percent is the appropriate measure of the cost of equity capital, because it is this rate 13 of return that caused the investor to commit the \$20 of equity capital in the first place. 14 If the stock were riskier, or if expected returns from other investments were higher, 15 investors would require a higher rate of return from the stock, which would result in a 16 lower initial purchase price in market trading. 17 Each day market rates of return and prices change to reflect new investor 18 expectations and requirements. For example, when interest rates on bonds and 19 savings accounts rise, utility stock prices usually fall. This is true, at least in part, 20 because higher interest rates on these alternative investments make utility stocks 21 relatively less attractive, which causes utility stock prices to decline in market trading. 22 This competitive market adjustment process is quick and continuous, so that market

prices generally reflect investor expectations and the relative attractiveness of one

23

investment versus another. In this context, to estimate the cost of equity one must
 apply informed judgment about the relative risk of the company in question and
 knowledge about the risk and expected rate of return characteristics of other available
 investments as well.

How does the market account for risk differences among the various

5 **Q**.

investments?

7 A. Risk-return tradeoffs among capital market investments have been the subject of 8 extensive financial research. Literally dozens of textbooks and hundreds of academic 9 articles have addressed the issue. Generally, such research confirms the common 10 sense conclusion that investors will take additional risks only if they expect to receive 11 a higher rate of return. Empirical tests consistently show that returns from low risk 12 securities, such as U.S. Treasury bills, are the lowest; that returns from longer-term 13 Treasury bonds and corporate bonds are increasingly higher as risks increase; and, 14 generally, returns from common stocks and other more risky investments are even 15 higher. These observations provide a sound theoretical foundation for both the DCF 16 and risk premium methods for estimating the cost of equity capital. These methods 17 attempt to capture the well founded risk-return principle and explicitly measure 18 investors' rate of return requirements.

19

20

Q. Can you illustrate the capital market risk-return principle that you just described?

A. Yes. The following graph depicts the risk-return relationship that has become widely
known as the Capital Market Line ("CML"). The CML offers a graphical
representation of the capital market risk-return principle. The graph is not meant to

illustrate the actual expected rate of return for any particular investment, but merely
 to illustrate in a general way the risk-return relationship.

Risk-Return Tradeoffs



3	As a continuum, the CML can be viewed as an available opportunity set for investors.
4	Those investors with low risk tolerance or investment objectives that mandate a low
5	risk profile should invest in assets depicted in the lower left-hand portion of the
6	graph. Investments in this area, such as Treasury bills and short-maturity, high
7	quality corporate commercial paper, offer a high degree of investor certainty. In
8	nominal terms (before considering the potential effects of inflation), such assets are
9	virtually risk-free.

1 Investment risks increase as one moves up and to the right along the CML. A 2 higher degree of uncertainty exists about the level of investment value at any point in 3 time and about the level of income payments that may be received. Among these 4 investments are long-term bonds and preferred stocks, which offer priority claims to 5 assets and income payments. They are relatively low risk, but they are not risk-free. 6 The market value of long-term bonds, even those issued by the U.S. Treasury, often 7 fluctuates widely when government policies or other factors cause interest rates to 8 change.

9 Farther up the CML continuum, common stocks are exposed to even more 10 risk, depending on the nature of the underlying business and the financial strength of 11 the issuing corporation. Common stock risks include market-wide factors, such as 12 general changes in capital costs, as well as industry and company specific elements 13 that may add further to the volatility of a given company's performance. As I will 14 illustrate in my risk premium analysis, common stocks typically are more volatile and 15 have higher risk than high quality bond investments and, therefore, they reside above 16 and to the right of bonds on the CML graph. Other more speculative investments, 17 such as stock options and commodity futures contracts, offer even higher risks (and 18 higher potential returns). The CML's depiction of the risk-return tradeoffs available 19 in the capital markets provides a useful perspective for estimating investors' required 20 rates of return.

Q. How is the fair rate of return in the regulatory process related to the estimated cost of equity capital?

- 1 A. The regulatory process is guided by fair rate of return principles established in the
- 2 U.S. Supreme Court cases, *Bluefield* and *Hope*:

3 A public utility is entitled to such rates as will permit it to earn a return 4 on the value of the property which it employs for the convenience of 5 the public equal to that generally being made at the same time and in 6 the same general part of the country on investments in other business undertakings which are attended by corresponding risks and 7 8 uncertainties; but it has no constitutional right to profits such as are 9 realized or anticipated in highly profitable enterprises or speculative 10 ventures. Bluefield Water Works & Improvement Company v. Public 11 Service Commission of West Virginia, 262 U.S. 679, 692-693 (1923).

- 12 From the investor or company point of view, it is important that there 13 be enough revenue not only for operating expenses, but also for the capital costs of the business. These include service on the debt and 14 15 dividends on the stock. By that standard the return to the equity owner 16 should be commensurate with returns on investments in other 17 enterprises having corresponding risks. That return, moreover, should 18 be sufficient to assure confidence in the financial integrity of the 19 enterprise, so as to maintain its credit and to attract capital. Federal 20 Power Commission v. Hope Natural Gas Co., 320 U.S. 591, 603 21 (1944).
- 22 Based on these principles, the fair rate of return should closely parallel investor
- 23 opportunity costs as discussed above. If a utility earns its market cost of equity,
- 24 neither its stockholders nor its customers should be disadvantaged.
- 25 Q. What specific methods and capital market data are used to evaluate the cost of
- 26 equity?
- 27 A. Techniques for estimating the cost of equity normally fall into three groups:
- 28 comparable earnings methods, risk premium methods, and DCF methods.
- 29 Q. Please describe the first set of estimation techniques, the comparable earnings
 30 methods.
- 31 A. The comparable earnings methods have evolved over time. The original comparable
- 32 earnings methods were based on book accounting returns. This approach developed

ROE estimates by reviewing accounting returns for unregulated companies thought to
have risks similar to those of the regulated company in question. These methods have
generally been rejected because they assume that the unregulated group is earning its
actual cost of capital, and that its equity book value is the same as its market value.
In most situations these assumptions are not valid, and, therefore, accounting-based
methods do not generally provide reliable cost of equity estimates.

More recent comparable earnings methods are based on historical stock market returns rather than book accounting returns. While this approach has some merit, it too has been criticized because there can be no assurance that historical returns actually reflect current or future market requirements. Also, in practical application, earned market returns tend to fluctuate widely from year to year. For these reasons, a current cost of equity estimate (based on the DCF model or a risk premium analysis) is usually required.

14 Q. Please describe the second set of estimation techniques, the risk premium 15 methods.

16 А The risk premium methods begin with currently observable market returns, such as 17 yields on government or corporate bonds, and add an increment to account for the 18 additional equity risk. The capital asset pricing model ("CAPM") and arbitrage 19 pricing theory ("APT") model are more sophisticated risk premium approaches. The 20 CAPM and APT methods estimate the cost of equity directly by combining the "risk-21 free" government bond rate with explicit risk measures to determine the risk premium 22 required by the market. Although these methods are widely used in academic cost of 23 capital research, their additional data requirements and their potentially questionable

underlying assumptions have detracted from their use in most regulatory jurisdictions.
 The basic risk premium methods provide a useful parallel approach with the DCF
 model and assure consistency with other capital market data consistency in the cost of
 equity cost estimation process.

5 Q. Please describe the third set of estimation techniques, based on the DCF model.

6 A. The DCF model is the most widely used regulatory cost of equity estimation method. 7 Like the risk premium approach, the DCF model has a sound basis in theory, and 8 many argue that it has the additional advantage of simplicity. I will describe the DCF 9 model in detail below, but in essence its estimate of ROE is simply the sum of the 10 expected dividend yield and the expected long-term dividend (or price) growth rate. 11 While dividend yields are easy to obtain, estimating long-term growth is more 12 difficult. Because the constant growth DCF model also requires very long-term 13 growth estimates (technically to infinity), some argue that its application is too 14 speculative to provide reliable results, resulting in the preference for the multistage 15 growth DCF analysis.

16 Q. Of the three estimation methods, which do you believe provides the most reliable
17 results?

A. From my experience, a combination of discounted cash flow and risk premium
methods provides the most reliable approach. While the caveat about estimating
long-term growth must be observed, the DCF model's other inputs are readily
obtainable, and the model's results typically are consistent with capital market
behavior. The risk premium methods provide a good parallel approach to the DCF

1 model and further ensure that current market conditions are accurately reflected in the 2 cost of equity estimate.

3 Q.

7

Please explain the DCF model.

4 A. The DCF model is predicated on the concept that stock prices represent the present 5 value or discounted value of all future dividends that investors expect to receive. In 6 the most general form, the DCF model is expressed in the following formula:

$$P_0 = D_1 / (1+k) + D_2 / (1+k)^2 + \dots + D_{\infty} / (1+k)^{\infty}$$
(1)

8 where P_0 is today's stock price; D_1 , D_2 , etc. are all future dividends and k is the 9 discount rate, or the investor's required rate of return on equity. Equation (1) is a 10 routine present value calculation based on the assumption that the stock's price is the 11 present value of all dividends expected to be paid in the future.

12 Under the additional assumption that dividends are expected to grow at a 13 constant rate "g" and that k is strictly greater than g, equation (1) can be solved for k 14 and rearranged into the simple form:

15
$$k = D_1/P_0 + g$$
 (2)

16 Equation (2) is the familiar constant growth DCF model for cost of equity estimation, 17 where D_1/P_0 is the expected dividend yield and g is the long-term expected dividend 18 growth rate.

19 Q. Are there circumstances where the constant growth model may not give reliable results? 20

21 A. Yes. Under circumstances when growth rates are expected to fluctuate or when 22 future growth rates are highly uncertain, the constant growth model may not give 23 reliable results. Although the DCF model itself is still valid, i.e., equation (1) is

12

Q.

mathematically correct, under such circumstances the simplified form of the model must be modified to capture market expectations accurately.

Recent events and current market conditions in the electric utility industry as 3 4 discussed later appear to challenge the constant growth assumption of the traditional 5 DCF model. Since the mid-1980s, dividend growth expectations for many electric 6 utilities have fluctuated widely. In fact, over one-third of the electric utilities in the 7 U.S. have reduced or eliminated their common dividends over this time period. Some 8 of these companies have re-established their dividends, producing exceptionally high 9 growth rates. Under these circumstances, long-term growth rate estimates may be 10 highly uncertain, and estimating a reliable "constant" growth rate for many companies 11 is often difficult.

13 violated?

A. Yes. When growth expectations are uncertain, the more general version of the model
represented in equation (1) should be solved explicitly over a finite "transition" period
while uncertainty prevails. The constant growth version of the model can then be
applied after the transition period, under the assumption that more stable conditions
will prevail in the future. There are two alternatives for dealing with the nonconstant
growth transition period.

Can the DCF model be applied when the constant growth assumption is

20 Under the "terminal price" nonconstant growth approach, equation (1) is 21 written in a slightly different form:

22 $P_0 = D_1/(1+k) + D_2/(1+k)^2 + ... + P_T/(1+k)^T$ (3)

1		where the variables are the same as in equation (1) except that P_T is the estimated
2		stock price at the end of the transition period T. Under the assumption that normal
3		growth resumes after the transition period, the price P_T is then expected to be based
4		on constant growth assumptions. With the terminal price approach, the estimated cost
5		of equity, k, is just the rate of return that investors would expect to earn if they bought
6		the stock at today's market price, held it and received dividends through the transition
7		period (until period T), and then sold it for price P_T . In this approach, the analyst's
8		task is to estimate the rate of return that investors expect to receive given the current
9		level of market prices they are willing to pay.
10	Q.	What is the other alternative for dealing with the nonconstant growth transition
11		period?
12	A.	Under the "multistage" nonconstant growth approach, equation (1) is simply
13		expanded to incorporate two or more growth rate periods, with the assumption that a
14		permanent constant growth rate can be estimated for some point in the future:
15		$P_0 = D_0(1+g_1)/(1+k) + \dots + D_0(1+g_2)^n/(1+k)^n +$
16		+ $(D_0(1+g_T)^{(T+1)}/(k-g_T))/(1+k)^T$ (4)
17		where the variables are the same as in equation (1), but g_1 represents the growth rate
18		for the first period, g_2 for a second period, and g_T for the period from year T (the end
19		of the transition period) to infinity. The first two growth rates are simply estimates
20		for fluctuating growth over "n" years (typically 5 or 10 years) and g_T is a constant
21		growth rate assumed to prevail forever after year T. The difficult task for analysts in
22		the multistage approach is determining the various growth rates for each period.

1Although less convenient for exposition purposes, the nonconstant growth2models are based on the same valid capital market assumptions as the constant3growth version. The nonconstant growth approach simply requires more explicit data4inputs and more work to solve for the discount rate, k. Fortunately, the required data5are available from investment and economic forecasting services, and computer6algorithms can easily produce the required solutions. Both constant and nonconstant7growth DCF analyses are presented in the following section.

8 Q. Please explain the risk premium methodology.

9 A. Risk premium methods are based on the assumption that equity securities are riskier 10 than debt and, therefore, that equity investors require a higher rate of return. This 11 basic premise is well supported by legal and economic distinctions between debt and 12 equity securities, and it is widely accepted as a fundamental capital market principle. 13 For example, debt holders' claims to the earnings and assets of the borrower have 14 priority over all claims of equity investors. The contractual interest on mortgage debt 15 must be paid in full before any dividends can be paid to shareholders, and secured 16 mortgage claims must be fully satisfied before any assets can be distributed to 17 shareholders in bankruptcy. Also, the guaranteed, fixed-income nature of interest 18 payments makes year-to-year returns from bonds typically more stable than capital 19 gains and dividend payments on stocks. All these factors demonstrate the more risky 20 position of stockholders and support the equity risk premium concept.

Q. Are risk premium estimates of the cost of equity consistent with other current capital market costs?

A. Yes. The risk premium approach is especially useful because it is founded on current
 market interest rates, which are directly observable. This feature assures that risk
 premium estimates of the cost of equity begin with a sound basis, which is tied
 directly to current capital market costs.

5 Q. Is there similar consensus about how risk premium data should be employed?

6 A. No. In regulatory practice, there is often considerable debate about how risk 7 premium data should be interpreted and used. Since the analyst's basic task is to 8 gauge investors' required returns on long-term investments, some argue that the 9 estimated equity spread should be based on the longest possible time period. Others 10 argue that market relationships between debt and equity from several decades ago are 11 irrelevant and that only recent debt-equity observations should be given any weight in 12 estimating investor requirements. There is no consensus on this issue. Since analysts 13 cannot observe or measure investors' expectations directly, it is not possible to know 14 exactly how such expectations are formed or, therefore, to know exactly what time 15 period is most appropriate in a risk premium analysis.

