**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 for Approval to Make Certain Changes in its Charges for Electric Service	))))) Case No. ER-2009-0090

Direct Testimony and Schedules of

Michael Gorman

On behalf of

The Office of Public Counsel

Project 9074
February 13, 2009

BAI

BRUBAKER & ASSOCIATES, INC.
CHESTERFIELD, MO 63017

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 for Approval to Make Certain Changes in its Charges for Electric Service	))) Case No. ER-2009-0090))

AFFIDAVIT OF MICHAEL GORMAN

STATE OF MISSOURI   )
)   ss
COUNTY OF ST. LOUIS   )

Michael Gorman, of lawful age and being first duly sworn, deposes and states:

1.   My name is Michael Gorman. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 16690 Swingley Ridge Road, Suite 140, Chesterfield, Missouri 63017. We have been retained by the Office of Public Counsel in this proceeding on its behalf.

2.   Attached hereto and made a part hereof for all purposes are my direct testimony and schedules.

3.   I hereby swear and affirm that my statements contained in the attached testimony are true and correct to the best of my knowledge and belief.

_____
Michael Gorman
Consultant

Subscribed and sworn to me this 12th day of February, 2009.

_____
Maria E. Decker
Notary Public

My commission expires May 5, 2009.

BRUBAKER & ASSOCIATES, INC.

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Direct Testimony of Michael Gorman

1 **Q** **PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A My name is Michael Gorman and my business address is 16690 Swingley Ridge

3 Road, Suite 140, Chesterfield, Missouri 63017.

4 **Q** **WHAT IS YOUR OCCUPATION?**

5 A I am an energy advisor and a consultant in the field of public utility regulation and a

6 managing principal in the firm of Brubaker & Associates, Inc. ("BAI").

7 **Q** **PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND EXPER-**

8 **IENCE.**

9 A These are set forth in Appendix A.

10 **Q** **ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?**

11 A I am appearing on behalf of the Office of Public Counsel.

1 **Q WHAT IS THE SUBJECT OF YOUR TESTIMONY?**

2 A I will recommend a fair return on common equity and overall rate of return for Aquila,

3 Inc. dba KCP&L Greater Missouri Operations Company ("GMO" or "Aquila Missouri"

4 or "Company").

5 **Q PLEASE SUMMARIZE YOUR RATE OF RETURN RECOMMENDATIONS.**

6 A I recommend the Missouri Public Service Commission ("MPSC" or the "Commission")

7 award GMO a return on common equity of 10.30% for Missouri Public Service

8 ("MPS") and St. Joseph Light & Power ("SJLP").

9 My recommended return on equity for GMO is based on a constant growth

10 Discounted Cash Flow ("DCF"), a two-stage growth DCF model, a multi-stage DCF

11 model, Risk Premium ("RP") model and Capital Asset Pricing Model ("CAPM")

12 analyses. These analyses estimate a fair return on equity based on observable

13 market information for a group of publicly traded electric utility companies that proxy

14 GMO's going-forward investment risk.

15 Finally, I recommend an overall rate of return of 8.51% for MPS, and 8.92%

16 for SJLP, as shown on my Schedule MPG-1. My recommended overall rate of return

17 is based on GMO's proposed capital structure, my recommended return on equity,

18 and the Company's projected embedded cost of debt.

19 ## ELECTRIC UTILITY INDUSTRY MARKET PERSPECTIVE

20 **Q DID YOU ATTEMPT TO VALIDATE THE ACCURACY OF YOUR MARKET**

21 **RETURN ON EQUITY ESTIMATE FOR GMO?**

22 A Yes. As shown on my Schedule MPG-2, I compared my estimated return on equity

23 for GMO in this case to the industry average authorized return on equity for electric

1   utility companies over the last five years. I also reviewed the credit rating history, and

2   stock investment returns for the industry over that same period. Industry authorized

3   returns on equity have averaged approximately 10.5% over the last 6 years, and

4   approximately 10.3% from 2006 to date.

5   These authorized returns on equity have supported improvement to the

6   investment grade credit rating of the electric utility industry and have resulted in

7   robust stock price performance over this time period. Indeed, electric utility stock

8   price performance has consistently outperformed the overall market during this time

9   period. This market evidence indicates that commission-authorized returns on equity

10   in the range of approximately 10.3% to 10.5% have supported stock prices and

11   investment grade credit ratings of utility companies. This is evidence that a return of

12   10.30% for GMO will support its financial integrity and access to capital.

13   **Q   PLEASE DESCRIBE THE EVIDENCE THAT THE INDUSTRY'S AUTHORIZED**

14   **RETURNS ON EQUITY HAVE SUPPORTED UTILITIES' FINANCIAL INTEGRITY**

15   **AND ACCESS TO CAPITAL.**

16   A   In its Q3 2008 "Credit Ratings," the Edison Electric Institute ("EEI"), an electric utility

17   industry trade organization, provided an assessment of the credit rating history of

18   U.S. electric utilities over the period 2002 through the third quarter 2008. EEI's

19   commentary included the following:

20   **COMMENTARY**
21   Ratings changes were minimal in Q3 for a third straight quarter. The
22   14 actions (upgrades plus downgrades) were the third lowest quarterly
23   total on record since EEI began gathering data in Q1 2001 (Q2 2008's
24   nine actions were the lowest).

25   Industry credit quality rose slightly, with nine upgrades and five
26   downgrades, although five of the upgrades related to one company.
27   This follows a modest decline in credit quality during the first half of
28   2008, leaving 23 downgrades outnumbering 18 upgrades through the

1	first nine months of the year. <u>Credit quality improved steadily over the</u>
2	<u>previous three years, with upgrades outnumbering downgrades in 10</u>
3	<u>of the 12 quarters prior to Q1 2008.</u>

4	The quarter's upgrades centered on prospects for effective
5	management of capital spending programs and an improved regulatory
6	environment in Illinois. Downgrades related primarily to the non-utility
7	side of the business. Ratings outlooks at quarter-end were mostly
8	negative, a trend in place throughout 2008 and for most of 2007.

9	Although it has not yet impacted ratings actions or individual company
10	outlooks, the severity of the credit crisis that erupted in early October is
11	a concern given the industry's rising capital spending and associated
12	capital needs. Despite this recent market turmoil, the volume of rating
13	actions remained low in October (through 10/24).[1]

14	Further, Moody's also acknowledges the following for the electric utility

15	industry in its report. Moody's states:

16	**Overview**
17	The U.S. investor-owned electric utility sector enjoys <u>solid credit</u>
18	<u>metrics and the fundamental credit outlook remains stable</u>. In general,
19	state regulators continue to let the utilities recover prudently incurred
20	operating costs and capital expenditures relatively quickly, and with
21	reasonable rates of return. Moreover, we believe state regulators
22	would otherwise prefer to regulate financially healthy companies.

23	<u>The sector is also well positioned relative to many other</u>
24	<u>corporate/industrial sectors</u>, primarily due to the fundamental business
25	plan: providing monopolistic electric service within a designated
26	service territory in exchange for oversight and limitations on
27	profitability. However, we are increasingly concerned with business
28	and operating risks, which are not new but appear to be accelerating
29	faster than previously understood. These business and operating risks
30	include potential environmental legislation from the Obama
31	Administration; the continued capital investment needs for refurbishing
32	aging infrastructure; and a potentially more contentious regulatory
33	relationship amid a protracted or severe recession.[2]

34	Similarly, Fitch states:

35	The utilities segment is not immune to the economic challenges facing
36	corporate America, but is <u>relatively well positioned</u>. Providing essential
37	services and largely regulated, utilities benefit from investor
38	perceptions as a defensive group. For the most part, electric utilities

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[1]"Q3 2008 Credit Ratings," EEI Q3 2008 *Financial Update*, emphasis added.
[2]Moody's Investors Service Industry Outlook: "U.S. Investor-Owned Electric Utilities," January 2009, emphasis added.

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1	reduced debt and focused on improving their core business over the
2	past four years. Consequently, <u>while many industries and companies</u>
3	<u>have recently been shut out of the capital markets, stronger utilities</u>
4	<u>have accessed both secured and unsecured markets</u>. However,
5	investor "flight to quality" is selective within the sector, favoring
6	companies at higher rating levels, with a marked preference for
7	secured debt and lending at the operating, rather than parent,
8	company.

9   * * *

Key Drivers of the 2009 Outlook

The positive and negative factors driving Fitch's outlook in 2009 include:

Positives

- Continued capital market access in a difficult financing environment, particularly for higher-rated regulated utilities and pipelines.
- The decline in commodity prices from record peak levels will ease cost pressures for materials and labor.
- Lower market prices for natural gas and electric power will be neutral to beneficial to electric and gas distribution utilities, and in many cases will reduce working capital needs and cash collateral postings on hedging activities.

Negatives

- Higher marginal cost of debt.
- Depressed equity valuations.
- Liquidity and market access to remain fragile.
- Administration change creates uncertainty about national environmental and tax and dividend policies.
- More stringent implementation of environmental regulations.
- Reduced electricity and gas consumption.
- Lower prices for natural gas and wholesale power, resulting in reduced spark spreads and dark spreads for un-hedged competitive power generators.
- Investor-owned and public power utilities may face resistance from regulators and consumers to rate increases in a recessionary environment.[3]
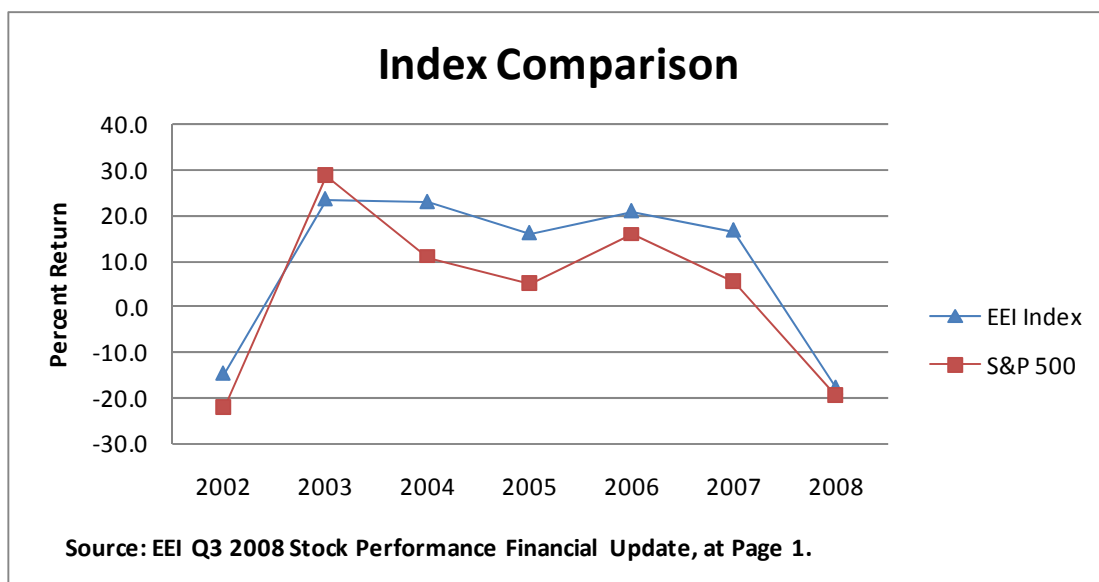
As noted by EEI, Moody's and Fitch above, the regulated electric utility industry is maintaining strong investment grade credit, and is well positioned to weather the current economic downturn. Therefore, reasoned and rational

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[3] Fitch Ratings: "U.S. Utilities, Power and Gas 2009 Outlook," December 22, 2008, emphasis added.

1   adjustments to GMO's rates would be appropriate to provide fair compensation, but

2   not excessive compensation, in an effort to improve GMO's competitive position,

3   strengthen its credit, and support its distressed service territory.

4 **Q**   **IS THERE EVIDENCE THAT ELECTRIC UTILITY STOCK PRICE PERFORMANCE**

5   **HAS BEEN STRONG OVER THE LAST FIVE YEARS?**

6 A   Yes.   As shown in the graph below, EEI has recorded electric utility stock price

7   performance compared to the market.   The EEI data shows that its Electric Utility

8   Stock Index has outperformed the market in every year over the last five years.

9   Again, this strong stock performance indicates commission-authorized returns on

10   equity over the last several years have been positively received by the market.

Index Comparison

Year	EEI Index	S&P 500
2002	-15.0	-22.0
2003	23.5	29.0
2004	23.0	11.0
2005	16.0	5.0
2006	21.0	16.0
2007	16.5	5.5
2008	-18.0	-19.5

Percent Return

Source: EEI Q3 2008 Stock Performance Financial Update, at Page 1.

11   As shown in the graph above, the EEI Electric Utility Index has outperformed

12   the market since 2003.

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1 **Q FOR 2008, THE ELECTRIC UTILITY STOCK AND THE OVERALL MARKET PRICE**

2 **PERFORMANCE HAS BEEN SIGNIFICANTLY NEGATIVE. DOES THIS TIME**

3 **PERIOD ALSO SUPPORT YOUR CONTENTION THAT REGULATED ELECTRIC**

4 **UTILITY STOCK PERFORMANCE HAS BEEN STRONG RELATIVE TO THE**

5 **MARKET?**

6 A Yes. While clearly the market performance for all securities has been dismal

7 throughout 2008, the only positive signal from the market performance is the fact that

8 electric utility stocks and bonds have continued to be perceived by the market as

9 "safe" investments. Indeed, during times of market duress, the market generally

10 exhibits a "flight to quality" and lower-risk securities generally perform better than the

11 overall market and higher-risk securities. This has happened through the first three

12 quarters of 2008. For example, EEI noted the following concerning electric utility

13 stock performance in 2008:

14 **COMMENTARY**
15 The second quarter's surge in energy-related stocks and commodities
16 sharply reversed in the third quarter, and the EEI Index posted a
17 -14.3% total return – strongly underperforming the Dow Jones
18 Industrials' -3.7% return and the S&P 500's -8.4% return (see Table
19 VIII).

20 The third quarter's weakness was most evident in the Mostly
21 Regulated and Diversified categories, which returned -13.9% and
22 -15.5%, respectively, on a non-capitalization weighted basis (an
23 average of constituent company returns).

24 <u>By contrast, the Regulated group offered something of a safe harbor</u>
25 <u>with a -0.3% return</u>. Given their dependable dividend yields and slow
26 but steady growth, regulated utilities are often viewed as a safe haven
27 investment in times of market turmoil – a status that certainly
28 benefitted the category during the third quarter.[4]

29 This stock price performance again supports the notion that regulated electric

30 utilities are perceived by the market as safe haven investments, which will help

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[4]"Q3 2008 Stock Performance," EEI Q3 2008 *Financial Update*, emphasis added.

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1   support their access to capital during difficult financial times. This is clearly evident

2   through a review of their stable credit outlook and stable stock prices, relative to the

3   securities of non-regulated companies.

4   **GMO RISK FACTORS**

5   **Q   PLEASE PROVIDE AN OVERVIEW OF GMO'S INVESTMENT RISK.**

6   A   GMO has a Standard & Poor's ("S&P") corporate and senior secured credit ratings of

7   "BBB" and "BBB+," respectively.[5] S&P assigned the Company an "Excellent"

8   business risk position rating and an "Aggressive" financial risk position rating. These

9   ratings represent typical financial and operating risk for an integrated electric utility.

10   GMO's corporate and senior secured credit ratings from Moody's are "Baa2."

11   Moody's stated the following:

12   **Recent Developments**

13   On July 15, 2008, Moody's upgraded Aquila Inc.'s ("Aquila") senior
14   unsecured rating to Baa2 from Ba3. At the same time Moody's
15   affirmed all ratings of Great Plains Energy Incorporated ("Great
16   Plains") and its operating subsidiary Kansas City Power & Light
17   Company ("KCPL").

18   * * *

19   **Rating Rationale**

20   At this time Aquila's Baa2 senior unsecured rating is largely a function
21   of the expected extension of absolute unconditional and irrevocable
22   downstream guarantees to be effected by Great Plains for the benefit
23   of Aquila bondholders following the acquisition. On a stand-alone
24   basis, we view Aquila's financial risk profile as and credit metrics as
25   being weak for the rating; however, Moody's does believe there are
26   significant synergistic, regulatory and financial opportunities that could
27   effectively improve the current business and financial risk profile of
28   Aquila as a subsidiary of Great Plains. Key rating factors forming the
29   basis for Aquila's ratings are:

30   * * *

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[5] SNL Financial, KCP&L Greater Missouri Operations Company, Credit Rating; downloaded
on February 11, 2009.

1 **REGIONAL, STABLE, REGULATED ELECTRIC & GAS UTILITY**

2 Aquila is now primarily viewed as a relatively small integrated electric
3 utility company with a relatively stable customer base. Aquila's
4 customers and assets are located in Missouri, a state in Moody's view
5 that has an improving regulatory environment but has been
6 challenging historically. We note the merger was approved by a 2 to 1
7 vote. Nevertheless, as a regulated utility, the company's operations
8 should, provide for relatively stable cash flows over time.

9 <div align="center">* * *</div>

10 **IMPROVING FINANCIAL PROFILE**

11 Aquila's rating reflects the potential for an improved financial profile as
12 part of the larger Great Plains corporate family and, more importantly,
13 an understanding that Great Plains will extend guarantees for all rated
14 debt obligations at Aquila that survives the transaction (Aquila had
15 approximately $1.1 billion of net debt a/o March 31, 2008, or
16 approximately 5.8 times debt to EBITDA).

17 The transaction is a transforming event for both Aquila and Great
18 Plains. Although Aquila is more leveraged than its "sister" subsidiary
19 KCPL, the rating recognizes the additional financial and operational
20 benefits to Aquila's risk profile as part of a larger utility family. Aquila's
21 rating also reflects the longer-term challenges that will need to be
22 addressed before further upgrades would likely be considered
23 including careful management of the sizeable capital program through
24 2010 and improvement in credit metrics. One area of differentiation
25 between Aquila and KCPL is that Aquila has regulatory approval for a
26 fuel adjustment clause for sharing up to 95% of energy costs not
27 covered in existing rate authorizations that could provide some added
28 protection against volatility in fuel costs in 2008 and beyond.[6]

29 ## GMO'S PROPOSED CAPITAL STRUCTURE

30 **Q WHAT CAPITAL STRUCTURE IS THE COMPANY REQUESTING TO USE TO**

31 **DEVELOP ITS OVERALL RATE OF RETURN FOR ELECTRIC OPERATIONS IN**

32 **THIS PROCEEDING?**

33 A GMO's proposed capital structure, as supported by Dr. Samuel Hadaway, is shown

34 below in Table 1.

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[6] Moody's Investors Service Credit Opinion: "Aquila, Inc.," July 16, 2008, emphasis added.

TABLE 1

GMO's Requested Capital Structure
(Projected March 31, 2009)

Description	Percent of Total Capital
Debt	45.47%
Preferred Stock	0.71%
Common Equity	53.82%
Total Regulatory Capital Structure	100.00%

Source: Hadaway Direct at 5.

1 **Q DO YOU HAVE ANY CONCERNS WITH THE COMPANY'S PROPOSED CAPITAL**

2 **STRUCTURE?**

3 A Yes. GMO's proposed capital structure is heavily weighted with common equity and

4 therefore inflates its claimed revenue deficiency in this proceeding. Further, the

5 proposed capital structure is based on its parent company GPE's capital structure

6 rather the utility's stand-alone capital structure.

7 If this capital structure is used to set rates, the Commission should recognize

8 the abnormally high common equity ratio, which reduces its financial risk. The

9 Commission should therefore reduce the authorized return on equity to reflect this

10 reduced financial risk for this capital structure. Further, the capital structure reflects

11 significant planned equity additions that have not yet been made, and may not be

12 made through the end of the true-up period. As such, a conservative measure if the

13 Commission approves this capital structure would be to recognize the reduced

14 financial risk created by this equity thick capital structure and award GMO a lower

15 return on equity.

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1 **Q** **DO YOU BELIEVE THE COMMISSION SHOULD USE GMO'S PROPOSED**

2 **CAPITAL STRUCTURE FOR SETTING RATES?**

3 A No. I recommend the capital structure set forth in Table 2.

TABLE 2

GMO's Actual Capital Structure
(September 30, 2008)

Description	Percent of Total Capital
Debt	51.59%
Common Equity	48.41%
Total Regulatory Capital Structure	100.00%

Source: Schedule MPG-1.

4 **Q** **WHY DO YOU BELIEVE THE CAPITAL STRUCTURE IN TABLE 2 ABOVE IS**

5 **APPROPRIATE FOR SETTING GMO'S RATES IN THIS PROCEEDING?**

6 A GMO is proposing to use its utility actual cost of debt (MPS and SJLP) for developing

7 its overall revenue requirement in this proceeding. Because GMO's cost of debt is

8 significantly higher than that of its parent company, it would be inappropriate to

9 combine the parent company's capital structure with the utility's debt cost to develop

10 an overall rate of return. GPE's capital structure is more heavily weighted with

11 common equity than is GMO's capital structure. This higher weight of common equity

12 increases the capital structure cost. In the case of GMO, its cost of debt is not as low

13 as GPE largely because it has greater financial risk as noted in the Moody's report

14 above, and because it has older debt issuances that cannot be or have not been

15 refinanced.

1   As such, it is balanced and appropriate to use GMO's capital structure, along

2   with the utility's embedded debt cost to develop the overall rate of return for MPS and

3   SJLP in this proceeding.

4   Moreover, this capital structure is reasonable for setting GMO's cost of service

5   in this proceeding because it contains a balanced amount of common equity and debt

6   capital. Indeed, this capital structure represents financial risk that is reasonably

7   comparable to the proxy group I used to estimate MPS's and SJLP's cost of equity in

8   this proceeding, and is consistent with the capital structure targets established by

9   Standard & Poor's as guidance for maintaining an investment grade bond rating. For

10   all these reasons, I believe the Company's actual capital structure is more reasonable

11   for setting GMO's cost of service in this proceeding, rather than the Company's

12   proposal to rely on its parent company's capital structure.

13 **Q   WILL YOUR PROPOSED CAPITAL STRUCTURE FOR GMO SUPPORT ITS**

14 **INVESTMENT GRADE BOND RATING AND FINANCIAL INTEGRITY?**

15 A   Yes. This is discussed in greater detail later in this testimony. Below, I show my

16   recommended return on equity and overall rate of return for GMO will support MPS's

17   and SJLP's ability to realize credit metrics that are consistent with an investment

18   grade utility bond rating.

19 **RETURN ON COMMON EQUITY**

20 **Q   PLEASE DESCRIBE WHAT IS MEANT BY A "UTILITY'S COST OF COMMON**

21 **EQUITY."**

22 A   A utility's cost of common equity is the return investors expect, or require, in order to

1   make an investment. Investors expect to achieve their return requirement from

2   receiving dividends and stock price appreciation.

3 **Q** **PLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A REGULATED**

4   **UTILITY'S COST OF COMMON EQUITY.**

5 A   In general, determining a fair cost of common equity for a regulated utility has been

6   framed by two decisions of the U.S. Supreme Court, in Bluefield Water Works &

7   Improvement Co. v. Public Serv. Commission of West Virginia, 262 U.S. 679 (1923)

8   and Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944).

9   These decisions identify the general standards to be considered in

10   establishing the cost of common equity for a public utility. Those general standards

11   provide that the authorized return should: (1) be sufficient to maintain financial

12   integrity; (2) attract capital under reasonable terms; and (3) be commensurate with

13   returns investors could earn by investing in other enterprises of comparable risk.

14 **Q** **PLEASE DESCRIBE THE METHODS YOU HAVE USED TO ESTIMATE THE COST**

15   **OF COMMON EQUITY FOR GMO.**

16 A   I have used several models based on financial theory to estimate GMO's cost of

17   common equity. These models are: (1) a constant growth Discounted Cash Flow

18   (DCF) model; (2) a two-stage growth DCF model; (3) a multi-stage growth DCF

19   model; (4) a Risk Premium model; and (5) a Capital Asset Pricing Model ("CAPM"). I

20   have applied these models to a group of publicly traded utilities that I have

21   determined reflect investment risk similar to GMO.

1 **Q HOW DID YOU SELECT A PROXY GROUP OF UTILITIES SIMILAR IN**
2   **INVESTMENT RISK TO GMO TO ESTIMATE ITS CURRENT MARKET COST OF**
3   **EQUITY?**

4 A   I relied on the same proxy group used by GMO witness Dr. Hadaway to estimate
5   GMO's return on equity.

6 **Q HOW DOES THE PROXY GROUP USED BY DR. HADAWAY COMPARE TO THE**
7   **INVESTMENT RISK OF GMO?**

8 A   The proxy group is shown on Schedule MPG-3. This proxy group's senior secured
9   credit rating from Moody's is "A3," which is higher than GMO's senior secured credit
10   rating from Moody's of "Baa2." This proxy group has an average senior secured
11   credit rating from S&P of "BBB+," which is identical to GMO's senior secured credit
12   rating. As such, my proxy group has comparable total investment risk to GMO.