16 The important point is to answer the following question: "What rate of return 17 should equity investors reasonably expect relative to returns that are currently 18 available from long-term bonds?" The risk premium studies and analyses I discuss 19 later address this question. My risk premium recommendation is based on an 20 intermediate position that avoids some of the problems and concerns that have been 21 expressed about both very long and very short periods of analysis with the risk 22 premium model.

23 Q. Please summarize your discussion of cost of equity estimation techniques.

1 A. Estimating the cost of equity is one of the most controversial issues in utility 2 ratemaking. Because actual investor requirements are not directly observable, several 3 methods have been developed to assist in the estimation process. The comparable 4 earnings method is the oldest but perhaps least reliable. Its use of accounting rates of 5 return, or even historical market returns, may or may not reflect current investor 6 requirements. Differences in accounting methods among companies and issues of 7 comparability also detract from this approach. 8 The DCF and risk premium methods have become the most widely accepted 9 in regulatory practice. A combination of the DCF model and a review of risk 10 premium data provides the most reliable cost of equity estimate. While the DCF 11 model does require judgment about future growth rates, the dividend yield is 12 straightforward, and the model's results are generally consistent with actual capital 13 market behavior. For these reasons, I will rely on a combination of the DCF model 14 and a risk premium analysis in the cost of equity studies that follow. 15 V. FUNDAMENTAL FACTORS THAT AFFECT THE COST OF EQUITY 16 Q. What is the purpose of this section of your testimony? 17 A. In this section, I review recent capital market conditions and industry and company-18 specific factors that should be reflected in the cost of capital estimate. 19 Q. What has been the recent experience in the U.S. capital markets? 20 A. Schedule SCH-5, page 1, provides a review of annual interest rates and rates of inflation in the U.S. economy over the past ten years. During that time inflation and 21 22 fixed income market costs declined and, generally, have been lower than rates that

23 prevailed in the previous decade. Inflation, as measured by the Consumer Price Index

("CPI"), until 2003 had remained at historically low levels not seen consistently since
the early 1960s. Since 2003, however, inflation rates have increased with the average
for 2004 though 2006 similar to the longer-term historical average, which is above 3
percent. The inflation rate for 2007 was even higher at 4.1 percent and, with the large
recent increases in energy and food prices, for the twelve months ended July 2008,
the CPI increased 5.6 percent. These inflationary pressures exert a direct influence on
capital market expectations and result in a higher cost of capital.

8 The Federal Reserve System's monetary policy options are currently limited 9 by rising inflation and simultaneously weak economic conditions. During the period 10 from mid-2004 until mid-2006, the Federal Reserve System increased the short-term 11 Federal Funds interest rate 17 times, raising it from 1 percent to 5.25 percent. In late 12 2007, in response to the extreme turbulence in the sub-prime credit markets, the 13 Federal Reserve Open Market Committee began aggressively reducing the Federal 14 Funds rate. Since September 2007, the rate has been lowered seven times to its 15 current level of 2.0 percent. With rising inflation expectations, however, and low 16 market tolerance for additional risk, long-term corporate interest rates have not 17 declined over the past two years. Furthermore, estimates for the coming year are for 18 additional interest rate increases.

19

Q. How have long-term interest rates changed over the past two years?

A. The following table, which also appears on page 2 of Schedule SCH-5, provides the
month-by-month interest rates paid by utilities and the U.S. Treasury:

Ι	Long-Term Interest Rate Trends			
	Triple-B	30-Year	Triple-B	
	Utility	Treasury	Utility	
Month	Rate	Rate	Spread	
Jan-06	6.06	ND	ND	
Feb-06	6.11	4.54	1.57	
Mar-06	6.26	4.73	1.53	
Apr-06	6.54	5.06	1.48	
May-06	6.59	5.20	1.39	
Jun-06	6.63	5.15	1.48	
Jul-06	6.63	5.13	1.50	
Aug-06	6.43	5.00	1.43	
Sep-06	6.26	4.85	1.41	
Oct-06	6.24	4.85	1.39	
Nov-06	6.04	4.69	1.35	
Dec-06	6.05	4.68	1.37	
Jan-07	6.16	4.85	1.31	
Feb-07	6.10	4.82	1.28	
Mar-07	6.10	4.72	1.38	
Apr-07	6.24	4.87	1.37	
May-07	6.23	4.90	1.33	
Jun-07	6.54	5.20	1.34	
Jul-07	6.49	5.11	1.38	
Aug-07	6.51	4.93	1.58	
Sep-07	6.45	4.79	1.66	
Oct-07	6.36	4.77	1.59	
Nov-07	6.27	4.52	1.75	
Dec-07	6.51	4.53	1.98	
Jan-08	6.35	4.33	2.02	
Feb-08	6.60	4.52	2.08	
Mar-08	6.68	4.39	2.29	
Apr-08	6.81	4.44	2.37	
May-08	6.79	4.60	2.19	
Jun-08	6.93	4.69	2.24	
Jul-08	6.97	4.57	2.40	
Aug-08	6.98	4.50	2.48	

 Table 1

 ong-Term Interest Rate Trends

Sources: Mergent Bond Record (Utility Rates);

www.federalreserve.gov (Treasury Rates).

1		The data in Table 1 show that in August 2008 long-term triple-B utility interest rates
2		were higher than at any time in the past two years. More important, recent market
3		turbulence from the sub-prime lending crisis and recent bank failures, as well as
4		concerns about renewed inflation have increased interest rates spreads (the
5		differences between utility borrowing costs and U.S. Treasury interest rates)
6		dramatically. While the Federal Reserve System has reduced short-term borrowing
7		rates for banks (the Fed Funds rate) and the "flight to safety" experience has driven
8		down some U.S. Treasury rates, corporate borrows have seen just the opposite trend.
9		Increased risk aversion has caused significantly higher borrowing costs for
10		corporations such as GMO. While the effects of market turbulence are not always
11		well captured in financial models for estimating the rate of return, the evolving long-
12		term borrowing cost relationships for corporate entities should be considered
13		explicitly in estimates of the going cost of equity capital.
14	Q.	What levels of interest rates are forecast for the coming year?
15	A.	Both corporate and government interest rates are expected to rise further from present
16		levels. Schedule SCH-5, page 3, provides Standard & Poor's most recent economic
17		forecast from its Trends & Projections publication for August 2008. S&P forecasts
18		resumed economic growth after the first quarter of 2009. For 2008, growth in real
19		Gross Domestic Product (GDP) is projected at only 1.7 percent with nominal GDP
20		(real GDP plus inflation) at 4.0 percent. For 2009, nominal GDP growth is projected
21		at 3.1 percent. These projected growth rates compare to a real rate for 2007 of 2.0
22		percent and a nominal rate of 4.8 percent. S&P also forecasts that interest rates will

1		rise from current levels.	The summary i	nterest rate dat	a are presented in	the
2		following table:				
3			Tabl	e 2		
4		Standar	d & Poor's Inte	rest Rate For	ecast	
5			August 2008	Average	Average	
6			Average	2008 Est.	2009 Est.	
7		Treasury Bills	1.7%	1.8%	2.4%	
8		10-Yr. T-Bonds	3.9%	3.9%	4.5%	
9		30-Yr. T-Bonds	4.5%	4.5%	4.9%	
10		Aaa Corporate Bonds	5.6%	5.6%	6.1%	
11		Sources: www.federalro	eserve.gov. (Aug	rust 2008 Aver	ages):	
12		Standard & Poor's Tren	ds & Projections	August 2008	nage 8	
13		(Projected Rates)		, 11agast 2000	, puge o	
10		(11) j				
14		The data in Table 2 show	w that interest ra	tes in 2009 are	projected to incre	ase from
15		current levels. The aver	age 30-year-tern	n Treasury bor	d rate for 2009 is	projected by
				-		
16		S&P to reach 4.9 percent in this period, relative to the current level of 4.5. Similarly,				
17		the rate on corporate bonds is expected to increase from 5.6 percent to 6.1 percent, a				
18		rise of 50 basis points.	These increasing	interest rate tr	ends offer importation	ant
19		perspective for judging	the cost of capita	l in the presen	t case and illustrat	te why the
20		return on equity must be	e set at a level su	fficient to refle	ect these rising cos	sts.
					_	
21	Q.	How have utility stock	s performed du	ring the past s	several years?	
		-	_		-	
22	A.	Utility stock prices have	e fluctuated wide	ly. The Dow J	ones Utility Aver	age (DJUA)
23		has ranged between about 200 and 500 during the past six years. The wider				
24		fluctuations in more recent years are vividly illustrated in the following graph of				
25		DJUA prices over the pa	ast 25 years.			

2



Widely fluctuating prices for natural gas as well as recent increases in coal prices and other uncertainties have created further unsettling conditions. These factors and continuing concerns for the more competitive market environment for all utility services will likely create further uncertainties and market volatility for utility shares. In this environment, investors' return expectations and requirements for providing capital to the utility industry remain high relative to the longer-term traditional view of the utility industry.

10 Q. What is the industry's current fundamental position?

A. Many electric utilities are attempting to return to their core businesses and hope to see
 more stable results over the next several years. S&P reflects this sentiment in its most
 recent *Electric Utility Industry Survey*:

1	Standard & Poor's Industry Surveys
2 3 4 5 6 7 8 9	We expect the performance of both the electric utility sector and the individual companies within the sector to remain volatile over the next several years. However, we believe the stocks will be less volatile than they were in the first few years of the decade The performance of the sector, however, will remain sensitive to the macroeconomic environment and market forces surrounding it. (Standard & Poor's <i>Industry Surveys</i> , Electric Utilities, August 14, 2008, p. 4)
10	Value Line notes electric utilities' relatively poor performance this year:
11	Value Line Investors' Survey
12 13 14 15 16	As a group, utility stocks have held up better than the overall market in recent weeks, but have performed just as poorly since the start of 2008. Many of these equities appear to be fully valued or even overvalued. (<i>Value Line Investment Survey</i> , Electric Utility (West) Industry, August 8, 2008, p. 1781.
17	Price volatility for utility shares and credit market gyrations make it all the more
18	difficult to estimate the fair, on-going cost of capital.
19	Over the past several years, the greatest consideration for utility investors has
20	been the industry's transition to competition. With the passage by Congress of the
21	Energy Policy Act in 1992 and the Federal Energy Regulatory Commission's (FERC)
22	Order 888 in 1996, the stage was set for vastly increased competition in the electric
23	utility industry. The 1992 Act's mandate for open access to the transmission grid and
24	FERC's implementation through Order 888, including subsequent orders such as
25	Order 2000 and Order 890, effectively opened the market for wholesale electricity to
26	competition. Previously protected utility service territory and lack of transmission
27	access in some parts of the country had limited the availability of competitive bulk
28	power prices. The Energy Policy Act and Order 888 have essentially eliminated such
29	constraints for incremental power needs.

1		In addition to wholesale issues at the federal level, many states implemented
2		retail access and have opened their retail markets to competition. Prior to the
3		Western energy crisis of 2000-2001, investors' concerns had focused principally on
4		appropriate transition mechanisms and the recovery of stranded costs. More recently,
5		however, provisions for dealing with power cost adjustments have become a larger
6		concern. The Western energy crisis refocused market concerns and contributed
7		significantly to increased market risk perceptions for companies without power cost
8		recovery provisions. As expected, the opening of previously protected utility markets
9		to competition, and the uncertainty created by the removal of regulatory protection,
10		has raised the level of uncertainty about investment returns across the entire industry.
11	Q.	Is GMO affected by these same market uncertainties and increasing utility
11 12	Q.	Is GMO affected by these same market uncertainties and increasing utility capital costs?
11 12 13	Q. A.	Is GMO affected by these same market uncertainties and increasing utility capital costs? Yes. To some extent all electric utilities are being affected by the industry's transition
11 12 13 14	Q. A.	Is GMO affected by these same market uncertainties and increasing utility capital costs? Yes. To some extent all electric utilities are being affected by the industry's transition to competition. GMO's power costs and other operating activities have been
 11 12 13 14 15 	Q. A.	Is GMO affected by these same market uncertainties and increasing utility capital costs? Yes. To some extent all electric utilities are being affected by the industry's transition to competition. GMO's power costs and other operating activities have been significantly affected by transition and restructuring events around the country. In
 11 12 13 14 15 16 	Q. A.	Is GMO affected by these same market uncertainties and increasing utility capital costs? Yes. To some extent all electric utilities are being affected by the industry's transition to competition. GMO's power costs and other operating activities have been significantly affected by transition and restructuring events around the country. In fact, the uncertainty associated with the changes that are transforming the utility
 11 12 13 14 15 16 17 	Q. A.	Is GMO affected by these same market uncertainties and increasing utility capital costs? Yes. To some extent all electric utilities are being affected by the industry's transition to competition. GMO's power costs and other operating activities have been significantly affected by transition and restructuring events around the country. In fact, the uncertainty associated with the changes that are transforming the utility industry as a whole, as viewed from the perspective of the investor, remain a factor in
 11 12 13 14 15 16 17 18 	Q. A.	Is GMO affected by these same market uncertainties and increasing utility capital costs? Yes. To some extent all electric utilities are being affected by the industry's transition to competition. GMO's power costs and other operating activities have been significantly affected by transition and restructuring events around the country. In fact, the uncertainty associated with the changes that are transforming the utility industry as a whole, as viewed from the perspective of the investor, remain a factor in assessing any utility's required ROE, including the ROE from GMO's operations in
 11 12 13 14 15 16 17 18 19 	Q.	Is GMO affected by these same market uncertainties and increasing utilitycapital costs?Yes. To some extent all electric utilities are being affected by the industry's transitionto competition. GMO's power costs and other operating activities have beensignificantly affected by transition and restructuring events around the country. Infact, the uncertainty associated with the changes that are transforming the utilityindustry as a whole, as viewed from the perspective of the investor, remain a factor inassessing any utility's required ROE, including the ROE from GMO's operations inMissouri. For GMO specifically, its large construction program and its heavy

2

Q. What has been the effect on GMO of its acquisition by GMO's parent company Great Plains Energy Incorporated?

A. I have not been able to discern any negative effect. On July 14, 2008 Standard &
Poor's Ratings Services raised GMO's corporate rating to BBB from BB-, its senior
secured rating to BBB+ from BB+, and its senior unsecured rating to BBB from BB-.
On July 15, 2008 Moody's Investors Service raised the Company's senior unsecured
rating to Baa2 from Ba3.

8 Q. How do capital market concerns and financial risk perceptions affect the cost of 9 equity capital?

10 A. As I discussed previously, equity investors respond to changing assessments of risk 11 and financial prospects by changing the price they are willing to pay for a given 12 security. When the risk perceptions increase or financial prospects decline, investors 13 refuse to pay the previously existing market price for a company's securities and market supply and demand forces then establish a new lower price. The lower market 14 15 price typically translates into a higher cost of capital through a higher dividend yield 16 requirement, as well as the potential for increased capital gains if prospects improve. 17 In addition to market losses for prior shareholders, the higher cost of capital is 18 transmitted directly to the company by the need to issue more shares to raise any 19 given amount of capital for future investment. The additional shares also impose 20 additional future dividend requirements and reduce future earnings per share growth 21 prospects.

Q. How have regulatory commissions responded to these changing market and
 industry conditions?

A. Over the past five years, allowed equity returns have generally followed the interest
 rate changes. The following table summarizes the overall average ROEs allowed for
 electric utilities since 2004:

4	Authorized Electric Utility Equity Returns								
5		2004	2005	2006	2007	2008			
6	1 st Quarter	11.00%	10.51%	10.38%	10.27%	10.50%			
7	2 nd Quarter	10.54%	10.05%	10.68%	10.27%	10.57%			
8	3 rd Quarter	10.33%	10.84%	10.06%	10.02%				
9	4 th Quarter	10.91%	10.75%	10.39%	10.56%				
10	Full Year Average	10.75%	10.54%	10.36%	10.36%	10.53%			
11	Average Utility								
12	Debt Cost	6.20%	5.67%	6.08%	6.11%	6.32%			
13	Indicated Average								
14	Risk Premium	4.55%	4.87%	4.28%	4.25%	4.21%			
15									
16	Source: Regulatory	<i>Focus</i> , Reg	gulatory Resea	arch Associate	es, Inc., Majo	or Rate Case			
17	Decisions, July 2, 20)08.							
18	The data above show	v that since 2	004 equity ris	k premiums (tl	he difference	between			
19	allowed equity return	ns and utility	interest rates)	have ranged f	from 4.21 perc	cent to 4.87			
20	percent. At the low	end of this ri	sk premium ra	inge, with an a	llowed equity	risk			
21	premium of 4.21 per	cent, the ind	icated cost of e	equity is 11.20	percent (6.99	9%			
22	projected triple-B in	terest rate + 4	4.21% risk pre	mium = 11.20	$\%)^1$. At the u	pper end			
23	of this risk premium	range, with	an allowed equ	uity risk premi	um of about 4	1.87			
24	percent, the indicated	d cost of equ	ity is 11.86 pe	rcent (6.99% j	projected tripl	e-B			
25	interest rate + 4.87%	risk premiu	m = 11.86%).	As I will dem	onstrate in the	e following			
26	section, my longer-to	erm risk prer	nium study, up	oon which I rel	ly to test my I	DCF			
27	results, produces a slightly more conservative estimate of the required rate of return.								

¹ The triple-B utility interest rate of 6.99% is equal to the forecasted 30-year Treasury bond rate of 4.9% from Schedule SCH-5, page 3, plus the average triple-B utility spread over long-term Treasuries of 2.09% for the 12 months ended August 2008, as shown in Schedule SCH-5, page 2.

1		VI. <u>COST OF EQUITY CAPITAL FOR GMO</u>
2	Q.	What is the purpose of this section of your testimony?
3	A.	Here I present my quantitative studies of the cost of equity capital for GMO and
4		discuss the details and results of my analysis.
5	Q.	How are your studies organized?
6	A.	In the first part of my analysis, I apply three versions of the DCF model to a 30-
7		company group of electric utilities based on the selection criteria discussed
8		previously. In the second part of my analysis, I present my risk premium study and I
9		review risk premium results from the longer-term Ibbotson Stocks, Bonds, Bills, and
10		Inflation market data (Ibbotson data) now published by Morningstar, Inc.
11		My DCF analysis is based on three versions of the DCF model. In the first
12		version of the DCF model, I use the constant growth format with long-term expected
13		growth based on analysts' estimates of five-year utility earnings growth. While I
14		continue to endorse a longer-term growth estimation approach based on growth in
15		overall gross domestic product, I show the traditional DCF results because this is the
16		approach that has traditionally been used by many regulators. In the second version
17		of the DCF model, for the estimated growth rate, I use the estimated long-term GDP
18		growth rate. In the third version of the DCF model, I use a two-stage growth
19		approach, with stage one based on Value Line's three-to-five-year dividend
20		projections and stage two based on long-term projected growth in GDP. The
21		dividend yields in all three of the annual models are from Value Line's projections of
22		dividends for the coming year and stock prices are from the three-month average for

the months that correspond to the *Value Line* editions from which the underlying
 financial data are taken.

3	Q.	Why do you believe the long-term GDP growth rate should be used to estimate
4		long-term growth expectations in the DCF model?
5	A.	Growth in nominal GDP (real GDP plus inflation) is the most general measure of
6		economic growth in the U.S. economy. For long time periods, such as those used in
7		the Ibbotson Associates rate of return data, GDP growth has averaged between 5
8		percent and 8 percent per year. From this observation, Professors Brigham and
9		Houston offer the following observation concerning the appropriate long-term growth
10		rate in the DCF Model:
11 12 13 14 15 16 17		Expected growth rates vary somewhat among companies, but dividends for mature firms are often expected to grow in the future at about the same rate as nominal gross domestic product (real GDP plus inflation). On this basis, one might expect the dividend of an average, or "normal," company to grow at a rate of 5 to 8 percent a year. (Eugene F. Brigham and Joel F. Houston, <i>Fundamentals of Financial Management</i> , 11th Ed. 2007, page 298.)
18		Other academic research on corporate growth rates offers similar conclusions about
19		GDP growth, as well as concerns about the long-term adequacy of analysts' forecasts:
20 21 22 23 24 25 26 27 28 29 30 31		Our estimated median growth rate is reasonable when compared to the overall economy's growth rate. On average over the sample period, the median growth rate over 10 years for income before extraordinary items is about 10 percent for all firms After deducting the dividend yield (the median yield is 2.5 percent per year), as well as inflation (which averages 4 percent per year over the sample period), the growth in real income before extraordinary items is roughly 3.5 percent per year. This is consistent with the historical growth rate in real gross domestic product, which has averaged about 3.4 percent per year over the period 1950-1998. (Louis K. C. Chan, Jason Karceski, and Josef Lakonishok, "The Level and Persistence of Growth Rates," The Journal of Finance, April 2003, p. 649)
32 33		IBES long-term growth estimates are associated with realized growth in the immediate short-term future. Over long horizons, however,

1 there is little forecastablility in earnings, and analysts' estimates tend to 2 be overly optimistic. ... On the whole, the absence of predictability in 3 growth fits in with the economic intuition that competitive pressures 4 ultimately work to correct excessively high or excessively low profitability growth. (Ibid, page 683) 5 6 These findings support the notion that long-term growth expectations are more 7 closely predicted by broader measures of economic growth than by near-term 8 analysts' estimates. Especially for the very long-term growth rate requirements of the 9 DCF model, the growth in nominal GDP should be considered an important input. 10 **O**. How did you estimate the expected long-term GDP growth rate? 11 A. I developed my long-term GDP growth forecast from nominal GDP data contained in 12 the St. Louis Federal Reserve Bank data base. That data for the period 1947 through 13 2007 is summarized in my Schedule SCH-6. As shown at the bottom of that 14 schedule, the overall average for the period was 7.0 percent. The data also show, 15 however, that in the more recent years since 1980, lower inflation has resulted in 16 lower overall GDP growth. For this reason I gave more weight to the more recent 17 years in my GDP forecast. This approach is consistent with the concept that more 18 recent data should have a greater effect on expectations and with generally lower 19 near- and intermediate-term growth rate forecasts that presently exist. Based on this 20 approach, my overall forecast for long-term GDP growth is 50 basis points lower than 21 the long-term average, at a level of 6.5 percent. 22 Please summarize the results of your electric utility DCF analyses. 0. 23 Α. The DCF results for my comparable company group are presented in Schedule SCH-24 7. The traditional constant growth DCF model results, with the projected growth rate 25 based on analysts' forecasts, are shown in the first column on page 1 of that exhibit. 26 That analysis indicates an ROE of 11.1 percent to 11.2 percent. In the second column

of page 1, I recalculate the constant growth results with long-term forecasted growth
in GDP as the projected growth rate. That analysis indicates an ROE of 11.0 percent.
Finally, in the third column of page 1, I present the multistage DCF results. The
multistage model indicates an ROE of 10.8 percent. Based on all three versions of the
DCF model, my analysis supports a reasonable ROE range of 10.8 percent to 11.2
percent.

7

Q. What are the results of your risk premium studies?

A. The details and results of my risk premium studies are shown in my Schedule SCH-8.
9 These studies and other risk premium data indicate an ROE range of 11.05 percent to
10 11.41 percent.

11 Q. How are your risk premium studies structured?

12 A. My risk premium studies are divided into two parts. First, I compare electric utility 13 authorized ROEs for the period 1980-2007 to contemporaneous long-term utility 14 bond interest rates. The differences between the average authorized ROEs and the 15 average interest rate for the year is the indicated equity risk premium. I then add the 16 indicated equity risk premium to the forecasted triple-B utility bond interest rate to 17 estimate ROE. Because there is a strong inverse relationship between risk premiums 18 and interest rates (when interest rates are high, risk premiums are low and vice versa), 19 further analysis is required to estimate the current risk premium level.

The inverse relationship between risk premiums and interest rate levels is well documented in numerous, well-respected academic studies. These studies typically use regression analysis or other statistical methods to predict or measure the risk premium relationship under varying interest rate conditions. On page 2 of Schedule

1 SCH-8, I provide regression analyses of the allowed annual equity risk premiums 2 relative to interest rate levels. The negative and statistically significant regression coefficients confirm the inverse relationship between risk premiums and interest 3 4 rates. This means that when interest rates rise by one percentage point, the cost of 5 equity increases, but by a smaller amount. Similarly, when interest rates decline by 6 one percentage point, the cost of equity declines by less than one percentage point. I 7 use this negative interest rate change coefficient in conjunction with current interest 8 rates to establish the appropriate current equity risk premium.

9 Q. How do the results of your risk premium study compare to levels found in other
10 published risk premium studies?

11 Based on my risk premium studies, I am conservatively recommending a lower risk A. 12 premium than is often found in other published risk premium data. For example, the 13 most widely followed risk premium data are provided in the Morningstar Ibbotson 14 data studies. These data, for the period 1926-2007, indicate an arithmetic mean risk 15 premium of 6.1 percent for common stocks versus long-term corporate bonds. Under 16 the assumption of geometric mean compounding, the Ibbotson risk premium for 17 common stocks versus corporate bonds is 4.5 percent. Based on the more 18 conservative geometric mean risk premium, the Ibbotson data indicate a cost of 19 equity of 11.49 percent (6.99% forecasted debt cost + 4.5% risk premium = 11.49%). 20 Based on the arithmetic risk premium, the Ibbotson data indicate a cost of equity of 21 over 13 percent (6.99% forecasted debt cost + 6.1% risk premium = 13.09%). 22 Although I do not use the Ibbotson data in my final ROE estimates, I do review the 23 data for their perspective on the overall market cost of equity capital.

1	Q.	Please summarize the results of your cost of equi	ty analysis.
2	A.	The following table summarizes my results:	
3		Summary of Cost of Equity Estimates	
4		DCF Analysis	Indicated Cost
5		Constant Growth (Analysts' Growth Rates)	11.1%-11.2%
6		Constant Growth (GDP Growth Rate)	11.0%
7		Multistage Growth Model	10.8%
8		Reasonable DCF Range	<u>10.8%-11.2%</u>
9		Risk Premium Analysis	Indicated Cost
10		Utility Debt + Risk Premium	
11		Risk Premium (6.99% + 4.11%)	11.10%
12		Ibbotson Risk Premium Analysis	
13		Risk Premium $(6.99\% + 4.5\%)$	11.49%
14			
15		GMO Requested Cost of Equity Capital	10.75%
16			
17	Q.	How should these results be interpreted by the C	ommission in setting the fair
18		cost of equity for GMO?	
19	A.	Higher analysts' growth rates and higher dividend y	ields have increased DCF model
20		results along with increases in utility interest rates.	The similarly higher results from
21		the risk premium models also indicate the increasing	g trend reflected in the
22		quantitative model results. These factors show that	GMO's requested ROE is a
23		conservative estimate of its market required rate of	return. Additionally, use of a
24		lower DCF range would fail to recognize the ongoin	ng risks and uncertainties that
25		exist in the electric utility industry as well as the con-	mpany-specific risks and
26		uncertainties that GMO is currently facing. All these	se factors show that the
27		Company's requested 10.75 percent ROE is a reason	hable estimate of the fair cost of
28		equity capital.	

1 Q. Does this conclude your testimony?

2 A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Application of Aquila, Inc. dba) KCP&L Greater Missouri Operations Company to) Modify Its Electric Tariffs to Effectuate a Rate Increase)

Case No. ER-2009-____

AFFIDAVIT OF SAMUEL C. HADAWAY

STATE OF TEXAS)) ss COUNTY OF TRAVIS)

Samuel C. Hadaway, being first duly sworn on his oath, states:

1. My name is Samuel C. Hadaway. I am employed by FINANCO, Inc. in Austin,

Texas. I have been retained by Great Plains Energy, Inc., the parent company of Aquila, Inc. dba KCP&L Greater Missouri Operations Company, to serve as an expert witness to provide cost of capital testimony on behalf of Aquila, Inc. dba KCP&L Greater Missouri Operations Company.

 Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Aquila, Inc. dba KCP&L Greater Missouri Operations Company consisting of <u>herefore</u> (38) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

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

Hadaway ay)8. Samuel C. Hadaway

Subscribed and sworn before me this $\frac{3}{2}$ day of September 2008.