13   The proxy group has an average common equity ratio of 44.5% (including
14   short-term debt) from AUS and 49.9% (excluding short-term debt) from *Value Line*.
15   This proxy group's common equity ratio is comparable to my proposed common
16   equity ratio for GMO of 48.4% (excluding short-term debt). Hence, GMO has
17   comparable financial risk to the proxy group.

18   The EEI operating designation for most of the companies in the proxy group is
19   "Regulated" or "Mostly Regulated." The average for all the companies is "Regulated,"
20   which indicates comparable operating risk to that of GMO.

1   **Q**   **PLEASE DESCRIBE EEI'S BUSINESS RISK ASSESSMENT OF ELECTRIC**

2   **UTILITY COMPANIES.**

3   A   EEI rates publicly traded companies based on their relative exposure to regulated

4   and non-regulated operating risk. It uses three categories: "Regulated," "Mostly

5   Regulated" and "Diversified." EEI rates companies that have 80% or more of total

6   assets in regulated operations and designates them as "Regulated" entities. "Mostly

7   Regulated" entities are those companies that have 50% to 80% of total assets in

8   regulated operations. Finally, EEI rates companies with less than 50% of assets in

9   regulated enterprises as "Diversified" companies.[7]

10 **Discounted Cash Flow Model**

11 **Q**   **PLEASE DESCRIBE THE DCF MODEL.**

12 A   The DCF model posits that a stock price is valued by summing the present value of

13   expected future cash flows discounted at the investor's required rate of return

14   ("ROR") or cost of capital. This model is expressed mathematically as follows:

15               $Po = \dfrac{D1}{(1+K)1} + \dfrac{D2}{(1+K)2} \; .\,.\,.\,. \; \dfrac{D\infty}{(1+K)\infty}$ where   (Equation 1)

16

17   Po= Current stock price

18   D = Dividends in periods 1 - ∞

19   K = Investor's required return

20   This model can be rearranged in order to estimate the discount rate or investor

21   required return, "K." If it is reasonable to assume that earnings and dividends will

22   grow at a constant rate, then Equation 1 can be rearranged as follows:

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[7]"Q3 2008 Stock Performance," EEI Q3 2008 *Financial Update.*

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1           $K = D1/Po + G$ (Equation 2)

2   K = Investor's required return

3   D1 = Dividend in first year

4   Po = Current stock price

5   G = Expected constant dividend growth rate

6   Equation 2 is referred to as the annual "constant growth" DCF model.

7   **Q**   **PLEASE DESCRIBE THE INPUTS TO YOUR CONSTANT GROWTH DCF MODEL.**

8   A   As shown under Equation 2 above, the DCF model requires a current stock price,

9   expected dividend, and expected growth rate in dividends.

10   **Q**   **WHAT STOCK PRICE AND DIVIDEND HAVE YOU RELIED ON IN YOUR**

11   **CONSTANT GROWTH DCF MODEL?**

12   A   I relied on the average of the weekly high and low stock prices over a 13-week period

13   ended January 16, 2009. An average stock price is less susceptible to market price

14   variations than is a spot price. Therefore, an average stock price is less susceptible

15   to aberrant market price movements, which may not be reflective of the stock's

16   long-term value.

17   A 13-week average stock price is short enough to contain data that

18   reasonably reflects current market expectations, but is not so short a period as to be

19   susceptible to market price variations that may not be reflective of the security's

20   long-term value. Therefore, in my judgment, a 13-week average stock price is a

21   reasonable balance between the need to reflect current market expectations and the

22   need to capture sufficient data to smooth out aberrant market movements.

1   I used the most recently paid quarterly dividend, as reported in *The Value Line*

2   *Investment Survey*. This dividend was annualized (multiplied by 4) and adjusted for

3   next year's growth to produce the D1 factor for use in Equation 2 above.

4 **Q   WHAT DIVIDEND GROWTH RATES HAVE YOU USED IN YOUR CONSTANT**

5   **GROWTH DCF MODEL?**

6 A   There are several methods one can use in order to estimate the expected growth in

7   dividends. However, for purposes of determining the market required return on

8   common equity, one must attempt to estimate investors' consensus about what the

9   dividend or earnings growth rate will be, and not what an individual investor or analyst

10   may use to form individual investment decisions.

11   Security analysts' growth estimates have been shown to be more accurate

12   predictors of future returns than growth rates derived from historical data because

13   they are more reliable estimates.[8] Assuming the market generally makes rational

14   investment decisions, analysts' growth projections are more likely the growth

15   estimates considered by the market that influence observable stock prices than are

16   growth rates derived from only historical data.

17   For my constant growth DCF analysis, I have relied on a consensus, or mean,

18   of professional security analysts' earnings growth estimates as a proxy for the

19   investor consensus dividend growth rate expectations. I used the average of two

20   sources of analysts' growth rate estimates: Zacks and SNL Financial. All consensus

21   analysts' projections used were available on January 19, 2009, as reported on-line.

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[8]*See*, e.g., David Gordon, Myron Gordon, and Lawrence Gould, "Choice Among Methods of Estimating Share Yield," The Journal of Portfolio Management, Spring 1989.

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1   Each consensus growth rate projection is based on a survey of security

2   analysts. The consensus estimate is a simple arithmetic average, or mean, of

3   surveyed analysts' earnings growth forecasts. A simple average of the growth

4   forecasts gives equal weight to all surveyed analysts' projections. It is problematic as

5   to whether any particular analyst's forecast is most representative of general market

6   expectations. Therefore, a simple average, or arithmetic mean, of analyst forecasts is

7   a good proxy for market consensus expectations. The growth rates I used in my DCF

8   analysis are shown on Schedule MPG-4.

9   **Q   WHAT ARE THE RESULTS OF YOUR CONSTANT GROWTH DCF MODEL?**

10   A   As shown on Schedule MPG-5, the constant growth DCF return for the proxy group is

11   12.02%.

12   **Q   DO YOU HAVE ANY COMMENTS CONCERNING THE RESULTS OF YOUR**

13   **CONSTANT GROWTH DCF ANALYSIS?**

14   A   Yes. The constant growth DCF return is not reasonable and represents an inflated

15   return for GMO at this time. The average three- to five-year growth rate for the proxy

16   group is 6.60% (shown on Schedule MPG-5). This growth rate is far too high to be a

17   rational estimate of the proxy group's long-term sustainable growth. Because the

18   current three- to five-year growth rate is too high to be a reasonable long-term

19   sustainable growth rate estimate, the constant growth DCF model is currently

20   producing an inflated DCF return and should not be used in the calculation of GMO's

21   return on equity.

1   Q   WHY DO YOU BELIEVE THE PROXY GROUP'S THREE- TO FIVE-YEAR

2   GROWTH RATE IS IN EXCESS OF A RATIONAL ESTIMATE OF LONG-TERM

3   SUSTAINABLE GROWTH?

4   A   The three- to five-year growth rate of the proxy group exceeds the growth rate of the

5   overall U.S. economy. As developed below, the consensus of published economists

6   projects that the U.S. GDP will grow at a rate of no more than 5.0% over the next

7   10 years. A company cannot grow, indefinitely, at a faster rate than the market in

8   which it sells its products. The U.S. economy, or GDP, growth projection represents

9   a ceiling, or high-end, sustainable growth rate for a utility over an indefinite period of

10   time.

11 Q   WHY IS THE GDP GROWTH PROJECTION CONSIDERED A CEILING GROWTH

12   RATE FOR A UTILITY?

13 A   Utilities cannot indefinitely sustain a growth rate that exceeds the growth rate of the

14   overall economy. Utilities' earnings/dividend growth is created by increased utility

15   investment or rate base. Utility plant investment, in turn, is driven by service area

16   economic growth and demand for utility service. In other words, utilities invest in

17   plant to meet sales demand growth, and sales growth in turn is tied to economic

18   growth in their service areas. The Energy Information Administration ("EIA") has

19   observed that utility sales growth is less than U.S. economic growth, as shown on

20   Schedule MPG-6. Utility sales growth has lagged the GDP growth. Hence, nominal

21   GDP growth is a very conservative, albeit overstated, proxy for electric utility sales

22   growth, rate base growth, and earnings growth. Therefore, GDP growth is a

23   reasonable proxy for the highest sustainable long-term growth rate of a utility.

1   Q   **HOW DO THE PROXY GROUP'S HISTORIC GROWTH RATES COMPARE TO**

2   **HISTORICAL NOMINAL GDP GROWTH RATES?**

3   A   As shown on Schedule MPG-7, the historical growth of the proxy group's dividend

4   (columns 1 & 2) is lower than the historical nominal GDP growth (columns 7 and 8).

5   Over the last five and ten years, my proxy group's dividend growth was lower than the

6   inflation growth (columns 4 and 5).

7   *Value Line* projections indicate that dividend growth will be similar to the

8   projected nominal GDP growth over the next three to five years.

9   This historical perspective confirms the robust outlook for earnings growth

10   over the next three to five years, and supports my contention that current three- to

11   five-year earnings growth projections are not reasonable estimates of sustainable

12   long-term growth.

13   While history may not provide all information needed to form forward

14   expectations, this historical relationship strongly supports the contention that

15   forward-looking utility earnings growth will not exceed nominal GDP growth for a

16   sustained long-term period and the actual growth will likely trail nominal GDP growth

17   over long-term periods.

18 Q   **IS THERE RESEARCH THAT SUPPORTS YOUR CONTENTION THAT OVER THE**

19   **LONG TERM, A COMPANY'S EARNINGS AND DIVIDENDS CANNOT GROW AT**

20   **A RATE GREATER THAN THE GROWTH OF THE U.S. GDP?**

21 A   Yes. This concept is supported both in published analyst literature and in academic

22   work. Specifically, in a textbook entitled "Fundamentals of Financial Management,"

23   published by Eugene Brigham and Joel F. Houston, the authors stated as follows:

24   The constant growth model is most appropriate for mature companies
25   with a stable history of growth and stable future expectations.

1	Expected growth rates vary somewhat among companies, but
2	dividends for mature firms are often expected to grow in the future at
3	about the same rate as nominal gross domestic product (real GDP
4	plus inflation).[9]

5   Also, Morningstar's Stocks, Bonds, Bills and Inflation 2008 Yearbook

6   Valuation Edition tracked dividends of the stock market in comparison to GDP growth

7   over the period 1926 through the end of 2007.[10] Based on that study, the authors

8   found that earnings and dividends for the market have historically grown in tandem

9   with the overall economy. It is important to note that the growth of companies

10   included in the overall market will normally be higher than that of utility companies.

11   These non-utility companies achieve a higher level of growth because they retain a

12   larger percentage of their earnings and pay out a much smaller percentage of their

13   earnings as dividends. Retaining higher percentages of total earnings fuels stronger

14   growth for these non-utility companies. Since the market in general grows at the

15   overall GDP growth rate, it is very conservative to assume that utility companies

16   could achieve this same level of sustained growth without a material reduction in their

17   dividend payout ratios. As such, using the GDP as a maximum sustainable growth

18   rate is a very conservative and high-end estimate for utility companies.

19 **Q**   **IS THERE A WAY OF TESTING WHETHER IT IS RATIONAL TO EXPECT THAT**

20   **THE ANALYSTS' THREE- TO FIVE-YEAR EARNINGS GROWTH OUTLOOKS ARE**

21   **A REASONABLE ESTIMATE OF SUSTAINABLE LONG-TERM GROWTH?**

22 **A**   Yes. This can be gauged using an internal growth rate calculation for the companies

23   included in the proxy group using *Value Line*'s three- to five-year earnings and

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[9]"Fundamentals of Financial Management," Eugene F. Grigham and Joel F. Houston, Eleventh Edition 2007, Thomson South-Western, a Division of Thomson Corporation at 298.

[10]*Stocks, Bonds, Bills and Inflation 2008 Yearbook Valuation Edition* (Morningstar, Inc.) at 92-93.

1   dividends projections, and estimated earned return on equity. An internal growth rate

2   methodology estimates the sustainable growth rate based on the percentage of the

3   utility's earnings that are retained in the company and reinvested in utility plant and

4   equipment. These reinvested earnings then increase the earnings base, and will

5   increase the earned return on equity as those additional earnings are put into service

6   and the company is allowed to earn its authorized return on the additional investment.

7   The internal growth methodology is tied to the percentage of earnings retained

8   in the Company and not paid out as dividends. The earnings retention ratio is 1

9   minus the dividend payout ratio. As the payout ratio declines, the earnings retention

10   ratio increases. An increased earnings retention ratio will fuel stronger growth

11   because the business funds more investments with retained earnings. As shown on

12   Schedule MPG-8, *Value Line* projects the proxy group to have a declining dividend

13   payout ratio over the next three to five years. These dividend payout ratios and

14   earnings retention ratios can then be used to develop a sustainable long-term

15   earnings retention growth rate to help gauge whether or not analysts' current three- to

16   five-year growth rate projections can be sustained over an indefinite period of time.

17   As shown on Schedule MPG-9, the average sustainable growth rate for the

18   proxy group using this internal growth rate model is approximately 4.30%.

19   Using the proxy group average growth rate of 6.60%, and a three- to five-year

20   projected dividend payout ratio of 60.15%, would require an earned return on book

21   equity of 16.56% to support a long-term sustainable growth rate of 6.60%. In

22   comparison, *Value Line* is projecting a group average return on book equity of

23   10.61%. Again, this information supports my conclusion that current analysts'

24   three- to five-year earnings growth projections are not sustainable, and will decline

25   over time.

1 **Q COULD YOU CONSTRUCT A CONSTANT GROWTH DCF STUDY USING YOUR**

2 **SUSTAINABLE GROWTH RATE OF 4.30%?**

3 A Yes. However, the sustainable growth rate does not reflect the expectation that

4 analysts and investors anticipate exceptionally high growth over the next three to five

5 years. However, the sustainable growth rate in combination with three- to five-year

6 analysts' growth rate expectations, can be used to proxy a long-term sustainable

7 growth rate estimate that reflects exceptionally high growth over the next three to five

8 years.

9 As such, using a composite weight of the analysts' growth rate estimates, and

10 the sustainable growth rate can be used to develop a sustainable long-term growth

11 rate for use in a constant growth model. I develop this modified growth rate by

12 applying two-thirds weight to the analysts' growth rate estimates, and one-third weight

13 to this sustainable growth rate. This constant growth DCF study is shown on my

14 Schedule MPG-10. As shown on that schedule, using a modified estimate of long-

15 term sustainable growth in this version of the constant growth DCF study, produces a

16 constant growth DCF result of 11.25%.

17 **Q HAVE YOU CONDUCTED ANY OTHER DCF STUDIES?**

18 A Yes. My first constant growth DCF is based on consensus analysts' growth rate

19 projections, so it is a reasonable reflection of rational investment expectations over

20 the next three to five years. The limitation on the constant growth DCF model is that

21 it cannot reflect a rational expectation that a period of high/low short-term growth can

22 be followed by a change in growth to a rate that is more reflective of long-term

23 sustainable growth. Hence, I performed two-stage and multi-stage growth DCF

24 analyses to reflect this outlook of changing growth expectations.

1 <u>**Two-Stage Growth DCF Model**</u>

2 **Q PLEASE DESCRIBE YOUR TWO-STAGE GROWTH DCF MODEL.**

3 A   The two-stage growth DCF model reflects the possibility of non-constant growth for a

4   company over time. The two-stage growth model reflects two growth periods: (1) a

5   short-term growth period, which consists of the first five years; and (2) a long-term

6   growth period, which consists of each year starting in year six through perpetuity. For

7   the short-term growth period, I relied on the consensus analysts' growth projections

8   described above in relationship to my constant growth DCF model. For the long-term

9   growth period, I assumed each company's growth would converge on the maximum

10   sustainable growth rate for a utility company as proxied by the consensus analysts'

11   projected growth for the U.S. GDP.

12 **Q   WHAT DO YOU BELIEVE IS A REASONABLE SUSTAINABLE LONG-TERM**

13   **GROWTH RATE?**

14 A   A reasonable growth rate that can be sustained in the long run should be based on

15   consensus analysts' projections. *The Blue Chip Economic Indicators* publishes

16   consensus gross domestic product ("GDP") growth projections twice a year. Based

17   on its latest issue, the consensus economists' published five- to ten-year GDP growth

18   rate outlook is 5.0% to 4.8%.[11]

19 **Q   HAVE YOU CONSIDERED OTHER ESTIMATES OF LONG-TERM SUSTAINABLE**

20   **GROWTH RATE?**

21 A   Yes. In the recent AmerenUE order (ER-2008-0318), the MPSC stated a preference

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[11]*Blue Chip Economic Indicators*, October 10, 2008 at 15.

1   for Morningstar's GDP growth projection. However, Morningstar does not project a

2   specific GDP growth rate. Rather, it proposes a methodology to derive an expected

3   GDP growth using historical data, and the Treasury bond market data.

4   I relied on Morningstar's methodology to derive a GDP forecast on my

5   Schedule MPG-11. On that schedule, based on Morningstar's methodology, I derived

6   an inflation rate projection using contemporary 20-year Treasury Inflation-Protected

7   Securities ("TIPS") and 20-year Treasury bond yields over the 13-week period ending

8   January 16, 2009. This produced a 20-year inflation outlook of 1.08%. Then,

9   consistent with Morningstar's methodology, I combined this 20-year inflation

10   projection with the historical real GDP growth rate of 3.47%, that was realized over

11   the period 1929-2008 using Morningstar's methodology and current market data,

12   which produced a 20-year GDP growth rate outlook of 4.55%.

13 **Q**   **WHAT GDP GROWTH RATE DO YOU PROPOSE TO USE AS A SUSTAINABLE**

14   **LONG-TERM GROWTH RATE IN YOUR DCF ANALYSES?**

15 A   I propose to use the consensus economists' projected five- and ten-year GDP

16   consensus growth rate of 4.9%. This consensus GDP growth forecast represents the

17   most likely views of market participants, because it is based on published economist

18   projections. Further, considering the current market environment, the consensus

19   GDP projections provides a conservative proxy of sustainable long-term growth.

20   Therefore, in my two-stage and multi-stage DCF analyses, I will rely on the

21   consensus GDP growth rate of 4.9% as published by the *Blue Chip Economic*

22   *Indicators* as an estimate of sustainable long-term growth.

1 **Q WHAT STOCK PRICE, DIVIDEND AND GROWTH RATES DID YOU USE IN YOUR**

2 **TWO-STAGE GROWTH DCF ANALYSIS?**

3 A I relied on the same 13-week stock price and the most recent quarterly dividend

4 payment discussed above. For stage one growth, I used the consensus analysts'

5 growth rate projections discussed above in my constant growth DCF model. For the

6 long-term sustainable growth rate starting in year six, I used 4.9%, the average of the

7 consensus economists' five- to ten-year projected nominal GDP growth rate (4.8% to

8 5.0%).

9 **Q WHAT ARE THE RESULTS OF YOUR TWO-STAGE GROWTH DCF MODEL?**

10 A As shown on Schedule MPG-12, the two-stage growth DCF return on equity result for

11 the proxy group is 10.59%.

12 ## Multi-Stage Growth DCF Model

13 **Q PLEASE DESCRIBE YOUR MULTI-STAGE GROWTH DCF MODEL.**

14 A Similar to the two-stage growth DCF, the multi-stage growth DCF model reflects the

15 possibility of non-constant growth for a company over time. The multi-stage growth

16 DCF model reflects three growth periods: (1) a short-term growth period, which

17 consists of the first five years; (2) a transition period, which consists of the next five

18 years (6 through 10); and (3) a long-term growth period, which consists of each year

19 starting in year 11 through perpetuity. This multi-stage growth DCF model differs

20 from the two-stage growth model by allowing for a longer period of abnormally high

21 growth and a more gradual decline from the abnormally high short-term growth rate to

22 a lower long-term sustainable growth rate.

1   For the short-term growth period, I relied on the consensus analysts' growth

2   projections described above in relationship to my constant growth DCF model. For

3   the transition period the growth rates were reduced or increased by an equal factor,

4   which reflects the difference between the analysts' growth rates and the GDP growth

5   rate. For the long-term growth period, I assumed each company's growth would

6   converge to the maximum sustainable growth rate for a utility company as proxied by

7   the consensus analysts' projected growth for the U.S. GDP of 4.9%.

8 **Q   WHAT STOCK PRICE AND DIVIDEND DID YOU USE IN YOUR MULTI-STAGE**

9 **GROWTH DCF ANALYSIS?**

10 A   I relied on the same 13-week average stock price as used in my constant growth DCF

11   model, and the most recent annualized quarterly dividend payment.

12 **Q   WHAT ARE THE RESULTS OF YOUR MULTI-STAGE GROWTH DCF MODEL?**

13 A   As shown on Schedule MPG-13, the multi-stage growth DCF return on equity for the

14   proxy group is 10.75%.

15 ## DCF Quarterly Compounding Adjustment

16 **Q   HAVE YOU INCLUDED A QUARTERLY COMPOUNDING ADJUSTMENT TO**

17 **YOUR DCF RESULTS DESCRIBED ABOVE?**

18 A   No. In the Empire District Order ER-2008-093, and the recent AmerenUE Order

19   ER-2008-0318, the Commission included a 5 basis point adjustment to the DCF

20   return estimates to reflect quarterly compounding. If the Commission chooses to

21   include that 5 basis point adjustment again in this case, then it should add it to the

22   results of my DCF studies shown in Table 3 below.

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1 **Q DO YOU BELIEVE IT IS APPROPRIATE TO INCREASE YOUR DCF RETURN**

2 **ESTIMATE FOR A 5 BASIS POINT QUARTERLY COMPOUNDING**

3 **ADJUSTMENT?**

4 A No. Including the quarterly compounding adjustment to GMO's authorized return on

5 equity is inappropriate. By including a quarterly compounding adjustment to a DCF

6 return estimate, shareholders will be permitted to earn the dividend reinvestment

7 return twice: (1) through the authorized return on equity, and (2) through actual

8 receipt of dividends and the reinvestment of those dividends throughout the year.

9 This double counting of the dividend reinvestment return is not just and reasonable,

10 and will unjustly inflate GMO's retail price.

11 **Q PLEASE EXPLAIN WHY THE QUARTERLY COMPOUNDING RETURN SHOULD**

12 **NOT BE INCLUDED IN GMO'S AUTHORIZED RETURN ON EQUITY.**

13 A Simply put, the quarterly compounding component of the return is not a cost to the

14 utility. Only the utility's cost of common equity capital should be included in the

15 authorized return on equity.

16 This issue surrounds whether or not the DCF return estimate should include

17 the expectations by investors that they will receive cash flows within the year, that can

18 be reinvested in other investments of comparable risk, and thus the cash flows will

19 produce compounded returns throughout the year. The relevant issue for setting

20 rates is whether or not that reinvestment return is a cost to the utility. It is not!

21 I believe the reinvestment return is not a cost to the utility and should therefore

22 not be included in the authorized return on equity. I believe while it is reasonable for

23 investors to expect to have the opportunity to earn the compounded return produced

1   by cash flows received within the year, the compound return is not paid to investors

2   by the utility.

3 **Q**   **CAN YOU PROVIDE AN EXAMPLE OF WHY THE COMPOUNDING RETURN**

4   **ESTIMATE IS NOT A COST TO THE UTILITY?**

5 **A**   Yes. I will provide two examples to help illustrate this point. First, the compounding

6   issue is also relevant in estimating the cost to the utility of an outstanding utility bond.

7   Most utility bonds pay a coupon every six months. The utility annual cost paid to the

8   bond investor is the sum of the two semi-annual coupon payments. However, a bond

9   investor expects to receive the semi-annual coupon payments from the utility, but

10   also has an opportunity to reinvest the first coupon payment for the remaining six

11   months of the year to enhance his end-of-year return. This compound return

12   component is, however, not a cost to the utility because the utility does not pay the

13   extra return.

14   For example, assume GMO has an outstanding bond with a face value of

15    $1,000, at an interest rate of 6% which is paid in two semi-annual $30 coupon

16   payments. GMO's cost of this bond is 6%. This 6% cost to GMO is based on a

17    $30 coupon payment paid in month 6 and month 12 for an annual payment of $60

18   relative to the $1,000 face value of the bond. However, the bond investor would have

19   an annual expected return on this bond of 6.1%. This annual expected return would

20   be realized by receiving the first $30 semi-annual coupon payment from GMO and

21   reinvesting it for the remaining six months of the year. This would produce $0.89 of

22   semi-annual compounding return ($30 x [$(1.06)^{\frac{1}{2}}$ - 1]). Hence, the bond investor

23   would receive $60 from GMO, and $0.89 from investing the first coupon for a total

24   annual return of 6.09%, or 6.1%.