My commission expires: 7-21-2012



		(1)	(2)		(3)		
					Cap	oital Structure (20	07)
		% Regulated	Credit	Rating	Common Equity	Long-Term Debt	Preferred Stock
No.	Company	Revenue	S&P	Moody's	Ratio	Ratio	Ratio
1	ALLETE	86.0%	A-	Baa1	64.4%	35.6%	0.0%
2	Alliant Energy Co.	90.5%	A-	A2	61.9%	32.4%	5.7%
3	Ameren	100.0%	BBB	Baa2	53.4%	45.0%	1.6%
4	American Elec. Pwr.	90.4%	BBB	Baa1	41.4%	58.3%	0.3%
5	Avista Corp.	90.9%	BBB+	Baa2	59.0%	41.0%	0.0%
6	Cent. Vermont P.S.	100.0%	BBB+	NR	60.6%	36.2%	3.2%
7	Cleco Corporation	95.9%	BBB	Baa1	56.7%	43.2%	0.1%
8	Con. Edison	77.2%	A-	A1	53.1%	45.6%	1.3%
9	DTE Energy Co.	79.6%	A-	A3	45.6%	54.4%	0.0%
10	Edison Internat.	79.9%	А	A2	46.0%	49.1%	4.9%
11	Empire District	99.3%	BBB+	Baa1	49.9%	50.1%	0.0%
12	Entergy Corp.	80.6%	A-	Baa2	43.9%	54.3%	1.8%
13	FPL Group, Inc.	76.1%	А	Aa3	48.8%	51.2%	0.0%
14	FirstEnergy	88.3%	BBB	Baa2	50.3%	49.7%	0.0%
15	Hawaiian Electric	83.0%	BBB	Baa2	51.0%	47.6%	1.4%
16	IDACORP	76.0%	A-	A3	51.1%	48.9%	0.0%
17	NiSource Inc.	73.1%	BBB-	Baa2	47.6%	52.4%	0.0%
18	Northeast Utilities	98.6%	BBB+	Baa1	48.8%	49.3%	1.9%
19	NSTAR	95.8%	AA-	A1	40.1%	58.9%	1.0%
20	PG&E Corp.	100.0%	BBB+	A3	50.4%	48.1%	1.5%
21	Pinnacle West	82.8%	BBB-	Baa2	53.0%	47.0%	0.0%
22	Portland General	100.0%	А	Baa1	50.1%	49.9%	0.0%
23	Progress Energy	99.8%	A-	A2	48.8%	50.6%	0.6%
24	Southern Co.	82.3%	А	A2	44.9%	51.2%	3.9%
25	Teco Energy, Inc.	78.8%	BBB-	Baa2	39.0%	61.0%	0.0%
26	UIL Holdings Co.	99.9%	NR	Baa2	49.2%	50.8%	0.0%
27	Vectren Corp.	77.0%	А	A3	49.8%	50.2%	0.0%
28	Westar Energy	81.3%	BBB-	Baa2	48.9%	50.6%	0.5%
29	Wisconsin Energy	99.7%	A-	Aa3	49.2%	50.3%	0.5%
30	Xcel Energy Inc.	99.3%	A-	A3	49.4%	49.7%	0.9%
	Average	88.7%	A-/BBB+	A3/Baa1	50.2%	48.8%	1.0%

Aquila, Inc., d/b/a KCP&L Greater Missouri Operations Company Comparable Company Fundamental Characteristics

Column Sources:

(1) Most recent company 10-Ks.

(2) AUS Utility Reports, August 2008.

(3) Value Line Investment Survey, Electric Utility (East), Aug 29, 2008; (Central), Jun 27, 2008; (West), May 9, 2008.

Aquila, Inc., d/b/a KCP&L Greater Missouri Operations Company Comparable Company Fuel Adjustment Mechanisms August 2008

		Operating Company		Fuel/Energy Adiustment	
No.	Reference Company	By Jurisdiction	Utility Type	Mechanism?	Comment
1	ALLETE	Minnesota Power (MN)	VI	Yes	Traditional fuel & purch power adjustment clause
2	Alliant Energy Co.	Interstate Power & Light (IA)	VI	Yes	Traditional fuel & purch power adjustment clause
		Wisconsin Power & Light (WI)	VI	Yes	Fuel clause effective outside of monitoring ranges
3	Ameren	CIPSCO, CILCO, III. Pwr (IL)	Del	Yes	Recovery allowed Jan 2007, under legal challenges; settled July 2007; all power procurement costs passed through to customers
		Union Electric (MO)	VI	No/Request Pending	Request denied in ER-2007-0002. New request filed April 1, 2008.
4	American Elec. Pwr.	Columbus South, Ohio Pwr (OH)	Del	No	Rates frozen through 2008
		Public Svc. Co. of Oklahoma (OK)	VI	Yes	Active fuel clause rates
		AEP Texas Central, North (TX)	T&D	n/a	Transmission & distribution companies only
		SWEPCO (TX)	VI	Yes	Active fuel clause rates
		Indiana Michigan Pwr Co. (IN)	VI	Yes	Active fuel clause rates
		Appalachian Pwr Co. (VA)	VI	Yes	Active fuel clause rates
		Kentucky Pwr Co. (KY)	VI	Yes	Active fuel clause rates
5	Avista Corp.	Avista Utilities (WA)	VI	Yes	Energy Recovery Mechanism (ERM) with recovery outside deadband
6	Cent. Vermont P.S.	Cent. Vermont P.S. (VT)	VI	No	No fuel adjustment clause in VT
7	Cleco Corporation	Cleco Power (LA)	VI	Yes	Traditional fuel & purch power adjustment clause
8	Con. Edison Co.	Con. Ed., Orange & Rockland (NY)	Del	Yes	Traditional fuel & purch power adjustment clause
9	DTE Energy Co.	Detroit Edison (MI)	VI	Yes	Power Supply Cost Recovery mechanism
10	Edison Internat.	Southern California Edison (CA)	VI	Yes	Energy Resource Recovery Account mechanism
11	Empire District	Empire District Electric Co. (MO)	VI	Yes	Request approved in ER-2008-0093, July 30, 2008.
12	Entergy Corp.	Entergy Arkansas (AR)	VI	Yes	Traditional fuel & purch power adjustment clause
		Entergy Gulf States (LA)	VI	Yes	Traditional fuel & purch power adjustment clause
		Entergy Gulf States (TX)	VI	Yes	Traditional fuel & purch power adjustment clause
		Entergy Louisiana (LA)	VI	Yes	Traditional fuel & purch power adjustment clause
		Entergy Mississippi (MS)	VI	Yes	Traditional fuel & purch power adjustment clause
		Entergy New Orleans (LA)	VI	Yes	Traditional fuel & purch power adjustment clause
13	FPL Group, Inc.	Florida Power & Light (FL)	VI	Yes	Traditional fuel & purch power adjustment clause
14	FirstEnergy	Cleveland Electric Illuminating (OH)	Del	Yes	Fuel cost rider, adjusted quarterly, in effect
		Ohio Edison (OH)	Del	Yes	Fuel cost rider, adjusted quarterly, in effect
		Toledo Edison (OH)	Del	Yes	Fuel cost rider, adjusted quarterly, in effect

		Jersey Central P&L (NJ)	Del	Yes	Excess fuel amounts deferred for future collection
		Metropolitan Edison (PA)	Del	No	No automatic fuel adjustment clause
		Pennsylvania Electric (PA)	Del	No	No automatic fuel adjustment clause
15	Hawaiian Electric	Hawaiian Electric (HI)	VI	Yes	Traditional energy cost adjustment clause (ECAC)
16	IDACORP	Idaho Power Co. (ID)	VI	Yes	Traditional Power Cost Adjustment (PCA) mechanism
17	NiSource Inc.	Northern Indiana (IN)	VI	Yes	Traditional fuel & purch power adjustment clause
18	Northeast Utilities	Connecticut Light & Power (CT)	Del	n/a	T&D utility allowed to recover all supply costs (has Transmission Adjustment Clause)
		Western Mass. Electric Co. (MA)	Del	n/a	T&D utility allowed to recover all supply costs costs (has Transmission Adjustment Clause)
		Public Service Co. of NH (NH)	VI	Yes	Co. files periodically for new energy services (ES) rate to recover generation and PP costs
19	NSTAR	NSTAR Electric (MA)	Del	Yes	Rates mechanisms reset every 6 mos (3 mos for large customers) to fully recover all energy costs.
20	PG&E Corp.	Pacific Gas & Electric (CA)	VI	Yes	Energy Resource Recovery Account mechanism
21	Pinnacle West	APS (AZ)	VI	Yes	Power Supply Adjustor mechanism
22	Progress Energy	Progress Energy Carolina (NC)	VI	Yes	Traditional fuel & purch power adjustment clause
23	Portland General	Portland General (OR)	VI	Yes	PCAM with asymmetrical deadband
		Progress Energy Florida (FL)	VI	Yes	Traditional fuel & purch power adjustment clause
24	Southern Co.	Alabama Power (AL)	VI	Yes	Traditional fuel & purch power adjustment clause
		Georgia Power, Sav Pwr (GA)	VI	Yes	Traditional fuel & purch power adjustment clause
		Gulf Power (FL)	VI	Yes	Traditional fuel & purch power adjustment clause
		Mississippi Power (MS)	VI	Yes	Traditional fuel & purch power adjustment clause
25	TECO Energy, Inc.	Tampa Electric Co. (FL)	VI	Yes	Traditional fuel & purch power adjustment clause
26	UIL Holdings Co.	United Illuminating Co. (CT)	Del	Yes	Included in Generation Services Charge which is a "pass- through" to customers
27	Vectren Corp.	Southern Indiana G&E (IN)	VI	Yes	Traditional fuel & purch power adjustment clause
28	Westar Energy	Westar Energy (KS)	VI	Yes	Through Retail Energy Cost Adjustment factor
29	Wisconsin Energy	Wisconsin Electric (WI)	VI	Yes	Fuel clause effective outside of +- 2% band
30	Xcel Energy Inc.	NSP-Minnesota (MN)	VI	Yes	Through Fuel Adjustment Clause factor
		NSP-Wisconsin (WI)	VI	Yes	Fuel clause effective outside of monitoring ranges
		PSC Colorado (CO)	VI	Yes	Through Electric Commodity Adjustment
		Southwestern Public Service (TX)	VI	Yes	Traditional fuel & purch power adjustment clause
	Summary of Results	Comparable Cos with Trackers		26	
		Comparable Cos w/o Trackers		4	(includes one "pending")
		Total Comparable Cos		30	

Aquila, Inc., d/b/a KCP&L Greater Missouri Operations Company

Capital Spending Relative to Net Plant

(\$millions unless otherwise noted)

							Total Capital	Spending		
	Reference	2007	Common	Shares C	Outstanding	Capital S	Spending I	Per Share	Spending	% of 2007
No.	Company	Net Plant	2008	2009	2010-2013	2008	2009	2010-2013	2008 -2013	Net Plant
1	ALLETE	1,105	32.3	33.6	36.5	9.80	11.30	7.00	1,718	155.6%
2	Alliant Energy Co.	4,680	111.0	112.0	119.0	9.45	11.00	5.90	5,089	108.7%
3	Ameren	15,069	210.0	212.0	222.0	7.60	7.55	7.20	9,590	63.6%
4	American Elec. Pwr.	29,870	404.0	407.0	415.0	10.00	9.70	9.25	23,343	78.1%
5	Avista Corp.	2,351	54.0	55.0	56.5	3.90	4.35	3.50	1,241	52.8%
6	Cent. Vermont P.S.	320	10.4	10.5	10.8	3.85	3.35	3.30	218	68.0%
7	Cleco Corporation	1,726	61.0	62.0	65.0	5.40	2.90	1.75	964	55.9%
8	Con. Edison	19,914	274.0	278.0	284.0	9.85	9.55	6.95	13,249	66.5%
9	DTE Energy Co.	11,408	163.3	163.3	163.3	9.20	8.60	8.50	8,456	74.1%
10	Edison Internat.	17,403	326.0	326.0	326.0	8.60	11.95	11.05	21,109	121.3%
11	Empire District	1,179	37.0	37.5	37.5	5.80	3.65	3.00	801	68.0%
12	Entergy Corp.	20,974	187.0	193.0	199.0	11.70	9.95	7.55	10,118	48.2%
13	FPL Group, Inc.	28,652	412.0	416.0	428.0	6.90	6.60	5.15	14,405	50.3%
14	FirstEnergy	15,383	304.9	304.9	304.9	7.10	5.80	5.25	10,334	67.2%
15	Hawaiian Electric	2,743	85.5	87.5	89.0	4.10	3.45	2.75	1,631	59.5%
16	IDACORP	2,617	46.4	47.7	51.6	6.45	6.30	5.35	1,704	65.1%
17	NiSource Inc.	10,032	275.5	276.0	277.5	3.75	3.65	4.00	6,481	64.6%
18	Northeast Utilities	7,230	158.2	178.0	192.0	8.30	6.00	7.15	7,872	108.9%
19	NSTAR	4,142	106.8	106.8	106.8	4.10	3.30	2.75	1,965	47.4%
20	PG&E Corp.	23,656	381.0	384.0	393.0	9.95	7.30	7.10	17,755	75.1%
21	Pinnacle West	8,436	100.7	100.9	101.5	10.55	11.80	9.35	6,049	71.7%
22	Portland General	3,066	62.6	71.0	76.0	6.75	10.35	4.50	2,525	82.4%
23	Progress Energy	16,605	264.0	268.0	280.0	9.55	8.45	6.45	12,010	72.3%
24	Southern Co.	33,327	777.0	793.0	815.0	5.80	6.05	4.75	24,789	74.4%
25	Teco Energy, Inc.	4.888	212.0	213.0	216.0	3.00	3.55	3.00	3.984	81.5%
26	UIL Holdings Co.	878	25.3	25.6	26.5	7.65	4.75	6.45	999	113.7%
27	Vectren Corp.	2.540	81.0	81.2	81.8	3.85	3.45	3.65	1.786	70.3%
28	Westar Energy	4.804	102.0	102.6	104.4	8.70	8.00	5.75	4,109	85.5%
29	Wisconsin Energy	7.681	117.0	117.0	117.0	10.45	7.20	7.25	5.458	71.1%
30	Xcel Energy Inc.	16,676	430.0	432.0	438.0	4.90	3.70	4.75	12.027	72.1%
	Average						0.1.0		,!	76.5%
	Aquila-MPS/LP Operations	1,157							1,670	144.3%

Source: Value Line Investment Survey, Electric Utility (East), Aug 29, 2008; (Central), Jun 27, 2008; (West), Aug 8, 2008; GMO estimates.

Aquila Missouri Weighted Average Cost of Debt: SJLP Projected to March 2009

Assigned Debt	Effective Rate	SJLP Electric Assigned Debt 3/31/09	Computed Interest on 3/31/09 Assigned Debt	SJLP Electric Weighted Avg Cost of Debt	
Poll Cntrl Bonds 5.85%, Due 2/1/13 Effective Rate 6.991%	6.991%	5,600,000	391,496		
20 Yr MTN 7.16%, Due 11/29/13 Effective Rate 7.573%	7.573%	6,000,000	454,380		
30 Yr MTN 7.17%, Due 12/1/23 Effective Rate 7.584%	7.584%	7,000,000	530,880		
30 Yr MTN 7.33%, Due 11/30/23 Effective Rate 7.753%	7.753%	3,000,000	232,590		
Sr 7.625%, Due 11/15/09 Effective Rate 7.742%	7.742%	53,355,087	4,130,751		
Sr 7.95% (downgrade 9.95%), Due 2/1/11 Effective Rate 8.01%	8.010%	19,661,000	1,574,846		
Sr 11.875% (downgrade 14.875%), Due 7/1/12 Effective Rate 6.474% (6/26/06)	6.474%	33,544,913	2,171,698		
UCFC Sr 7.75%, Due 6/15/11 Effective Rate 8.487%	8.487%	3,238,909	274,886		
Total		131,399,909	9,761,527		
9.44% FMB, Due 2/1/2021 Effective Rate 9.487%	9.487%	13,500,000	1,280,745	[Debt on SJMOE books - assumes 100%
		144,899,909	11,042,272	7.62%	

KANSAS CITY POWER & LIGHT COMPANY Capitalization At December 31, 2007 (Est.)