1   Importantly, if GMO were to recover a 6.1% cost of this bond in its cost of

2   service, and paid that return out to the bond investor, then the bond investor would

3   receive $60.89 from GMO, rather than the $60.00 actual cost, but the bond investor

4   could still reinvest the semi-annual coupon, now $30.89 for the remaining 6 months of

5   the year. This would provide the investor with the reinvestment return twice, once

6   from utility ratepayers, and a second time after the semi-annual coupon payment was

7   paid and reinvested.

8   Reflecting this compounding assumption in the authorized return on equity

9   therefore will double count the reinvestment return opportunity.

10   **Q   DOES THIS EXAMPLE ALSO APPLY TO UTILITY STOCK INVESTMENTS?**

11   A   Yes. Assume now that an investor purchased GMO stock for $100, and expects to

12   receive four quarterly dividends of $1.50, or $6.00 per year. The expected cost to the

13   utility of this dividend payment over the year would be $6.00, or 6.0%. However, the

14   expected effective yield of the dividend to investors would be 6.13% because the

15   quarterly dividends could be reinvested for the remaining term of the year. Hence,

16   the expected end-of-year value of those four $1.50 quarterly dividend payments to

17   the investor would be $6.13.[12] Again, the utility pays $6.00 of annual dividends. The

18   $0.13 is not paid to investors from the utility, but is rather earned in the other

19   investments that earn the same return, which the dividends were invested in

20   throughout the year.

21   Importantly, the reinvestment return of the dividends is not paid by the utility,

22   and therefore is not part of the utility's cost of capital. Again, if this dividend

23   reinvestment return is included in the utility's authorized return on equity, then

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[12] $1.5 \times (1.06)^{.75} + 1.5 \times (1.06)^{.5} + 1.5 \times (1.06)^{.25} + 1.5 = \$6.13$.

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1   investors will receive the dividend reinvestment return twice, once through the

2   authorized return on equity, and a second time when dividends are actually received

3   by investors and reinvested.

4   **Q   PLEASE SUMMARIZE THE RESULTS FROM YOUR DCF ANALYSIS.**

5   A   The results from my DCF analysis are summarized in the table below:

<div align="center">

TABLE 3

Summary of DCF Results

Description	Proxy Group
Constant Growth DCF (Analysts' Growth)	12.02%
Constant Growth DCF (Composite Long-Term Growth)	11.25%
Two-Stage Growth DCF Model	10.59%
Multi-Stage Growth DCF Model	<u>10.75%</u>
Average DCF	11.15%

</div>

6   The average of my DCF studies is 11.15%.

7   **Risk Premium Model**

8   **Q   PLEASE DESCRIBE YOUR BOND YIELD PLUS RISK PREMIUM MODEL.**

9   A   This model is based on the principle that investors require a higher return to assume

10   greater risk. Common equity investments have greater risk than bonds because

11   bonds have more security of payment in bankruptcy proceedings than common equity

12   and the coupon payments on bonds represent contractual obligations. In contrast,

13   companies are not required to pay dividends on common equity, or to guarantee

14   returns on common equity investments. Therefore, common equity securities are

15   considered to be more risky than bond securities.

1   This risk premium model is based on two estimates of an equity risk premium.

2   First, I estimated the difference between the required return on utility common equity

3   investments and Treasury bonds. The difference between the required return on

4   common equity and the bond yield is the risk premium. I estimated the risk premium

5   on an annual basis for each year over the period 1986 through the third quarter of

6   2008. The common equity required returns were based on regulatory commission-

7   authorized returns for electric utility companies. Authorized returns are typically

8   based on expert witnesses' estimates of the contemporary investor required return.

9   The second equity risk premium method is based on the difference between

10   regulatory commission-authorized returns on common equity and contemporary

11   "A" rated utility bond yields. This time period was selected because over the period

12   1986 through the third quarter of 2008, public utility stocks have consistently traded at

13   a premium to book value. This is illustrated on Schedule MPG-14, where the market

14   to book ratio since 1986 for the electric utility industry was consistently above 1.0.

15   Therefore, over this time period, regulatory authorized returns were sufficient to

16   support market prices that at least exceeded book value. This is an indication that

17   regulatory authorized returns on common equity supported a utility's ability to issue

18   additional common stock, without diluting existing shares. It further demonstrates that

19   utilities were able to access equity markets without a detrimental impact on current

20   shareholders.

21   Based on this analysis, as shown on Schedule MPG-15, the average indicated

22   equity risk premium over U.S. Treasury bond yields has been 5.09%. Of the 23

23   observations, 17 indicated risk premiums fall in the range of 4.40% to 6.01%. Since

24   the risk premium can vary depending upon market conditions and changing investor

25   risk perceptions, I believe using an estimated range of risk premiums provides the

1   best method to measure the current return on common equity using this

2   methodology.

3   As shown on Schedule MPG-16, the average indicated equity risk premium

4   over contemporary Moody's utility bond yields was 3.69% over the period 1986

5   through the third quarter of 2008. The equity risk premium estimates based on this

6   analysis primarily fall in the range of 3.03% to 4.39% over this time period.

7 **Q   DO YOU BELIEVE THAT THIS RISK PREMIUM IS BASED ON A TIME PERIOD**

8   **THAT IS TOO LONG OR TOO SHORT TO DRAW ACCURATE RESULTS**

9   **CONCERNING CONTEMPORARY MARKET CONDITIONS?**

10 A   No. Contemporary market conditions can change dramatically during the period rates

11   determined in this proceeding will be in effect. Therefore, relying on a relatively long

12   period of time, where stock valuations reflect premiums to book value, is an indication

13   that the authorized returns on equity, and the corresponding equity risk premiums

14   were supportive of investors' return expectations, and provided utilities access to the

15   equity markets under reasonable terms and conditions. While market conditions and

16   risk premiums do vary over time, this historical time period is a reasonable period to

17   estimate contemporary risk premiums.

18   The time period I use in this risk premium I would also note is a generally

19   accepted period to develop a risk premium study using this type of expectational

20   data. For example, GMO's own witness Dr. Hadaway develops his risk premium

21   using the time period 1980-2007,[13] which is comparable to the time period I am

22   proposing in this testimony. Conversely, witnesses that use an actual achieved

23   return risk premium study would normally use very long time periods because annual

---

[13] Schedule SCH-6.

1		actual achieved returns can vary significantly throughout the study period, and the
2		annual returns may not reflect investors' expectations. However, it is reasonable to
3		assume that averages of annual returns over long time periods will generally
4		converge on the investors' expected returns.

5 **Q** **BASED ON HISTORICAL DATA, WHAT RISK PREMIUM HAVE YOU USED TO**
6   **ESTIMATE GMO'S COST OF EQUITY IN THIS PROCEEDING?**

7 A The equity risk premium should reflect the relative market perception of risk in the
8   utility industry today. I have gauged investor perceptions in utility risk today on
9   Schedule MPG-17. On that schedule, I show the yield spread between utility bonds
10   and Treasury bonds over the last 28 years. As shown on this schedule, the 2008
11   utility bond yield spreads over Treasury bonds for "A" rated and "Baa" rated utility
12   bonds are 2.23% and 2.93%, respectively. These utility bond yield spreads over
13   Treasury bond yields are much higher than the 28-year average spreads of 1.59%
14   and 1.96%, respectively.

15 **Q** **HOW DID YOU ESTIMATE GMO'S COST OF COMMON EQUITY WITH THIS RISK**
16   **PREMIUM MODEL?**

17 A I added a projected long-term Treasury bond yield to my estimated equity risk
18   premium over Treasury yields. *Blue Chip Financial Forecasts* projects the 30-year
19   Treasury bond yield to be 4.0%, and a 10-year Treasury bond yield to be 3.5%.[14]
20   Using the projected 30-year bond yield of 4.0%, and a Treasury bond risk premium of
21   4.40% to 6.01%, as developed above, produces an estimated common equity return
22   in the range of 8.40% to 10.01%. I recommend a risk premium return above the

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[14]*Blue Chip Financial Forecast*, January 1, 2009 at 2.

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1   midpoint, 9.21%, of this range to reflect the above average utility bond yield spread in

2   this market. Therefore, using this methodology and recognizing the abnormally high

3   yield spread, I recommend a range at this point in time based on the midpoint

4   estimate of 9.21% and the high-end estimate of 10.01%. This produces a

5   recommended return on equity of 9.61%.

6   I next added my equity risk premium over utility bond yields to a current

7   13-week average yield on "Baa" rated utility bonds for the period ending January 16,

8   2009 of 8.44%, see Schedule MPG-18. Adding the utility equity risk premium of

9   3.03% to 4.39%, as developed above, to a "Baa" rated bond yield of 8.44%, produces

10   a cost of equity in the range of 11.47% to 12.83%. I recommend the risk premium at

11   the low end of this return estimate at this point in time. As shown on my Schedule

12   MPG-18, utility bond yields reached very high levels during this 13-week average

13   period. Indeed, during late October through December, utility bond yields increased

14   dramatically over the 13-week average. More recent "Baa" utility bond yields have

15   been in the mid to high 7% range. As shown on page 2 of Schedule MPG-18, current

16   contemporary "Baa" utility bond yield is less than 8.0%, but this yield is still relatively

17   high compared to those yields over the last 12 months. Hence, an average risk

18   premium of a 7.5% utility bond yield that reflects a 12-month perspective of this yield

19   would indicate a return on equity of around 11.2%. As such, I recommend the low

20   end of my return estimate using the 13-week average bond yields to reflect relatively

21   high 13-week average yield, and the expectations of declines to corporate utility bond

22   yields during the period rates determined in this proceeding will be in effect.

23   My risk premium analyses produce a return estimate in the range of 9.61% to

24   11.47%, with a midpoint estimate of 10.54%.

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1   **Capital Asset Pricing Model (CAPM)**

2   **Q   PLEASE DESCRIBE THE CAPM.**

3   A   The CAPM method of analysis is based upon the theory that the market required rate

4   of return for a security is equal to the risk-free rate, plus a risk premium associated

5   with the specific security. This relationship between risk and return can be expressed

6   mathematically as follows:

7            $Ri = Rf + Bi \times (Rm - Rf)$ where:

8   Ri =   Required return for stock i
9   Rf =   Risk-free rate
10   Rm =   Expected return for the market portfolio
11   Bi =   Beta - Measure of the risk for stock

12   The stock-specific risk term in the above equation is beta. Beta represents

13   the investment risk that cannot be diversified away when the security is held in a

14   diversified portfolio. When stocks are held in a diversified portfolio, firm-specific risks

15   can be eliminated by balancing the portfolio with securities that react in the opposite

16   direction to firm-specific risk factors (e.g., business cycle, competition, product mix

17   and production limitations).

18   The risks that cannot be eliminated when held in a diversified portfolio are

19   nondiversifiable risks. Nondiversifiable risks are related to the market in general and

20   are referred to as systematic risks. Risks that can be eliminated by diversification are

21   regarded as nonsystematic risks. In a broad sense, systematic risks are market risks,

22   and nonsystematic risks are business risks. The CAPM theory suggests that the

23   market will not compensate investors for assuming risks that can be diversified away.

24   Therefore, the only risk that investors will be compensated for are systematic or

25   nondiversifiable risks. The beta is a measure of the systematic or nondiversifiable

26   risks.

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1   **Q**   **PLEASE DESCRIBE THE INPUTS TO YOUR CAPM.**

2   A   The CAPM requires an estimate of the market risk-free rate, the company's beta, and

3   the market risk premium.

4   **Q**   **WHAT DID YOU USE AS AN ESTIMATE OF THE MARKET RISK-FREE RATE?**

5   A   As previously noted, *Blue Chip Financial Forecasts*' projected 30-year Treasury bond

6   yield is 4.0%.[15] The current 30-year bond yield is 3.8%. I used *Blue Chip Financial*

7   *Forecasts*' projected 30-year Treasury bond yield of 4.0% for my CAPM analysis.

8   **Q**   **WHY DID YOU USE LONG-TERM TREASURY BOND YIELDS AS AN ESTIMATE**

9   **OF THE RISK-FREE RATE?**

10   A   Treasury securities are backed by the full faith and credit of the United States

11   government. Therefore, long-term Treasury bonds are considered to have negligible

12   credit risk. Also, long-term Treasury bonds have an investment horizon similar to that

13   of common stock. As a result, investor-anticipated long-run inflation expectations are

14   reflected in both common stock required returns and long-term bond yields.