(\$ in 000's)

CAPITAL COMPONENT Long-Term Debt (Note 1)	AMOUNT 1,003,387	PERCENT 40.41%	REQUIRED RETURN 5.51%	WEIGHTED RETURN 2.23%
Preferred Stock	0	0.00%	0.00%	0.00%
Common Equity before Adjustment Equity Adjustment for OCI Related to Pension Adjusted Common Equity	1,479,495 0 1,479,495	59.59%	10.75%	6.41%
Total	\$2,482,882	100.00%		8.63%

Note 1: Includes amounts classified as current liabilities.

GREAT PLAINS ENERGY INCORPORATED Capitalization At December 31, 2007 (Est.)

(\$ in 000's)

CAPITAL COMPONENT Long-Term Debt (Note 1)	AMOUNT 1,103,209	PERCENT 40.68%	REQUIRED RETURN 5.66%	WEIGHTED RETURN 2.30%
Preferred Stock	39,000	1.44%	4.29%	0.06%
Common Equity before Adjustment Equity Adjustment for All OCI Adjusted Common Equity	1,567,897 (2,073) 1,569,970	57.89%	10.75%	6.22%
Total	\$2,712,179	100.00%		8.59%

Note 1: Includes amounts classified as current liabilities.

Weighted Average Cost of Long-Term Debt Capital

At December 31, 2007 (Est.)

		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
						Underwriters				Long-term	Annual Cost
1 in a	leave.	Initial	Date of	Date of	Price to	Discounts &	Issuance	Net Proceeds	Cost to	Debt Capital	of Long-term
Line		Offering	Offering	Maturity	Public	Commissions	Expense	to Company	Company	Outstanding	Debt Capital
KAN	SAS CITY POWER & LIGHT ONLY										
	Pledged General Mortgage Bonds										
1	EIRR 1992 Series	\$31,000,000	9/15/1992	7/1/2017					4.131%	\$31,000,000	\$1,280,610
2	EIRR Hawthorn 1993 Series - 4.0% Coupon	\$12,366,000	10/14/1993	1/2/2012					4.202%	\$12,366,000	\$519,619
3	MATES Series 1993-A	\$40,000,000	12/7/1993	12/1/2023					4.154%	\$40,000,000	\$1,661,600
4	MATES Series 1993-B	\$39,480,000	12/7/1993	12/1/2023					4.082%	\$39,480,000	\$1,611,574
5	EIRR La Cygne 1994 Series - 4.05% Coupon	\$13,982,500	2/23/1994	3/1/2015					4.221%	\$13,982,000	\$590,180
6	EIRR La Cygne 1994 Series - 4.65% Coupon	\$21,940,000	2/23/1994	9/1/2035					4.801%	\$21,940,000	\$1,053,339
	Unsecured Notes										
7	Senior Notes Due 2017 - 5.85% Coupon (1)	\$250,000,000	5/30/2007	6/15/2017	\$250,000,000	\$1,625,000	\$250,000	\$248,125,000	5.951%	\$250,000,000	\$14,876,484
8	Senior Notes Due 2011 - 6.5% Coupon (2)	\$150,000,000	3/20/2001	11/15/2011	\$150,000,000	\$1,198,500	\$50,000	\$148,751,500	6.615%	\$150,000,000	\$9,922,646
9	Senior Notes Due 2035 -6.05% Coupon (3)	\$250,000,000	11/17/2005	11/15/2035	\$250,000,000	\$2,187,500	\$150,000	\$247,662,500	6.118%	\$250,000,000	\$15,296,070
	Environmental Improvement Revenue Refun	ding Bonds									
10	2005 Series Due 2035 - 4.65% Coupon	\$50,000,000	9/1/2005	9/1/2035					4.817%	\$50,000,000	\$2,408,500
11	2007 Series A Due 2035	\$73,250,000	9/19/07	9/1/2035					4.157%	\$73,250,000	\$3,045,341
12	2007 Series B Due 2035	\$73,250,000	9/19/07	9/1/2035					4.217%	\$73,250,000	\$3,089,183
	Other Long-Term Debt										
13	Unamortized Discount on Senior Notes									(\$1,880,930)	\$0
14	Loss/(Gain) on Reacquired Debt									\$0	\$504,812
15	Net Weighted Cost of Interest Rate Management	nt Products							-	\$0	(\$593,312)
16	Total KCP&L Long-Term Debt Capital			At	December 31, 2007	7 (Est.)			-	\$1,003,387,070	\$55,266,647
17	KCP&L Weighted Avg. Cost of Long-Term	Debt Capital			At December 31, 2	007 (Est.)		5.508%			
	····· ···· ····· ·····················										

Weighted Average Cost of Long-Term Debt Capital

At December 31, 2007 (Est.)

		(a)	(b)	(C)	(d)	(e) Underwriters	(f)	(g)	(h)	(i) Long-term	(j) Annual Cost
		Initial	Date of	Date of	Price to	Discounts &	Issuance	Net Proceeds	Cost to	Debt Capital	of Long-term
Line	Issue	Offering	Offering	Maturity	Public	Commissions	Expense	to Company	Company	Outstanding	Debt Capital
GRE	AT PLAINS ENERGY ONLY			<u> </u>			<u>`</u>		<u> </u>		·
	Unsecured Notes										
1	Senior Notes Due 2017 - 6.875% Coupon (4)	\$100,000,000	9/20/2007	9/15/2017	\$100,000,000	\$650,000	\$500,000	\$98,850,000	7.037%	\$100,000,000	\$7,037,102
	Affordable Housing Notes										
2	Missouri Affordable Housing Fund IX - NDH	\$3,907,767	3/30/1999	10/1/2008					7.740%	\$322,397	\$24,954
	Other Long-Term Debt										
3	Unamortized Discount on Senior Notes									(\$500,950)	
4	Weighted Cost of Interest Rate Management P	roducts									\$127,862
5	Total GPE Only Long-Term Debt Capit	al		A	t December 31, 2007	7 (Est.)				\$99,821,447	\$7,189,918
6	GPE Only Weighted Avg. Cost of Long-Te	erm Debt Capital			At December 31, 2	007 (Est.)		7.203%			
GRE	AT PLAINS ENERGY										
7	Total GPE Long-Term Debt Capital			A	t December 31, 2007	7 (Est.)				\$1,103,208,517	\$62,456,565
8	GPE Weighted Avg. Cost of Long-Term D	ebt Capital			At December 31, 2	007 (Est.)		5.661%			

(1) Expenses associated with the Senior Notes issue are being amortized over a 10 year period.

(2) Expenses associated with the Senior Notes issue are being amortized over a 10 year period.

(3) Expenses associated with the Senior Notes are being amortized over a 30 year period.

(4) Expenses associated with the Senior Notes issue are being amortized over a 10 year period.

E:\123DATA\FINANCE\COST-CAP\2005\[Cost of Capital Projected 12-31-05 FINAL for DF (12-7-05).xls]WCLTD

SCHEDULE SCH-4, PAGES 5 AND 6

THESE PAGES CONTAIN HIGHLY CONFIDENTIAL INFORMATION NOT AVAILABLE TO THE PUBLIC

Weighted Average Cost of Long-Term Debt Capital

At March 31, 2009 (Est.)

		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
		Initial	Data of	Data af	Dring to		lanuanan	Net Dressede	Contra	Long-term	Annual Cost
Line		Offering	Offering	Date of Maturity	Plice to	Commissions	Expense	to Company	Company	Outstanding	Debt Capital
KAN	SAS CITY POWER & LIGHT ONLY	Olicing	Olicing	Waturity	T ublic	00111113310113	Expense	to company	Company	Outstanding	
	Pledged Constal Mortgage Bonds										
1	FIRR 1992 Series	\$31,000,000	9/15/1992	7/1/2017					5 603%	\$31,000,000	\$1 736 930
2	EIRR Hawthorn 1993 Series - 4.0% Coupon	\$12,366,000	10/14/1993	1/2/2012					4 202%	\$12,366,000	\$519.619
3	MATES Series 1993-A	\$40,000,000	12/7/1993	12/1/2023					5 385%	\$40,000,000	\$2 154 000
4	MATES Series 1993-B	\$39,480,000	12/7/1993	12/1/2023					5 136%	\$39,480,000	\$2,027,693
5	EIRR La Cyone 1994 Series - 4 05% Coupon	\$13,982,500	2/23/1994	3/1/2015					4 254%	\$13,982,000	\$594 794
6	EIRR La Cygne 1994 Series - 4.65% Coupon	\$21,940,000	2/23/1994	9/1/2035					4.731%	\$21,940,000	\$1,037,981
	Unsecured Notes										
7	Senior Notes Due 2017 - 5.85% Coupon (1)	\$250,000,000	5/30/2007	6/15/2017	\$250,000,000	\$1,625,000	\$250,000	\$248,125,000	5.951%	\$250,000,000	\$14,876,484
8	Senior Notes Due 2011 - 6.5% Coupon (2)	\$150,000,000	3/20/2001	11/15/2011	\$150,000,000	\$1,198,500	\$50,000	\$148,751,500	6.615%	\$150,000,000	\$9,922,646
9	Senior Notes Due 2035 - 6.05% Coupon (3)	\$250,000,000	11/17/2005	11/15/2035	\$250,000,000	\$2,187,500	\$150,000	\$247,662,500	6.118%	\$250,000,000	\$15,296,070
10	Senior Notes Due 2018 - 6.375% Coupon (4)	\$350,000,000	3/6/2008	3/1/2018	\$350,000,000	\$2,275,000	\$250,000	\$347,475,000	6.474%	\$350,000,000	\$22,659,422
	Environmental Improvement Revenue Refunding Bonds										
11	2005 Series Due 2035 - 4.65% Coupon	\$50,000,000	9/1/05	9/1/2035					4.747%	\$50,000,000	\$2,373,500
12	2007 Series A-1 Due 2035	\$63,250,000	9/19/07	9/1/2035					5.229%	\$63,250,000	\$3,307,525
13	2007 Series A-2 Due 2035	\$10,000,000	9/19/07	9/1/2035					5.049%	\$10,000,000	\$504,914
14	2007 Series B Due 2035	\$73,250,000	9/19/07	9/1/2035					5.489%	\$73,250,000	\$4,020,631
15	2008 Series Due 2038	\$23,400,000	5/28/08	5/1/2038					4.930%	\$23,400,000	\$1,153,586
	Other Long-Term Debt										
16	Unamortized Discount on Senior Notes									(\$1,737,784)	\$0
17	Loss/(Gain) on Reacquired Debt									\$0	\$388,142
18	Net Weighted Cost of Interest Rate Management Products									\$0	\$3,188,878
19	Total KCP&L Long-Term Debt Capital			At	March 31, 2009 (Es	st.)				\$1,376,930,216	\$85,762,816
20	KCP&L Weighted Avg. Cost of Long-Term Debt Capital				At March 31, 2009	(Est.)		6.229%			

Weighted Average Cost of Long-Term Debt Capital

At March 31, 2009 (Est.)

		(a)	(b)	(c)	(d)	(e) Underwriters	(f)	(g)	(h)	(i) Long-term	(j) Annual Cost
		Initial	Date of	Date of	Price to	Discounts &	Issuance	Net Proceeds	Cost to	Debt Capital	of Long-term
Line	Issue	Offering	Offering	Maturity	Public	Commissions	Expense	to Company	Company	Outstanding	Debt Capital
GRE	AT PLAINS ENERGY ONLY										
	Unsecured Notes										
1	Senior Notes Due 2017 - 6.875% Coupon (5)	\$100,000,000	9/20/2007	9/15/2017	\$100,000,000	\$650,000	\$500,000	\$98,850,000	7.037%	\$100,000,000	\$7,037,102
	Other Long-Term Debt										
2	Unamortized Discount on Senior Notes									(\$436,450)	
3	Weighted Cost of Interest Rate Management Products										\$453,103
4	Total GPE Only Long-Term Debt Capital			At	March 31, 2009 (Es	t.)				\$99,563,550	\$7,490,206
5	GPE Only Weighted Avg. Cost of Long-Term Debt Capita	I			At March 31, 2009 ((Est.)		7.523%			
GRE	AT PLAINS ENERGY and KANSAS CITY POWER & LIGHT										
6	Total GPE and KCP&L Long-Term Debt Capital			At	March 31, 2009 (Es	t.)				\$1,476,493,766	\$93,253,022
7	GPE and KCP&L Weighted Avg. Cost of Long-Term Debt	Capital			At March 31, 2009 ((Est.)		6.316%			

Weighted Average Cost of Long-Term Debt Capital

At March 31, 2009 (Est.)

		(a)	(b) Date of	(c) Date of	(d) Price to	(e) Underwriters Discounts &	(f)	(g) Net Proceeds	(h) Cost to	(i) Long-term Debt Capital	(j) Annual Cost of Long-term
Line	Issue	Offering	Offering	Maturity	Public	Commissions	Expense	to Company	Company	Outstanding	Debt Capital
AQL	JILA ONLY	<u> </u>								<u> </u>	
	Pledged General Mortgage Bonds										
1	SJLP First Mortgage Bonds - 9.44%	\$22,500,000	2/1/91	2/1/21						\$13,500,000	
	Unsecured Notes										
2	Senior Notes Due 2021 - 8.27% Coupon	\$131,750,000	3/31/99	11/15/21						\$80,850,000	
3	Senior Notes Due 2009 - 7.625% Coupon	\$200,000,000	11/15/99	11/15/09						\$68,489,000	
4	Senior Notes Due 2011 - 9.95% Coupon	\$250,000,000	2/1/01	2/1/11						\$137,310,000	
5	Senior Notes Due 2011 - 7.75% Coupon	\$200,000,000	6/20/01	6/15/11						\$197,000,000	
6	Senior Notes Due 2011 - 14.875% Coupon	\$500,000,000	7/3/02	7/1/12						\$500,000,000	
7	Medium Term Notes Due 2013 - 7.16% Coupon	\$9,000,000	11/30/93	11/30/13						\$6,000,000	
8	Medium Term Notes Due 2023 - 7.33% Coupon	\$3,000,000	11/30/93	11/30/13						\$3,000,000	
9	Medium Term Notes Due 2023 - 7.17% Coupon	\$7,000,000	12/6/93	12/1/23						\$7,000,000	
	Environmental Improvement Revenue Refunding Bon	nds									
10	Wamego 1996 Series	\$7,300,000	3/1/96	3/1/26						\$7,300,000	
11	SJLP EIERA Bonds - 5.85%	\$5,600,000	6/4/95	2/1/13						\$5,600,000	
12	Sibley 1993 Series	\$5,000,000	5/26/93	5/1/28						\$5,000,000	
	Other Long-Term Debt										
13	Sanwa Bus CC	\$8,190,000	12/9/95	12/9/09						\$667,952	
14	MZ Partners Nebraska	\$3,640,000	6/9/94	7/1/09						\$136,767	
15	Unamortized Discount								-	(\$8,546,100)	
16	Total Aquila Long-Term Debt Capital			At	March 31, 2009 (Est.)			-	\$1,023,307,619	
GRE	AT PLAINS ENERGY, KANSAS CITY POWER & LIGHT	and AQUILA									
17	Total GPE, KCP&L and Aquila Long-Term Debt	Capital		At	March 31, 2009 (Est.)			-	\$2,499,801,385	

(1) Expenses associated with the Senior Notes are being amortized over a 10 year period.

(2) Expenses associated with the Senior Notes are being amortized over a 10 year period.

(3) Expenses associated with the Senior Notes are being amortized over a 30 year period.

(4) Expenses associated with the Senior Notes are being amortized over a 10 year period.

(5) Expenses associated with the Senior Notes are being amortized over a 10 year period.

E:\123DATA\FINANCE\COST-CAP\2005\[Cost of Capital Projected 9-30-06 FINAL for DF (12-7-05).xls]WCLTD

GREAT PLAINS ENERGY INCORPORATED

Weighted Cost of Preferred Stock Capital Outstanding at March 31, 2009 (Est.)

	(a)	(b)	(c) No. of Shares	(d)	(e) Underwriters	(f)	(g)	(h)	(i)	(j) Annual Cost
Line	Description of Issue	Date of Issuance	Initial Offering	Price to Public	Discounts & Commissions	Issuance Expense	Net Proceeds to Company	Cost to Company	Preferred Stock Capital Outstanding	of Preferred Stock Capital
1	3.80% cum \$100 par	12-01-46	100,000	\$10,270,000	\$179,000	\$58,391	\$10,032,609	3.788%	\$10,000,000	\$378,800
2	4.50% cum \$100 par	1-20-52	100,000	10,000,000	195,000	79,241	9,725,759	4.627%	10,000,000	462,700
3	4.20% cum \$100 par	1-21-54	70,000	7,070,000	122,500	41,270	6,906,230	4.257%	7,000,000	297,990
4	4.35% cum \$100 par	4-17-56	120,000	12,000,000	201,600	71,304	11,727,096	4.451%	12,000,000	534,120

5 Total Preferred Stock Capital September 30, 2007 (Est.)

\$39,000,000 \$1,673,610

6 Weighted Average Cost at September 30, 2007 (Est.)

4.291%

Missouri Public Service (MPS) Requested Capital Structure At March 31, 2009 (Est.)

(\$ in 000's)

CAPITAL COMPONENT Long-Term Debt	PERCENT 45.47%	REQUIRED RETURN 6.83%	WEIGHTED RETURN 3.10%
Preferred Stock	0.71%	4.29%	0.03%
Adjusted Common Equity	53.82%	10.75%	5.79%
Total	100.00%		8.92%

St. Joseph Light & Power (SJLP) Requested Capital Structure At March 31, 2009 (Est.)

(\$ in 000's)

CAPITAL COMPONENT Long-Term Debt	PERCENT 45.47%	REQUIRED RETURN 7.62%	WEIGHTED RETURN 3.47%
Preferred Stock	0.71%	4.29%	0.03%
Adjusted Common Equity	53.82%	10.75%	5.79%
Total	100.00%		9.29%

Calculation of LT Debt Assignment Projected to March 31, 2009

	MPS	SJLP Electric	SJLP Steam	SJLP Total
Projected Rate Base @ 3/31/2009	1,203,038,614	304,170,841	14,500,610	318,671,451
Preferred Stock	0.71%			0.71%
Common Equity	53.82%			53.82%
LT Debt as a Percentage of Total Capital	45.47%			45.47%
Projected LT Debt Assigned @ 3/31/2009	547,021,658		-	144,899,909
Current LT Debt Assigned @ 6/30/2008 Projected Direct LT Debt @ 3/31/2009	550,910,073 0			155,771,000 13,500,000
Additional LT Debt Assignment	(3,888,415)		-	(24,371,091)

Great Plains - Aquila MO Long Term Debt Assigned

Great Plains - Aquila MO Long Term Debt Assigned Projected to March 31, 2009					
	MPS	SJLP	DEBT	UNASSIGNED	Date
	Total	Total	ASSIGNED	DEBI	Issueu
SENIOR NOTES					
30 Yr 8.27% Due 11/15/21					
Total Debt per Balance Sheet			80,850,000		31-Mar-1999
Amt Assigned	80,850,000		80,850,000	0	
Sr 7.625% due 11/15/2009					
Total Debt per Balance Sheet			68,489,000		15-Nov-1999
Amt Assigned	15,133,913	53,355,087	68,489,000	0	
10 yr Sr notes 7.95%-Now at 9.95% due 2/1/2011					
Total Debt per Balance Sheet			137,310,000		1-Feb-2001
Amt Assigned	117,649,000	19,661,000	137,310,000	0	
10 yr Sr notes 11.875%-Now at 14.875% due 7/1/12					
Total Debt per Balance Sheet			500,000,000		3-Jul-2002
Amt Assigned	302,998,674	33,544,913	336,543,587	163,456,413	
MTN 7.16% due 11/29/2013					
Total Debt per Balance Sheet			6,000,000		30-Nov-1993
Amt Assigned	-	6,000,000	6,000,000	0	
MTN 7.17% due 12/1/2023					
Total Debt per Balance Sheet			7,000,000		6-Dec-1993
Amt Assigned	-	7,000,000	7,000,000	0	
MTN 7.33% due 11/30/2023					
Total Debt per Balance Sheet			3,000,000		30-Nov-1993
Amt Assigned	-	3,000,000	3,000,000	0	
UCFC 10 yr Sr notes 7.75% due 6/15/2011					
Total Debt per Balance Sheet			197,000,000		20-Jun-2001
Amt Assigned	17,422,119	3,238,909	20,661,028	176,338,972	
OTHER LONG-TERM DEBT					
Wamego 96 - Due 3/1/26					
Total Debt per Balance Sheet			7,300,000		1-Mar-1996
Amt Assigned	7,300,000	-	7,300,000	0	
Environ Impr - Due 5/1/28					
Total Debt per Balance Sheet			5,000,000		26-May-1993
Amt Assigned	5,000,000	-	5,000,000	0	
Pollution Cntrl Bonds - Due 2/1/13					
Total Debt per Balance Sheet			5,600,000		4-Jun-1995
Amt Assigned	-	5,600,000	5,600,000	0	
Sanwa Bank Loan 6.99%					
Total Debt per Balance Sheet			0		9-Dec-1995
Amt Assigned	-	-	0	0	
Total Long-Term Debt Assigned	546,353,706	131,399,909	677,753,615	339,795,385	
CURRENT MATURITIES					
Sanwa Bank Loan 6.99% (final qtrly pymt on 12/9/2009)					
Total Debt per Balance Sheet			667,952		9-Dec-1995
Amt Assigned	667,952	-	667,952	0	
Total CM of LT Debt per Balance Sheet			<u>667,9</u> 52		
Total CM of LT Debt Assigned	667,952	-	667,952	0	
Total Amount Assigned	547,021,658	131,399,909	678,421,567	339,795,385	

Aquila Missouri Weighted Average Cost of Debt: MPS Projected to March 2009

Assigned Debt	Effective Rate	MO Electric Assigned Debt 3/31/09	Computed Interest on 3/31/09 Assigned Debt	MO Electric Weighted Avg Cost of Debt
30 Yr 8.27%, Due 11/15/21 Effective Rate 8.502%	8.502%	80,850,000	6,873,867	
Sr 7.625%, Due 11/15/09 Effective Rate 7.742%	7.742%	15,133,913	1,171,668	
Wamego 96, Due 3/1/26 Current Effective Rate 2.406%	2.406%	7,300,000	175,638	
Environ Improve, Due 5/1/28 Current Effective Rate 4.123%	4.123%	5,000,000	206,150	
Sanwa Bank Loan, Due 12/9/09 Effective Rate 7.02%	7.020%	667,952	46,890	
Sr 11.875% (downgrade 14.875%), Due 7/1/12 Effective Rate 5.35% (10/01/04)	5.350%	108,063,961	5,781,422	
Sr 11.875% (downgrade 14.875%), Due 7/1/12 Effective Rate 6.05% (7/15/04)	6.050%	66,171,000	4,003,346	
Sr 11.875% (downgrade 14.875%), Due 7/1/12 Effective Rate 6.474% (6/26/06)	6.474%	101,965,118	6,601,222	
Sr 11.875% (downgrade 14.875%), Due 7/1/12 Effective Rate 5.848% (12/29/06)	5.848%	25,300,318	1,479,563	
Sr 11.875% (downgrade 14.875%), Due 7/1/12 Effective Rate 6.404% (6/15/07)	6.404%	1,498,277	95,950	
Sr 7.95% (downgrade 9.95%), Due 2/1/11 Effective Rate 8.01%	8.010%	117,649,000	9,423,685	
UCFC Sr 7.75%, Due 6/15/11 Effective Rate 8.487%	8.487%	17,422,119	1,478,615	
Total		547,021,658	37,338,014	6.83%

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Prime Rate	8.4%	8.0%	9.2%	6.9%	4.7%	4.1%	4.3%	6.2%	8.0%	8.1%
Consumer Price Index	1.6%	2.7%	3.4%	1.6%	2.4%	1.8%	3.4%	3.4%	2.6%	4.1%
Long-Term Treasuries	5.6%	5.9%	5.9%	5.5%	5.4%	5.0%	5.1%	4.7%	5.0%	4.9%
Moody's Avg Utility Debt	7.0%	7.6%	8.1%	7.7%	7.5%	6.6%	6.2%	5.7%	6.1%	6.1%
Moody's Baa Utility Debt	7.3%	7.9%	8.4%	8.0%	8.0%	6.8%	6.4%	5.9%	6.3%	6.3%

Aquila Inc., d/b/a KCP&L Greater Missouri Operations Company **Historical Capital Market Costs**

SOURCES:

Prime Interest Rate - Federal Reserve Bank of St. Louis website

Consumer Price Index For All Urban Consumers: All Items (Seasonally Adjusted, December to December) - Federal Reserve Bank of St. Louis website Long-Term Treasuries - Federal Reserve Bank of St. Louis website

Moody's Average Utility Debt - Moody's (Mergent) Bond Record

Moody's Baa Utility Debt - Moody's (Mergent) Bond Record

	Triple-B	30-Year	Triple-B
Month	Utility Rate	Treasury Rate	Utility Spread
Jan-06	6.06	ND	ND
Feb-06	6.11	4.54	1.57
Mar-06	6.26	4.73	1.53
Apr-06	6.54	5.06	1.48
May-06	6.59	5.20	1.39
Jun-06	6.63	5.15	1.48
Jul-06	6.63	5.13	1.50
Aug-06	6.43	5.00	1.43
Sep-06	6.26	4.85	1.41
Oct-06	6.24	4.85	1.39
Nov-06	6.04	4.69	1.35
Dec-06	6.05	4.68	1.37
Jan-07	6.16	4.85	1.31
Feb-07	6.10	4.82	1.28
Mar-07	6.10	4.72	1.38
Apr-07	6.24	4.87	1.37
May-07	6.23	4.90	1.33
Jun-07	6.54	5.20	1.34
Jul-07	6.49	5.11	1.38
Aug-07	6.51	4.93	1.58
Sep-07	6.45	4.79	1.66
Oct-07	6.36	4.77	1.59
Nov-07	6.27	4.52	1.75
Dec-07	6.51	4.53	1.98
Jan-08	6.35	4.33	2.02
Feb-08	6.60	4.52	2.08
Mar-08	6.68	4.39	2.29
Apr-08	6.81	4.44	2.37
May-08	6.79	4.60	2.19
Jun-08	6.93	4.69	2.24
Jul-08	6.97	4.57	2.40
Aug-08	6.98	4.50	2.48
]	Most Recent 12	2 Month Average	2.09

Aquila Inc., d/b/a KCP&L Greater Missouri Operations Company Long-Term Interest Rate Trends

Sources: Mergent Bond Record (Utility Rates); www.federalreserve.gov (Treasury Rates).