15   Therefore, the nominal risk-free rate (or expected inflation rate and real risk-free rate)

16   included in a long-term bond yield is a reasonable estimate of the nominal risk-free

17   rate included in common stock returns.

18   Treasury bond yields, however, do include risk premiums related to

19   unanticipated future inflation and interest rates. Therefore, a Treasury bond yield is

20   not a risk-free rate. Risk premiums related to unanticipated inflation and interest rates

21   are systematic or market risks. Consequently, for companies with betas less than

---

[15]*Blue Chip Financial Forecasts*, January 1, 2009 at 2.

1   1.0, using the Treasury bond yield as a proxy for the risk-free rate in the CAPM

2   analysis can produce an overstated estimate of the CAPM return.

3 **Q   WHAT BETA DID YOU USE IN YOUR ANALYSIS?**

4 A   As shown on Schedule MPG-19, the proxy group average *Value Line* beta estimate is

5   0.76.

6 **Q   HOW DID YOU DERIVE YOUR MARKET RISK PREMIUM ESTIMATE?**

7 A   I derived two market risk premium estimates, a forward-looking estimate and one

8   based on a long-term historical average.

9   The forward-looking estimate was derived by estimating the expected return

10   on the market (as represented by the S&P 500) and subtracting the risk-free rate from

11   this estimate. I estimated the expected return on the S&P 500 by adding an expected

12   inflation rate to the long-term historical arithmetic average real return on the market.

13   The real return on the market represents the achieved return above the rate of

14   inflation.

15   Morningstar's Stocks, Bonds, Bills and Inflation 2008 Yearbook publication

16   estimates the historical arithmetic average real market return over the period

17   1926 - 2007 as 9.0%.   A current consensus analysts' inflation projection, as

18   measured by the Consumer Price Index, is 2.0%.[16]   Using these estimates, the

19   expected market return is 11.18%.[17]   The market premium then is the difference

20   between the 11.18% expected market return, and my 4.0% risk-free rate estimate, or

21   7.18%.

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[16]Blue Chip Financial Forecasts, January 1, 2009 at 2.
[17]{ [(1 + 0.090) * (1 + 0.020)] – 1] } * 100.

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1   The historical estimate of the market risk premium was also estimated by

2   Morningstar in Stocks, Bonds, Bills and Inflation 2008 Yearbook. Over the period

3   1926 through 2007, Morningstar's study estimated that the arithmetic average of the

4   achieved total return on the S&P 500 was 12.30%, and the total return on long-term

5   Treasury bonds was 5.80%. The indicated equity risk premium is 6.50% (12.30% -

6   5.80% = 6.50%).

7   **Q   HOW DOES YOUR ESTIMATED MARKET RISK PREMIUM RANGE COMPARE TO**

8   **THAT ESTIMATED BY MORNINGSTAR?**

9   A   Morningstar estimates a forward-looking market risk premium based on actual

10   achieved data from the historical period of 1926 through year-end 2007. Using this

11   data, Morningstar estimates a market risk premium derived from the total return on

12   large company stocks (S&P 500), less the income return on Treasury bonds. The

13   total return includes capital appreciation, dividend or coupon reinvestment returns,

14   and annual yields received from coupons and/or dividend payments. The income

15   return, in contrast, only reflects the income return received from dividend payments or

16   coupon yields. Morningstar argues that the income return is the only true riskless rate

17   associated with the Treasury bond and is the best approximation of a truly risk-free

18   rate. While I disagree with this assessment from Morningstar, because it does not

19   reflect a true investment option available to the marketplace, and therefore does not

20   produce a legitimate estimate of the expected premium of investing in the stock

21   market versus that of Treasury bonds, I will use Morningstar's conclusion to show the

22   reasonableness of my market risk premium estimates.

23   Morningstar's analysis indicates that a market risk premium falls somewhere

24   in the range of 6.2% to 7.1%. This range is based on several methodologies. First,

1   Morningstar estimates a market risk premium of 7.1% based on the difference

2   between the total market return on common stocks (S&P 500) less the income return

3   on Treasury bond investments. Second, Morningstar found that if the New York

4   Stock Exchange (the "NYSE") was used as the market index rather than the S&P

5   500, that the market risk premium would be 6.8% and not 7.1%. Third, if only the two

6   deciles of the largest companies included in the NYSE were considered, the market

7   risk premium would be 6.35%.[18]

8   Finally, Morningstar found that the 7.1% market risk premium based on the

9   S&P 500 was impacted by an abnormal expansion of price-to-earnings ("P/E") ratios

10   relative to earnings and dividend growth during the period 1980 through 2001.

11   Morningstar believes this abnormal P/E expansion is not sustainable. Therefore,

12   Morningstar adjusted this market risk premium estimate to normalize the growth in the

13   P/E ratio to be more in line with the growth in dividends and earnings. Based on this

14   alternative methodology, Morningstar published a long-horizon supply-side market

15   risk premium of 6.2%.[19]

16   Thus, based on all of Morningstar's estimates, the market risk premium falls

17   somewhere in the range of 6.2% to 7.1%. This range supports my use of a 6.50%

18   market risk premium in my CAPM study.

19   **Q   WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?**

20   A   As shown on my Schedule MPG-20, based on my historical market risk premium of

21   6.50% and prospective market risk premium of 7.18%, a risk-free rate of 4.0%, and a

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[18]Morningstar observes that the S&P 500 and the NYSE Decile 1-2 are both large
capitalization benchmarks. *Ibbotson SBBI 2008 Valuation Yearbook* (Morningstar, Inc.) at 72 and 74.
        [19]*Id.* at 92-98.

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1   beta of 0.76, my CAPM analysis produces a return in the range of 8.94% to 9.46%,

2   with a midpoint of 9.20%.

3   **Return on Equity Summary**

4   **Q   BASED ON THE RESULTS OF YOUR RATE OF RETURN ON COMMON EQUITY**

5   **ANALYSES DESCRIBED ABOVE, WHAT RETURN ON COMMON EQUITY DO**

6   **YOU RECOMMEND FOR GMO?**

7   A   Based on my analyses, I estimate GMO's current market cost of equity to be 10.30%.

TABLE 4

Return on Common Equity Summary

Description	Results
DCF	11.15%
Risk Premium	10.54%
CAPM	9.20%

8   My recommended return on equity of 10.30% is the average return of my

9   DCF, risk premium and CAPM analyses. My use of an average return on equity

10   estimate is based on the recent AmerenUE Order ER-2008-0318.

11   **Q   DO YOU BELIEVE YOUR AUTHORIZED RETURN OF 10.30% REASONABLY**

12   **REFLECTS UTILITIES' COST OF CAPITAL, GIVEN THE CURRENT DISTRESSED**

13   **FINANCIAL MARKETS?**

14   A   Yes. In today's marketplace, a flight to quality has taken place which has significantly

15   driven up the price of Treasury securities, and reduced the overall yield. This flight to

16   quality investment has impacted corporate securities in the opposite direction.

17   Specifically, by moving money out of corporate securities and into Treasury

1   securities, Treasury yields are very low right now, but corporate yields are abnormally

2   high. While utility corporate bonds and equity investments have not been hit as hard

3   as non-regulated companies, their cost of capital has still been detrimentally impacted

4   in this market. However, on a normalized basis, recognizing that the markets will

5   soon recover, a reasonable estimate of GMO's cost of equity is spread somewhere

6   between the abnormally low CAPM return estimates driven by Treasury bond yields

7   of 4.0%, and the abnormally high returns caused by depressed stock prices and utility

8   bond prices as reflected in the DCF and risk premium study. As such, creating a

9   range of returns as I have done above, produces a cost of equity of 10.3%, which is a

10 reasonable estimate of GMO's cost of equity during the period rates determined in

11 this proceeding will be in effect. The range of reasonable returns on equity based on

12 today's marketplace I believe would be around 50 basis points around this midpoint,

13 or a high of 10.8% and a low of 9.8%.

14 **FINANCIAL INTEGRITY**

15 **Q   WILL YOUR RECOMMENDED OVERALL RATE OF RETURN SUPPORT AN**

16 **INVESTMENT GRADE BOND RATING FOR GMO?**

17 A   Yes. I have reached this conclusion by comparing the key credit rating financial

18 ratios for GMO at its proposed capital structure, and my return on equity to S&P's

19 benchmark financial ratios using S&P's new credit metric ranges. In addition, I

20 compared GMO's key credit financial ratios to S&P benchmark financial ratios and to

21 the old S&P credit metric ranges for an "A" rated utility and "BBB" rated utility with a

22 business profile score (BPS) of '6,' GMO's S&P rating under S&P's old credit metric

23 benchmarks.

1   Q   WHY ARE YOU COMPARING YOUR CREDIT METRIC CALCULATIONS TO

2   S&P'S NEW AND OLD CREDIT METRIC GUIDELINES?

3   A   S&P's new credit metrics are not as transparent and do not clearly identify utility-

4   specific credit metric guidance ranges based on S&P business risk assessment.

5   Specifically, S&P has not published a range, that I am aware of, where it sets out

6   specific credit metric ranges for a utility with an "Aggressive" financial risk rating, and

7   a business risk rating score of "Excellent," GMO's current rating. However, S&P has

8   published guidelines which appear to be generally reflective of credit metrics at

9   various credit rating levels. In order to more clearly identify credit metric ranges that

10   are appropriate to support GMO's credit ratings, I will use both S&P's old and new

11   credit metric benchmarks.

12 Q   PLEASE DESCRIBE S&P'S USE OF THE FINANCIAL BENCHMARK RATIOS IN

13   ITS CREDIT RATING REVIEW.

14 A   S&P evaluates a utility's credit rating based on an assessment of its financial and

15   business risks. A combination of financial and business risks equates to the overall

16   assessment of GMO's total credit risk exposure. S&P publishes a matrix of financial

17   ratios that defines the level of financial risk as a function of the level of business risk.

18   S&P publishes ranges for three primary financial ratios that it uses as guidance in its

19   credit review for utility companies. The three primary financial ratio benchmarks it

20   relies on in its credit rating process include: (1) funds from operations (FFO) to debt

21   interest expense, (2) FFO to total debt, and (3) total debt to total capital.

1 **Q HOW DID YOU APPLY S&P'S FINANCIAL RATIOS TO TEST THE**

2 **REASONABLENESS OF YOUR RATE OF RETURN RECOMMENDATIONS?**

3 A I calculated each of S&P's financial ratios based on GMO's cost of service for retail

4 operations. While S&P would normally look at total Great Plains Energy Inc.

5 consolidated financial ratios in its credit review process, my investigation in this

6 proceeding is to judge the reasonableness of my proposed cost of capital for rate

7 setting in GMO's Missouri utility operations. Hence, I am attempting to determine

8 whether the rate of return and related cash flow generation opportunity reflected in

9 my proposed utility rates for GMO will support its investment grade bond ratings and

10 financial integrity.

11 **Q PLEASE DESCRIBE THE RESULTS OF THIS CREDIT METRIC ANALYSIS FOR**

12 **MPS BASED ON YOUR RATE OF RETURN RECOMMENDATION.**

13 A The S&P financial metric calculations for MPS are developed on my Schedule

14 MPG-21.

15 As shown on this schedule, based on an equity return of 10.30%, MPS will be

16 provided an opportunity to produce an FFO to debt interest expense of 4.0x. This

17 FFO to interest coverage ratio is at the high end of S&P's old benchmark ratio

18 guideline of 4.2x to 3.0x[20] for a "BBB" rated utility company with a business profile

19 score of '6,' and is well above (stronger than) S&P's new guideline range of 2.0x to

20 3.5x.[21] This ratio supports a credit rating of strong "BBB."

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[20]Standard & Poor's: Assessing U.S. Vertically Integrated Utilities? Business Risk Drivers, September 14, 2006.
[21]Standard & Poor's: U.S. Utilities Rating Analysis Now Portrayed in the S&P Corporate Ratings Matrix; November 30, 2007.

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1   MPS's retail operations FFO to total debt coverage at a 10.30% equity return

2   would be 21%, which is within S&P's old credit metric guideline range of 18% to 28%

3   for a "BBB" bond rating and within the new metric guideline range of 10% to 30%.