⁸ Trends & Projections

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Seasonally	Adjusted +	Innual Rates -	— <i>Dollar</i> Ann	<i>Figures</i> , al % Chau	in Billion: nge	5	2007			E2008			E2009	
2007	E2008	E2009	2007	E2008	E2009		40	10	E20	E30	E40	10	20	30
\$13,807.6 4.8 2.0 2.7	\$14,354.3 4.0 1.7 2.3	\$14,795.2 3.1 0.9 2.1	4.8	4.0		Gross Domestic Product GDP (current dollars) Annual rate of increase (%) Annual rate of increase-real GDP (%) Annual rate of increase-GDP deflator (%)	\$14,031.2 2.3 (0.2) 2.8	\$14,150.8 3.5 0.9 2.6	\$14,256.5 3.0 1.9 1.1	\$14,453.5 5.6 2.1 3.2	\$14,556.6 2.9 (0.2) 3.1	\$14,602.3 \$ 1.3 (1.1) 2.4	\$14,699.7 2.7 2.2 0.4	\$14,854.8 4.3 2.4 1.9
\$8,252.8 2.8 1,242.4 2,392.6 4,646.2 1.383.0	\$8,342.0 1.1 1,218.8 2,415.0 4,724.6 1,434.5	\$8,370.3 0.3 1,180.9 2,414.8 4,777.0	2.8 2.5 2.5 2.6	1.1 - (1.9) 0.9 1.7	0.3 - (0.0) 1.1	*Components of Real GDP Personal consumption expenditures % change Durable goods Nondurable goods Services Nonresidental fixed investment	\$8,298.2 1.0 1,250.6 2,400.2 4,676.1 1,4147	\$8,316.1 0.9 1,237.0 2,397.9 4,704.3	\$8,347.5 1.5 1,227.7 2,421.7 4,717.4	\$8,362.2 0.7 1,214.0 2,426.5 4,735.8 1,437.3	\$8,342.1 (1.0) 1,196.5 2,413.9 4,740.8 1,451.3	\$8,320.8 (1.0) 1,167.6 2,403.9 4,749.5 1,411.7	\$8,348.7 1.3 1,175.1 2,407.7 4,767.2 1,400.8	\$8,379.5 1.5 1,177.5 2,417.6 4,785.0 1,403.8
1,078.9 1,078.9 444.9 (18.1) (2.5) 752.9 1,259.0 (546.5) 1,425.9 1,425.9 1,972.4	, 1,089.1 352.0 (20.9) (34.1) 2,053.7 785.6 1,268.8 (397.4) (397.4) 1,548.3 1,945.7	(1.8) (1.8) (1.65.4 (17.4) (17				% change Producers durable equipment Residental fixed investment % change Net change in business inventories Gov't purchases of goods & services Federal State & local Net exports Exports Imports	27.3) 3.4 403.0 (8.1) 761.7 761.7 1,267.5 (484.5) 1,267.5 1,267.5 1,266.5	1,008.6 374.5 (25.4) (10.2) 772.6 1,266.7 (462.0) 1,500.6 1,962.6	1,079.2 358.6 (16.0) (16.0) (62.2) 785.2 785.2 785.2 1,271.7 (395.2) (395.2) (395.2) 1,534.1 1,534.1	7,013 (14.3) (17.3) (17	7,5.4 1,112.6 329.9 (16.5) (29.6) 7,95.0 1,265.8 1,265.8 1,265.8 1,592.7 1,592.7 1,953.9	(10.5) (10.5) (10.5) (9.1) (9.1) (9.1) (31.0) 2,057.5 738.8 738.8 1,260.1 (325.9) (325.9) 1,617.1 1,617.1 1,943.0	(3.1) 1,094.7 328.5 8.1 (28.4) 2,052.1 801.1 1,252.7 1,252.7 1,252.7 1,547.0 1,647.0 1,932.5	, 0.9 1,1087 340.1 14.9 (14.7) 2,045.0 800.3 1,246.6 1,246.6 1,246.6 1,246.6 1,246.6 1,246.5 1,246.6 1,677.9
\$11,663.3 10,170.5 0.6 1,435.9 1,435.9 66.18	\$12,168.8 10,668.2 0.5 1,764.8 1,356.1 66.59	\$12,573.0 11,008.2 0.6 1,815.5 1,378.2 64.66	6.1 5.5 - 0.7 (18.8)	4.3 4.9 (6.4) (5.6) 0.6	3.3 3.2 - 2.9 (2.9)	** Income & Profits Personal income Disposable personal income Savings rate (%) Corporate profits before taxes Corporate profits after taxes ‡ Earnings per share (S&P 500)	\$11,872.1 10,351.5 0.4 1,894.3 1,460.9 66.18	\$11,981.2 10,440.0 0.3 1,750.9 1,348.0 60.39	\$12,195.7 10,833.4 2.6 1,781.8 1,373.4 55.42	\$12,209.8 10,677.2 (0.3) 1,800.1 1,382.1 58.09	\$12,288.3 10,722.4 (0.7) 1,726.4 1,321.0 66.59	\$12,399.0 3 10,863.5 0.2 1,827.7 1,389.5 68.16	\$12,503.4 \$ 10,953.2 0.6 1,783.5 1,783.5 1,355.7 67.35	\$12,627.4 11,055.5 0.7 1,819.1 1,380.4 66.29
2.9 4.4 4.6 4.8 5.6	4.8 3.9 5.6 5.6	2.9 2.4 4.5 6.1				t Prices & Interest Rates Consumer price index Treasury bills 10-yr notes 30-yr bonds New issue rate-corporate bonds	5.0 3.4 4.3 5.5	4.3 2.2 3.7 5.5	5.0 3.9 3.6 5.6	6.7 1.7 3.9 4.5 5.6	5.6 1.8 4.0 5.7	2.5 1.9 4.1 5.8	(1.0) 2.0 4.2 4.7 5.9	1.6 2.5 4.6 5.0 6.2
1,340.7 16.1 4.6 (5.6)	969.6 14.2 5.4 (8.5)	1,079.1 14.1 6.2 (0.0)	(26.0) (2.5) -	(27.7) (11.5) -	11.3 (0.8) -	Other Key Indicators Housing starts (1,000 units SAAR) Auto & truck sales (1,000,000 units) Unemployment rate (%) §U.S. dollar	1,151.3 16.0 4.8 (17.9)	1,053.0 15.2 4.9 (6.9)	1,015.7 14.1 5.3 (6.0)	903.4 13.4 5.6 5.2	906.2 14.2 5.8 (7.4)	930.8 13.7 6.0 0.4	1,034.7 14.1 6.2 1.7	1,123.6 14.1 6.2 3.4
Note: Annual **Current doll	changes an lars. ‡Trailin	e from prior yea g 4 quarters. T,	ir and qua Average fu	rterly char or period.	iges are fi §Quarterly	om prior quarter. Figures may not add to totals because o / % changes at quarterly rates. This forecast prepared by	if rounding. A–/ Standard & Poo	Advance data. or's.	. P-Prelimine	ıry. E-Estimate	ed. R-Revised	l. *1996 Chain	-weighted dol	lars.

Aquila, Inc., d/b/a KCP&L Greater Missouri Operations Company GDP Growth Rate Forecast

	Nominal	%	GDP Price	%		%
4047	GDP	Change	Deflator	Change	CPI	Change
1947	244.2	10.20/	15.5	5 69/	22.3	7 70/
1948	209.2	-0.7%	16.4	-0.2%	24.1	-1.0%
1950	207.5	9.0%	16.5	1.0%	20.0	1 1%
1950	339.3	15.5%	10.5	7.2%	26.0	7.9%
1952	358.4	5.6%	18.0	1.7%	26.6	2.3%
1953	379.4	5.9%	18.2	1.2%	26.8	0.8%
1954	380.4	0.3%	18.4	1.0%	26.9	0.3%
1955	414.8	9.0%	18.7	1.8%	26.8	-0.2%
1956	437.5	5.5%	19.4	3.5%	27.2	1.4%
1957	461.1	5.4%	20.0	3.3%	28.1	3.4%
1958	467.2	1.3%	20.5	2.3%	28.9	2.7%
1959	506.6	8.4%	20.8	1.2%	29.2	1.0%
1960	526.4	3.9%	21.0	1.4%	29.6	1.5%
1961	544.7	3.5%	21.3	1.1%	29.9	1.0%
1962	585.6	7.5%	21.6	1.4%	30.3	1.2%
1963	617.8	5.5%	21.8	1.1%	30.6	1.3%
1964	663.6	7.4%	22.1	1.5%	31.0	1.3%
1965	719.1	8.4%	22.5	1.8%	31.6	1.6%
1966	787.8	9.5%	23.2	2.8%	32.5	3.0%
1967	832.6	5.7%	23.9	3.1%	33.4	2.7%
1968	910.0	9.3%	24.9	4.3%	34.8	4.2%
1969	984.0	8.2% E E0/	20.1	5.0%	30.7	5.4%
1970	1030.5	0.5%	27.5	5.3%	30.0 40 5	5.9% 4.2%
1971	1228.3	0.0%	20.9	J.0 %	40.5	4.2 %
1972	1230.3	9.970	30.2	4.3%	41.0	5.5% 6.3%
1973	1502.7	8.5%	34.7	9.1%	44.4	11.0%
1974	1638.3	9.2%	38.0	9.1%	53.8	9.1%
1975	1825.3	11 4%	40.2	5.8%	56.9	5.8%
1970	2030.9	11.3%	42.7	6.3%	60.6	6.5%
1978	2294.7	13.0%	45.7	7.0%	65.2	7.6%
1979	2563.3	11.7%	49.5	8.3%	72.6	11.3%
1980	2789.5	8.8%	54.0	9.1%	82.4	13.5%
1981	3128.4	12.1%	59.1	9.4%	90.9	10.4%
1982	3255.0	4.0%	62.7	6.1%	96.5	6.2%
1983	3536.7	8.7%	65.2	3.9%	99.6	3.2%
1984	3933.2	11.2%	67.6	3.8%	103.9	4.4%
1985	4220.3	7.3%	69.7	3.0%	107.6	3.5%
1986	4462.8	5.7%	71.2	2.2%	109.7	1.9%
1987	4739.5	6.2%	73.2	2.7%	113.6	3.6%
1988	5103.8	7.7%	75.7	3.4%	118.3	4.1%
1989	5484.4	7.5%	78.6	3.8%	123.9	4.8%
1990	5803.1	5.8%	81.6	3.9%	130.7	5.4%
1991	5995.9	3.3%	84.4	3.5%	136.2	4.2%
1992	6337.8	5.7%	86.4	2.3%	140.3	3.0%
1993	6657.4	5.0%	88.4	2.3%	144.5	3.0%
1994	70/2.2	6.2%	90.3	2.1%	148.2	2.6%
1990	1391.1	4.0%	92.1	2.0%	152.4	∠.ŏ% 2.0%
1990	0.0101	5.1% 6.00/	93.8 05 4	1.9%	100.9 160 F	∠.9% 2.20/
1997	0304.3 8717 0	0.2% 5 20/	90.4 06 5	1.70	162.0	2.3%
1990	0747.0 0268 A	6.0%	90.3 07 0	1.170	166.6	2.0%
2000	9817 N	5.0%	100.0	2.2%	172.2	3.4%
2000	10128.0	3.2%	100.0	2.270	177.0	2.4%
2002	10469.6	3.4%	104.2	1.7%	179.9	1.6%
2003	10960.8	4.7%	106.4	2.1%	184.0	2.3%
2004	11685.9	6.6%	109.5	2.9%	188.9	2.7%
2005	12433.9	6.4%	113.0	3.2%	195.3	3.4%
2006	13194.7	6.1%	116.6	3.2%	201.6	3.2%
2007	13843.0	4.9%	119.7	2.7%	207.3	2.9%
10-Year Ave	rage	5.2%		2.3%		2.6%
20-Year Ave	rage	5.5%		2.5%		3.1%
30-Year Ave	rage	6.6%		3.5%		4.2%
40-Year Ave	rage	7.3%		4.1%		4.7%
50-Year Ave	rage	7.1%		3.7%		4.1%
60-Year Ave	rage	7.0%		3.5%		3.8%
Average of F	Periods	6.5%		3.3%		3.8%

Source: St. Louis Federal Reserve Bank, www.research.stlouisfed.org

Aquila, Inc., d/b/a KCP&L Greater Missouri Operations Company Discounted Cash Flow Analysis Summary Of DCF Model Results

Company	Constant Growth DCF Model Analysts' Growth Rates	Constant Growth DCF Model Long-Term GDP Growth	Low Near-Term Growth Two-Stage Growth DCF Model
· · ·		¥	
1 ALLETE	8.8%	10.8%	10.4%
2 Alliant Energy Co.	10.3%	11.0%	11.1%
3 Ameren	10.2%	12.6%	11.6%
4 American Elec. Pwr.	11.1%	11.0%	11.4%
5 Avista Corp.	9.7%	10.1%	10.8%
6 Cent, Vermont P.S.	12.5%	10.8%	10.1%
7 Cleco Corporation	15.8%	10.2%	11.4%
8 Con. Edison	8.4%	12.5%	11.6%
9 DTE Energy Co.	10.8%	11.5%	11.0%
10 Edison Internat.	10.1%	9.2%	9.2%
11 Empire District	14.4%	12.9%	12.3%
12 Entergy Corp.	14.6%	9.7%	10.0%
13 FPL Group, Inc.	12.9%	9.5%	9.5%
14 FirstEnergy	12.4%	9.7%	9.8%
15 Hawaiian Electric	12.9%	11.4%	10.8%
16 IDACORP	8.7%	10.5%	9.9%
17 NiSource Inc.	9.0%	11.8%	11.3%
18 Northeast Utilities	13.3%	9.9%	9.8%
19 NSTAR	11.2%	11.1%	11.1%
20 PG&E Corp.	11.0%	10.8%	10.8%
21 Pinnacle West	10.7%	13.0%	12.4%
22 Portland General	11.1%	10.8%	10.7%
23 Progress Energy	11.2%	12.4%	11.6%
24 Southern Co.	10.0%	11.3%	11.1%
25 Teco Energy, Inc.	12.2%	10.7%	10.3%
26 UIL Holdings Co.	11.7%	12.0%	11.2%
27 Vectren Corp.	9.7%	11.1%	10.6%
28 Westar Energy	9.1%	11.9%	11.5%
29 Wisconsin Energy	11.7%	9.2%	9.3%
30 Xcel Energy Inc.	11.1%	11.3%	10.8%
GROUP AVERAGE	11.2%	11.0%	10.8%
GROUP MEDIAN	11.1%	11.0%	10.8%

Sources: Value Line Investment Survey, Electric Utility (East), Aug 29, 2008; (Central), Jun 27, 2008; (West), Aug 8, 2008.

Aquila, Inc., d/b/a KCP&L Greater Missouri Operations Company Constant Growth DCF Model Analysts' Growth Rates

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
					Analysts' Es	timated Grov	wth	
		Next					Average	ROE
	Recent	Year's	Dividend	Value			Growth	K=Div Yld+G
Company	Price(P0)	Div(D1)	Yield	Line	Zacks	Thomson	(Cols 4-6)	(Cols 3+7)
1 ALLETE	42.10	1.80	4.28%	2.50%	5.00%	6.00%	4.50%	8.8%
2 Alliant Energy Co.	34.06	1.53	4.49%	6.00%	6.10%	5.40%	5.83%	10.3%
3 Ameren	41.94	2.54	6.06%	3.50%	5.00%	4.00%	4.17%	10.2%
4 American Elec. Pwr.	40.08	1.80	4.49%	7.50%	6.30%	5.97%	6.59%	11.1%
5 Avista Corp.	21.85	0.78	3.57%	9.00%	5.00%	4.50%	6.17%	9.7%
6 Cent. Vermont P.S.	21.25	0.92	4.33%	7.50%	NA	8.90%	8.20%	12.5%
7 Cleco Corporation	24.56	0.90	3.66%	10.50%	14.00%	12.04%	12.18%	15.8%
8 Con. Edison	39.55	2.36	5.97%	1.00%	3.20%	3.00%	2.40%	8.4%
9 DTE Energy Co.	42.34	2.12	5.01%	5.00%	6.30%	6.00%	5.77%	10.8%
10 Edison Internat.	49.22	1.34	2.72%	5.00%	8.80%	8.45%	7.42%	10.1%
11 Empire District	20.02	1.28	6.39%	10.00%	NA	6.00%	8.00%	14.4%
12 Entergy Corp.	112.15	3.60	3.21%	10.00%	12.00%	12.18%	11.39%	14.6%
13 FPL Group, Inc.	64.10	1.92	3.00%	9.50%	10.30%	9.84%	9.88%	12.9%
14 FirstEnergy	76.04	2.45	3.22%	11.00%	8.30%	8.33%	9.21%	12.4%
15 Hawaiian Electric	25.21	1.24	4.92%	7.50%	4.20%	12.20%	7.97%	12.9%
16 IDACORP	29.73	1.20	4.04%	2.00%	6.00%	6.00%	4.67%	8.7%
17 NiSource Inc.	17.28	0.92	5.32%	5.00%	3.00%	2.91%	3.64%	9.0%
18 Northeast Utilities	25.92	0.88	3.39%	11.50%	10.00%	8.22%	9.91%	13.3%
19 NSTAR	33.23	1.53	4.60%	7.50%	6.40%	6.00%	6.63%	11.2%
20 PG&E Corp.	39.10	1.68	4.30%	5.00%	7.80%	7.24%	6.68%	11.0%
21 Pinnacle West	32.83	2.12	6.46%	2.00%	6.70%	4.00%	4.23%	10.7%
22 Portland General	23.69	1.01	4.26%	7.00%	7.00%	6.65%	6.88%	11.1%
23 Progress Energy	42.33	2.49	5.88%	5.00%	4.70%	6.12%	5.27%	11.2%
24 Southern Co.	35.74	1.73	4.84%	5.50%	4.70%	5.36%	5.19%	10.0%
25 Teco Energy, Inc.	19.59	0.82	4.19%	7.00%	10.10%	6.85%	7.98%	12.2%
26 UIL Holdings Co.	31.20	1.73	5.55%	4.50%	6.00%	8.00%	6.17%	11.7%
27 Vectren Corp.	29.58	1.35	4.56%	3.50%	6.10%	5.77%	5.12%	9.7%
28 Westar Energy	22.13	1.20	5.42%	1.50%	4.80%	4.61%	3.64%	9.1%
29 Wisconsin Energy	45.53	1.24	2.72%	8.00%	9.60%	9.19%	8.93%	11.7%
30 Xcel Energy Inc.	20.29	0.97	4.78%	7.50%	5.40%	6.12%	6.34%	11.1%
GROUP AVERAGE	36.75	1.58	4.52%	6.27%	6.89%	6.86%	6.70%	11.2%
GROUP MEDIAN			4.49%					11.1%

Sources: Value Line Investment Survey, Electric Utility (East), Aug 29, 2008; (Central), Jun 27, 2008; (West), Aug 8, 2008.

Aquila, Inc., d/b/a KCP&L Greater Missouri Operations Company Constant Growth DCF Model Long-Term GDP Growth

	(9)	(10)	(11)	(12)	(13)
		Next			ROE
	Recent	Year's	Dividend	GDP	K=Div Yld+G
Company	Price(P0)	Div(D1)	Yield	Growth	(Cols 11+12)
1 ALLETE	42.10	1.80	4.28%	6.50%	10.8%
2 Alliant Energy Co.	34.06	1.53	4.49%	6.50%	11.0%
3 Ameren	41.94	2.54	6.06%	6.50%	12.6%
4 American Elec. Pwr.	40.08	1.80	4.49%	6.50%	11.0%
5 Avista Corp.	21.85	0.78	3.57%	6.50%	10.1%
6 Cent. Vermont P.S.	21.25	0.92	4.33%	6.50%	10.8%
7 Cleco Corporation	24.56	0.90	3.66%	6.50%	10.2%
8 Con. Edison	39.55	2.36	5.97%	6.50%	12.5%
9 DTE Energy Co.	42.34	2.12	5.01%	6.50%	11.5%
10 Edison Internat.	49.22	1.34	2.72%	6.50%	9.2%
11 Empire District	20.02	1.28	6.39%	6.50%	12.9%
12 Entergy Corp.	112.15	3.60	3.21%	6.50%	9.7%
13 FPL Group, Inc.	64.10	1.92	3.00%	6.50%	9.5%
14 FirstEnergy	76.04	2.45	3.22%	6.50%	9.7%
15 Hawaiian Electric	25.21	1.24	4.92%	6.50%	11.4%
16 IDACORP	29.73	1.20	4.04%	6.50%	10.5%
17 NiSource Inc.	17.28	0.92	5.32%	6.50%	11.8%
18 Northeast Utilities	25.92	0.88	3.39%	6.50%	9.9%
19 NSTAR	33.23	1.53	4.60%	6.50%	11.1%
20 PG&E Corp.	39.10	1.68	4.30%	6.50%	10.8%
21 Pinnacle West	32.83	2.12	6.46%	6.50%	13.0%
22 Portland General	23.69	1.01	4.26%	6.50%	10.8%
23 Progress Energy	42.33	2.49	5.88%	6.50%	12.4%
24 Southern Co.	35.74	1.73	4.84%	6.50%	11.3%
25 Teco Energy, Inc.	19.59	0.82	4.19%	6.50%	10.7%
26 UIL Holdings Co.	31.20	1.73	5.55%	6.50%	12.0%
27 Vectren Corp.	29.58	1.35	4.56%	6.50%	11.1%
28 Westar Energy	22.13	1.20	5.42%	6.50%	11.9%
29 Wisconsin Energy	45.53	1.24	2.72%	6.50%	9.2%
30 Xcel Energy Inc.	20.29	0.97	4.78%	6.50%	11.3%
GROUP AVERAGE	36.75	1.58	4.52%	6.50%	11.0%
GROUP MEDIAN			4.49%		11.0%

Sources: Value Line Investment Survey, Electric Utility (East), Aug 29, 2008; (Central), Jun 27, 2008; (West), Aug 8, 2008.

Aquila, Inc., d/b/a KCP&L Greater Missouri Operations Company Low Near-Term Growth Two-Stage Growth DCF Model

	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)
	Next		Annual			CA	SH FLO	NS			ROE=Internal
	Year's	2012	Change	Recent	Year 1	Year 2	Year 3	Year 4	Year 5	Year 5-150	Rate of Return
Company	Div	Div	to 2012	Price	Div	Div	Div	Div	Div	Div Growth	(Yrs 0-150)
1 ALLETE	1.80	2.00	0.07	-42.10	1.80	1.87	1.93	2.00	2.13	6.50%	10.4%
2 Alliant Energy Co.	1.53	1.92	0.13	-34.06	1.53	1.66	1.79	1.92	2.04	6.50%	11.1%
3 Ameren	2.54	2.54	0.00	-41.94	2.54	2.54	2.54	2.54	2.71	6.50%	11.6%
4 American Elec. Pwr.	1.80	2.40	0.20	-40.08	1.80	2.00	2.20	2.40	2.56	6.50%	11.4%
5 Avista Corp.	0.78	1.15	0.12	-21.85	0.78	0.90	1.03	1.15	1.22	6.50%	10.8%
6 Cent. Vermont P.S.	0.92	0.92	0.00	-21.25	0.92	0.92	0.92	0.92	0.98	6.50%	10.1%
7 Cleco Corporation	0.90	1.50	0.20	-24.56	0.90	1.10	1.30	1.50	1.60	6.50%	11.4%
8 Con. Edison	2.36	2.42	0.02	-39.55	2.36	2.38	2.40	2.42	2.58	6.50%	11.6%
9 DTE Energy Co.	2.12	2.30	0.06	-42.34	2.12	2.18	2.24	2.30	2.45	6.50%	11.0%
10 Edison Internat.	1.34	1.64	0.10	-49.22	1.34	1.44	1.54	1.64	1.75	6.50%	9.2%
11 Empire District	1.28	1.40	0.04	-20.02	1.28	1.32	1.36	1.40	1.49	6.50%	12.3%
12 Entergy Corp.	3.60	4.80	0.40	-112.15	3.60	4.00	4.40	4.80	5.11	6.50%	10.0%
13 FPL Group, Inc.	1.92	2.34	0.14	-64.10	1.92	2.06	2.20	2.34	2.49	6.50%	9.5%
14 FirstEnergy	2.45	3.05	0.20	-76.04	2.45	2.65	2.85	3.05	3.25	6.50%	9.8%
15 Hawaiian Electric	1.24	1.30	0.02	-25.21	1.24	1.26	1.28	1.30	1.38	6.50%	10.8%
16 IDACORP	1.20	1.20	0.00	-29.73	1.20	1.20	1.20	1.20	1.28	6.50%	9.9%
17 NiSource Inc.	0.92	1.00	0.03	-17.28	0.92	0.95	0.97	1.00	1.07	6.50%	11.3%
18 Northeast Utilities	0.88	1.03	0.05	-25.92	0.88	0.93	0.98	1.03	1.10	6.50%	9.8%
19 NSTAR	1.53	1.85	0.11	-33.23	1.53	1.64	1.74	1.85	1.97	6.50%	11.1%
20 PG&E Corp.	1.68	2.04	0.12	-39.10	1.68	1.80	1.92	2.04	2.17	6.50%	10.8%
21 Pinnacle West	2.12	2.30	0.06	-32.83	2.12	2.18	2.24	2.30	2.45	6.50%	12.4%
22 Portland General	1.01	1.20	0.06	-23.69	1.01	1.07	1.14	1.20	1.28	6.50%	10.7%
23 Progress Energy	2.49	2.55	0.02	-42.33	2.49	2.51	2.53	2.55	2.72	6.50%	11.6%
24 Southern Co.	1.73	2.00	0.09	-35.74	1.73	1.82	1.91	2.00	2.13	6.50%	11.1%
25 Teco Energy, Inc.	0.82	0.90	0.03	-19.59	0.82	0.85	0.87	0.90	0.96	6.50%	10.3%
26 UIL Holdings Co.	1.73	1.73	0.00	-31.20	1.73	1.73	1.73	1.73	1.84	6.50%	11.2%
27 Vectren Corp.	1.35	1.47	0.04	-29.58	1.35	1.39	1.43	1.47	1.57	6.50%	10.6%
28 Westar Energy	1.20	1.32	0.04	-22.13	1.20	1.24	1.28	1.32	1.41	6.50%	11.5%
29 Wisconsin Energy	1.24	1.60	0.12	-45.53	1.24	1.36	1.48	1.60	1.70	6.50%	9.3%
30 Xcel Energy Inc.	0.97	1.06	0.03	-20.29	0.97	1.00	1.03	1.06	1.13	6.50%	10.8%
GROUP AVERAGE											10.8%
GROUP MEDIAN											10.8%

Sources: Value Line Investment Survey, Electric Utility (East), Aug 29, 2008; (Central), Jun 27, 2008; (West), Aug 8, 2008.

Aquila, Inc., d/b/a KCP&L Greater Missouri Operations Company Discounted Cash Flow Analysis Column Descriptions

Column 1: Three-month Average Price per Share (Jun 2008-Aug 2008)	Column 13: Column 11 Plus Column 12
Column 2: Estimated 2009 Dividends per Share from Value Line	Column 14: See Column 2
Column 3: Column 2 Divided by Column 1	Column 15: Estimated 2012 Dividends per Share from Value Line
Column 4: "Est'd 05-07 to 11-13" Earnings Growth	Column 16: (Column 15 Minus Column 14) Divided by Three
	Column 17: See Column 1
Reported by Zacks.com	Column 18: See Column 14
Column 6: "Next 5 Years (per annum) Growth Estimate Reported	Column 19: Column 18 Plus Column 16
	Column 20: Column 19 Plus Column 19
Column 2: Column 2 Plus Column 7	Column 21: Column 20 Plus Column 16
	Column 22: Column 21 Increased by the Growth
Column 9: See Column 1	Rate Snown in Column 23
Column 10: See Column 2	Column 23: See Column 12
Column 11: Column 10 Divided by Column 9	Column 24: The Internal Rate of Return of the Cash Flows in Columns 17-22 along with the Dividends
Column 12: Average of GDP Growth During the Last 10 year, 20 year, 30 year, 40 year, 50 year, and 60 year growth periods.	for the Years 6-150 Implied by the Growth Rates shown in Column 23

See Schedule SCH-6

Μ	OODY'S AVERAGE	AUTHORIZED	INDICATED
			RISK
1080	12 15%	<u>RETURNS (2)</u>	1 08%
1960	15.15%	14.23%	-0.40%
1982	15.02 %	15.22%	-0.40%
1083	13 31%	15.70%	2 05%
1984	14.03%	15.00%	1 29%
1985	12 29%	15.02%	2 91%
1986	9.46%	13 93%	4 47%
1987	9.98%	12 99%	3.01%
1988	10.45%	12.79%	2.34%
1989	9.66%	12.97%	3.31%
1990	9.76%	12.70%	2.94%
1991	9.21%	12.55%	3.34%
1992	8.57%	12.09%	3.52%
1993	7.56%	11.41%	3.85%
1994	8.30%	11.34%	3.04%
1995	7.91%	11.55%	3.64%
1996	7.74%	11.39%	3.65%
1997	7.63%	11.40%	3.77%
1998	7.00%	11.66%	4.66%
1999	7.55%	10.77%	3.22%
2000	8.14%	11.43%	3.29%
2001	7.72%	11.09%	3.37%
2002	7.53%	11.16%	3.63%
2003	6.61%	10.97%	4.36%
2004	6.20%	10.75%	4.55%
2005	5.67%	10.54%	4.87%
2006	6.08%	10.36%	4.28%
2007	6.11%	10.36%	4.25%
AVERAGE	9.23%	12.40%	3.17%
INDICATED COS	ST OF EQUITY		
PROJECTED TR	IPLE-B UTILITY BOND	/IELD*	6.99%
MOODY'S AVG A	ANNUAL YIELD DURING	STUDY	9.23%
INTEREST RATE	DIFFERENCE		-2.24%
INTEREST RATE	CHANGE COEFFICIEN	Т	-41.83%
ADUSTMENT T	O AVG RISK PREMIUM		0.94%
BASIC RISK PRE	EMIUM		3.17%
INTEREST RAT	E ADJUSTMENT		0.94%
EQUITY RISK F	PREMIUM		4.11%
PROJECTED TR	IPLE-B UTILITY BOND	/IELD*	6.99%
INDICATED EQU	JITY RETURN		11.10%

Aquila, Inc., d/b/a KCP&L Greater Missouri Operations Company

Risk Premium Analysis

(1) Moody's Investors Service

(2) Regulatory Focus, Regulatory Research Associates, Inc.

*Projected triple-B bond yield is 209 basis points over projected long-term Treasury bond rate of 4.9% from Schedule SCH-5, p. 3. The triple-B spread is for the 12 months ended August 2008 from Schedule SCH-5, p. 2.



Aquila, Inc., d/b/a KCP&L Greater Missouri Operations Company Risk Premium Analysis