4   The FFO/total debt ratio will support a "BBB" rated investment grade bond rating.

5   Finally, MPS's total debt ratio to total capital is 52%. This is within S&P's

6   "BBB" rated utility old guideline range of 48% to 58%, and also within the new

7   guideline range of 45% to 60%. This total debt ratio will support a "BBB" investment

8   grade bond rating.

9   With my proposed capital structure and my return on equity, MPS's financial

10   credit metrics are supportive of its current "BBB" utility bond rating.

11 **Q   WHAT ARE THE CREDIT METRIC FINANCIAL RATIOS FOR SJLP BASED ON**

12   **YOUR RATE OF RETURN RECOMMENDATION?**

13 A   These ratios are developed on my Schedule MPG-21.

14   As shown on this schedule, based on an equity return of 10.30%, SJLP will be

15   provided an opportunity to produce an FFO to debt interest expense of 3.6x. This

16   FFO to interest coverage ratio is above S&P's old benchmark ratio guideline of 4.2x

17   to 3.0x[22] for a "BBB" rated utility company with a business profile score of '6,' and is

18   above (stronger than) S&P's new guideline range of 2.0x to 3.5x.[23] This ratio

19   supports a credit rating of "BBB."

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[22]Standard & Poor's: Assessing U.S. Vertically Integrated Utilities? Business Risk Drivers, September 14, 2006.
[23]Standard & Poor's: U.S. Utilities Rating Analysis Now Portrayed in the S&P Corporate Ratings Matrix; November 30, 2007.

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1   SJLP's retail operations FFO to total debt coverage at a 10.30% equity return

2   would be 20%, which is within S&P's old credit metric guideline range of 18% to 28%

3   for a "BBB" bond rating and within the new metric guideline range of 10% to 30%.

4   The FFO/total debt ratio will support a "BBB" rated investment grade bond rating.

5   Finally, SJLP total debt ratio to total capital is 52%. This is within S&P's "BBB"

6   rated utility old guideline range of 48% to 58%, and also within the new guideline

7   range of 45% to 60%. This total debt ratio will support a "BBB" investment grade

8   bond rating.

9   With my proposed capital structure and return on equity, SJLP's financial

10   credit metrics are supportive of a "BBB" utility bond rating.

11   **Q   DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

12   A   Yes.

Qualifications of Michael Gorman

1 **Q** **PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 **A** Michael P. Gorman. My business address is 16690 Swingley Ridge Road, Suite 140,

3 Chesterfield, MO 63017.

4 **Q** **PLEASE STATE YOUR OCCUPATION.**

5 **A** I am a consultant in the field of public utility regulation and a managing principal with

6 Brubaker & Associates, Inc., energy, economic and regulatory consultants.

7 **Q** **PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND WORK**

8 **EXPERIENCE.**

9 **A** In 1983 I received a Bachelors of Science Degree in Electrical Engineering from

10 Southern Illinois University, and in 1986, I received a Masters Degree in Business

11 Administration with a concentration in Finance from the University of Illinois at

12 Springfield. I have also completed several graduate level economics courses.

13 In August of 1983, I accepted an analyst position with the Illinois Commerce

14 Commission ("ICC"). In this position, I performed a variety of analyses for both formal

15 and informal investigations before the ICC, including: marginal cost of energy, central

16 dispatch, avoided cost of energy, annual system production costs, and working

17 capital. In October of 1986, I was promoted to the position of Senior Analyst. In this

18 position, I assumed the additional responsibilities of technical leader on projects, and

19 my areas of responsibility were expanded to include utility financial modeling and

20 financial analyses.

1　　　　In 1987, I was promoted to Director of the Financial Analysis Department. In

2　　this position, I was responsible for all financial analyses conducted by the staff.

3　　Among other things, I conducted analyses and sponsored testimony before the ICC

4　　on rate of return, financial integrity, financial modeling and related issues. I also

5　　supervised the development of all Staff analyses and testimony on these same

6　　issues. In addition, I supervised the Staff's review and recommendations to the

7　　Commission concerning utility plans to issue debt and equity securities.

8　　　　In August of 1989, I accepted a position with Merrill-Lynch as a financial

9　　consultant. After receiving all required securities licenses, I worked with individual

10　　investors and small businesses in evaluating and selecting investments suitable to

11　　their requirements.

12　　　　In September of 1990, I accepted a position with Drazen-Brubaker &

13　　Associates, Inc. In April 1995 the firm of Brubaker & Associates, Inc. ("BAI") was

14　　formed. It includes most of the former DBA principals and Staff. Since 1990, I have

15　　performed various analyses and sponsored testimony on cost of capital, cost/benefits

16　　of utility mergers and acquisitions, utility reorganizations, level of operating expenses

17　　and rate base, cost of service studies, and analyses relating industrial jobs and

18　　economic development. I also participated in a study used to revise the financial

19　　policy for the municipal utility in Kansas City, Kansas.

20　　　　At BAI, I also have extensive experience working with large energy users to

21　　distribute and critically evaluate responses to requests for proposals ("RFPs") for

22　　electric, steam, and gas energy supply from competitive energy suppliers. These

23　　analyses include the evaluation of gas supply and delivery charges, cogeneration

24　　and/or combined cycle unit feasibility studies, and the evaluation of third-party

25　　asset/supply management agreements. I have also analyzed commodity pricing

1   indices and forward pricing methods for third party supply agreements, and have also

2   conducted regional electric market price forecasts.

3   In addition to our main office in St. Louis, the firm also has branch offices in

4   Phoenix, Arizona and Corpus Christi, Texas.

5 **Q   HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?**

6 A   Yes. I have sponsored testimony on cost of capital, revenue requirements, cost of

7   service and other issues before the Federal Energy Regulatory Commission and

8   numerous state regulatory commissions including: Arkansas, Arizona, California,

9   Colorado, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas,

10   Louisiana, Michigan, Missouri, Montana, New Jersey, New Mexico, New York, North

11   Carolina, Oklahoma, Oregon, South Carolina, Tennessee, Texas, Utah, Vermont,

12   Virginia, Washington, West Virginia, Wisconsin, Wyoming, and before the provincial

13   regulatory boards in Alberta and Nova Scotia, Canada. I have also sponsored

14   testimony before the Board of Public Utilities in Kansas City, Kansas; presented rate

15   setting position reports to the regulatory board of the municipal utility in Austin, Texas,

16   and Salt River Project, Arizona, on behalf of industrial customers; and negotiated rate

17   disputes for industrial customers of the Municipal Electric Authority of Georgia in the

18   LaGrange, Georgia district.

19 **Q   PLEASE   DESCRIBE   ANY   PROFESSIONAL   REGISTRATIONS   OR**

20 **   ORGANIZATIONS TO WHICH YOU BELONG.**

21 A   I earned the designation of Chartered Financial Analyst ("CFA") from the CFA

22   Institute. The CFA charter was awarded after successfully completing three

23   examinations which covered the subject areas of financial accounting, economics,

1   fixed income and equity valuation and professional and ethical conduct. I am a

2   member of the CFA Institute's Financial Analyst Society.

Aquila Missouri

GMO Actual Capital Structure
(September 30, 2008)

Missouri Public Service (MPS)

Line	Description	Amount ($000) (1)	Weight (2)	Cost (3)	Weighted Cost (4)
1	Long-Term Debt	$ 1,157,301	51.59%	6.83%	3.52%
2	Common Equity	$ 1,085,809	48.41%	**10.30%**	4.99%
3	**Total**	**$ 2,243,110**	**100.00%**		**8.51%**

Source:
FERC Form-1; 3Q, 2008.

Aquila Missouri

GMO Actual Capital Structure
(September 30, 2008)

St. Joseph Light & Power (SJLP)

Line	Description	Amount ($000) (1)	Weight (2)	Cost (3)	Weighted Cost (4)
1	Long-Term Debt	$ 1,157,301	51.59%	7.62%	3.93%
2	Common Equity	$ 1,085,809	48.41%	**10.30%**	4.99%
3	**Total**	**$ 2,243,110**	**100.00%**		**8.92%**

Source:
  FERC Form-1; 3Q, 2008.

Aquila Missouri

Electric Utility Authorized Returns on Equity

Line	Year	Return on Equity
1	2003	10.92%
2	2004	10.82%
3	2005	10.52%
4	2006	10.30%
5	2007	10.26%
6	2008*	10.33%
7	**Average**	**10.53%**
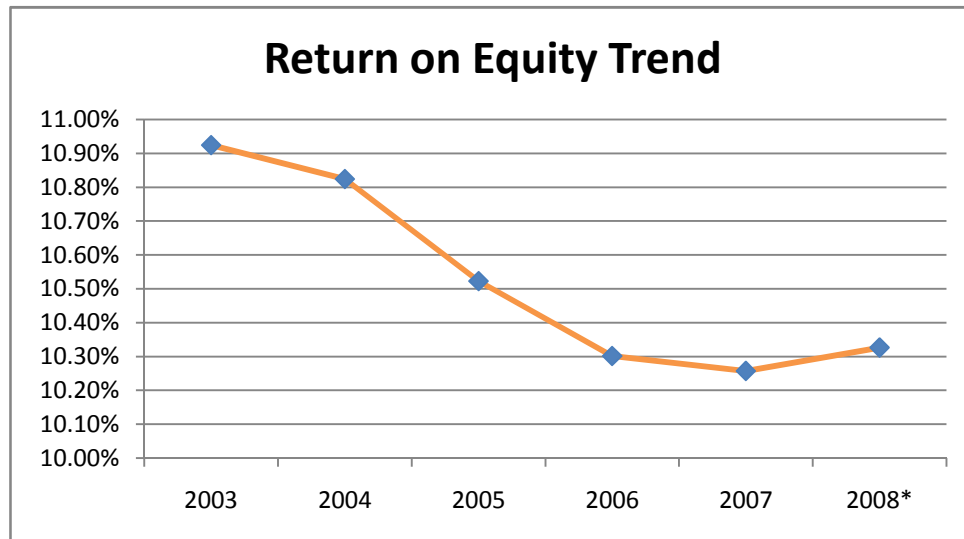
Source:
Edison Electric Institute; Rate Case Summary, 3Q 2008 Financial Update.
* The data for 2008 includes the period January - September 2008.

Aquila Missouri

Proxy Group

| Line | Company | Bond Ratings[1] | | Common Equity Ratios | | EEI Risk Assessment[3] |
| | | S&P | Moody's | *AUS*[1] | *Value Line*[2] | |
		(1)	(2)	(3)	(4)	(5)
1	ALLETE	A-	N/R	58.0%	64.4%	Regulated
2	Alliant Energy	A-	A2	60.0%	61.9%	Mostly Regulated
3	Ameren Corp.	BBB	Baa2	47.0%	53.4%	Regulated
4	Amer. Elec. Power	BBB	Baa1	39.0%	41.4%	Regulated
5	Avista Corp.	BBB+	Baa2	48.0%	59.0%	Regulated
6	Cen. Vermont Pub. Serv.	BBB+	N/R	50.0%	60.6%	Regulated
7	Cleco Corp.	BBB	Baa1	50.0%	56.7%	Regulated
8	Consol. Edison	A-	A1	49.0%	53.1%	Regulated
9	DTE Energy	A-	A3	42.0%	45.6%	Mostly Regulated
10	Edison Int'l	A	A2	40.0%	46.0%	Mostly Regulated
11	Empire Dist. Elec.	BBB+	Baa1	42.0%	49.9%	Regulated
12	Entergy Corp.	A-	Baa2	38.0%	43.9%	Mostly Regulated
13	FPL Group	A	Aa3	40.0%	48.8%	Mostly Regulated
14	FirstEnergy Corp.	BBB	Baa2	41.0%	50.3%	Mostly Regulated
15	Hawaiian Elec.	BBB	Baa2	38.0%	51.0%	Diversified
16	IDACORP, Inc.	A-	A3	46.0%	51.1%	Regulated
17	NiSource Inc.	BBB-	Baa2	38.0%	47.6%	Mostly Regulated
18	Northeast Utilities	BBB+	Baa1	39.0%	39.2%	Regulated
19	NSTAR	AA-	A1	40.0%	40.1%	Regulated
20	PG&E Corp.	BBB+	A3	48.0%	50.4%	Regulated
21	Pinnacle West Capital	BBB-	Baa2	50.0%	53.0%	Regulated
22	Portland General	A	Baa1	50.0%	50.1%	Regulated
23	Progress Energy	A-	A2	44.0%	48.8%	Regulated
24	Southern Co.	A	A2	41.0%	44.9%	Regulated
25	TECO Energy	BBB-	Baa2	39.0%	39.0%	Regulated
26	UIL Holdings	N/R	Baa2	40.0%	49.2%	Regulated
27	Vectren Corp.	A	A3	46.0%	49.8%	Regulated
28	Westar Energy	BBB-	Baa2	47.0%	48.9%	Regulated
29	Wisconsin Energy	A-	Aa3	42.0%	49.2%	Regulated
30	Xcel Energy Inc.	A-	A3	44.0%	49.4%	Regulated
31	**Average**	**BBB+**	**A3**	**44.5%**	**49.9%**	**Regulated**
32	Aquila Missouri	BBB+	Baa2		48.4%[5]	Regulated

Sources:

[1] *AUS Utility Reports*, December 2008.

[2] *The Value Line Investment Survey* for November 7, November 28, and December 26, 2008.

[3] *EEI Q3 Financial Update*, Companies Listed by Category.

[4] SNL Interactive, http://www.snl.com/InteractiveX/MyInteractive.aspx, downloaded on February 11, 2009.

[5] Schedule MPG-1.

Aquila Missouri

Growth Rates

Line	Company	Zacks Estimated Growth %[1] (1)	Number of Estimates (2)	SNL Estimated Growth %[2] (3)	Number of Estimates (4)	Average of Growth Rates (5)
1	ALLETE	5.00%	1	6.50%	2	5.75%
2	Alliant Energy	5.00%	2	6.10%	2	5.55%
3	Ameren Corp.	5.50%	4	4.00%	2	4.75%
4	Amer. Elec. Power	5.00%	1	5.30%	4	5.15%
5	Avista Corp.	10.50%	2	5.00%	3	7.75%
6	Cen. Vermont Pub. Serv.	N/A	N/A	N/A	N/A	N/A
7	Cleco Corp.	15.00%	2	13.60%	2	14.30%
8	Consol. Edison	3.33%	3	2.00%	5	2.67%
9	DTE Energy	6.00%	1	3.50%	2	4.75%
10	Edison Int'l	7.00%	2	7.00%	3	7.00%
11	Empire Dist. Elec.	N/A	N/A	N/A	N/A	N/A
12	Entergy Corp.	9.75%	4	10.00%	5	9.88%
13	FPL Group	9.33%	6	10.00%	6	9.67%
14	FirstEnergy Corp.	7.67%	3	9.00%	3	8.34%
15	Hawaiian Elec.	4.50%	3	3.00%	3	3.75%
16	IDACORP, Inc.	6.00%	2	5.00%	2	5.50%
17	NiSource Inc.	2.50%	2	3.00%	5	2.75%
18	Northeast Utilities	10.00%	3	8.50%	6	9.25%
19	NSTAR	7.40%	5	6.00%	4	6.70%
20	PG&E Corp.	7.50%	3	7.00%	7	7.25%
21	Pinnacle West Capital	6.00%	1	4.00%	3	5.00%
22	Portland General	6.50%	2	5.30%	4	5.90%
23	Progress Energy	4.88%	4	5.00%	6	4.94%
24	Southern Co.	5.20%	5	5.80%	6	5.50%
25	TECO Energy	8.25%	4	8.10%	7	8.18%
26	UIL Holdings	8.00%	2	6.00%	1	7.00%
27	Vectren Corp.	6.40%	5	6.00%	3	6.20%
28	Westar Energy	6.00%	2	4.00%	3	5.00%
29	Wisconsin Energy	9.00%	4	10.00%	5	9.50%
30	Xcel Energy Inc.	6.50%	2	7.30%	4	6.90%
31	**Average**	**6.92%**	**3**	**6.29%**	**4**	**6.60%**

Sources:

[1] Zacks Elite, http://www.zackselite.com/, downloaded on January 19, 2009.

[2] SNL Interactive, http://www.snl.com/, downloaded on January 19, 2009.

Aquila Missouri

Constant Growth DCF Model

Line	Company	13-Week AVG Stock Price[1] (1)	Analysts' Growth[2] (2)	Annual Dividend[3] (3)	Adjusted Yield (4)	Constant Growth DCF (5)
1	ALLETE	$32.61	5.75%	$1.72	5.58%	11.33%
2	Alliant Energy	$29.23	5.55%	$1.40	5.05%	10.60%
3	Ameren Corp.	$32.44	4.75%	$2.54	8.20%	12.95%
4	Amer. Elec. Power	$31.09	5.15%	$1.64	5.55%	10.70%
5	Avista Corp.	$18.51	7.75%	$0.72	4.19%	11.94%
6	Cen. Vermont Pub. Serv.	$20.44	N/A	$0.92	N/A	N/A
7	Cleco Corp.	$21.91	14.30%	$0.90	4.69%	18.99%
8	Consol. Edison	$39.73	2.67%	$2.34	6.05%	8.71%
9	DTE Energy	$35.31	4.75%	$2.12	6.29%	11.04%
10	Edison Int'l	$32.40	7.00%	$1.22	4.03%	11.03%
11	Empire Dist. Elec.	$17.48	N/A	$1.28	N/A	N/A
12	Entergy Corp.	$80.93	9.88%	$3.00	4.07%	13.95%
13	FPL Group	$47.22	9.67%	$1.78	4.13%	13.80%
14	FirstEnergy Corp.	$51.96	8.34%	$2.20	4.59%	12.92%
15	Hawaiian Elec.	$24.10	3.75%	$1.24	5.34%	9.09%
16	IDACORP, Inc.	$28.26	5.50%	$1.20	4.48%	9.98%
17	NiSource Inc.	$11.61	2.75%	$0.92	8.14%	10.89%
18	Northeast Utilities	$22.71	9.25%	$0.85	4.10%	13.35%
19	NSTAR	$33.86	6.70%	$1.40	4.41%	11.11%
20	PG&E Corp.	$36.76	7.25%	$1.56	4.55%	11.80%
21	Pinnacle West Capital	$30.54	5.00%	$2.10	7.22%	12.22%
22	Portland General	$18.46	5.90%	$0.98	5.62%	11.52%
23	Progress Energy	$38.62	4.94%	$2.46	6.68%	11.62%
24	Southern Co.	$35.49	5.50%	$1.68	4.99%	10.49%
25	TECO Energy	$12.23	8.18%	$0.80	7.07%	15.25%
26	UIL Holdings	$29.86	7.00%	$1.73	6.19%	13.19%
27	Vectren Corp.	$25.13	6.20%	$1.34	5.66%	11.86%
28	Westar Energy	$19.20	5.00%	$1.16	6.34%	11.34%
29	Wisconsin Energy	$41.52	9.50%	$1.08	2.85%	12.35%
30	Xcel Energy Inc.	$17.90	6.90%	$0.95	5.68%	12.58%
31	**Average**	**$30.58**	**6.60%**	**$1.51**	**5.42%**	**12.02%**

Sources:

[1] http://moneycentral.msn.com, downloaded on January 20, 2009.
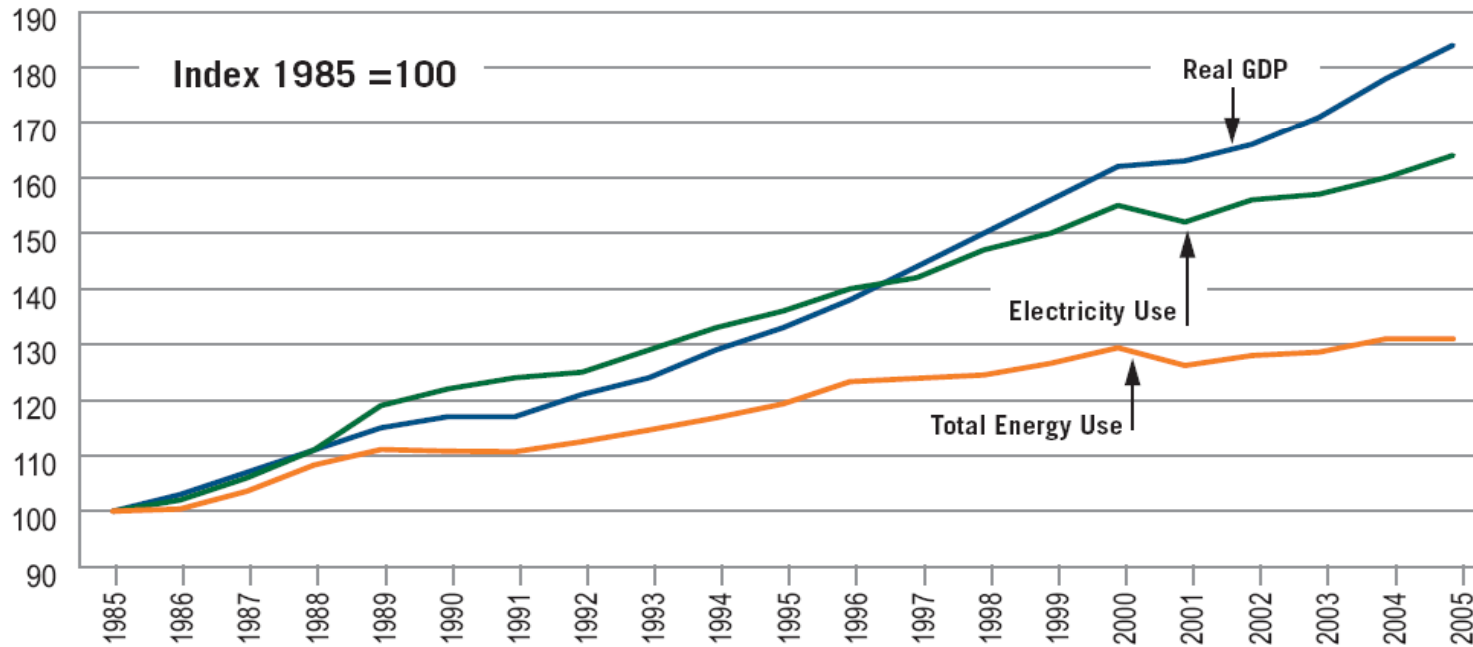
[2] Schedule MPG-4, Column 5.

[3] *The Value Line Investment Survey* for November 7, November 28, and December 26, 2008.

Aquila Missouri

Electricity Sales Are Linked to U.S. Economic Growth

1985 represents the base year. Graph depicts increases or decreases from the base year.

Source: U.S. Department of Energy, Energy Information Administration (EIA).

Aquila Missouri

Historical Growth Rates

		Dividend Growth			Inflation (CPI)			Nominal GDP			
		Historical		3-5 Years	Historical		3-5 Years	Historical		Projected*	
Line	Company	10 Years	5 Years	Projection	5 Years	10 Years	Projection	5 Years	10 Years	5 Years	10 Years
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	ALLETE	N/A	N/A	4.5%							
2	Alliant Energy	-5.0%	-10.5%	9.0%							
3	Ameren Corp.	N/A	N/A	N/A							
4	Amer. Elec. Power	-4.5%	-9.0%	4.0%							
5	Avista Corp.	-7.5%	3.5%	12.5%							
6	Cen. Vermont Pub. Serv.	1.0%	1.0%	N/A							
7	Cleco Corp.	1.5%	0.5%	9.5%							
8	Consol. Edison	1.0%	1.0%	1.0%							
9	DTE Energy	N/A	N/A	1.5%							
10	Edison Int'l	1.0%	N/A	7.0%							
11	Empire Dist. Elec.	N/A	N/A	1.5%							
12	Entergy Corp.	2.5%	12.5%	6.0%							
13	FPL Group	5.0%	6.5%	6.5%							
14	FirstEnergy Corp.	2.0%	4.5%	8.5%							
15	Hawaiian Elec.	0.5%	N/A	1.0%							
16	IDACORP, Inc.	-4.5%	-8.5%	N/A							
17	NiSource Inc.	0.5%	-2.5%	1.5%							
18	Northeast Utilities	-4.5%	9.5%	7.0%							
19	NSTAR	3.0%	3.5%	7.0%							
20	PG&E Corp.	-3.0%	N/A	9.0%							
21	Pinnacle West Capital	7.0%	5.5%	1.0%							
22	Portland General	N/A	N/A	N/A							
23	Progress Energy	3.0%	2.5%	1.0%							
24	Southern Co.	2.0%	2.5%	4.5%							
25	TECO Energy	-3.5%	-11.0%	2.5%							
26	UIL Holdings	N/A	N/A	N/A							
27	Vectren Corp.	N/A	3.5%	3.0%							
28	Westar Energy	-7.0%	-5.0%	5.5%							
29	Wisconsin Energy	-4.5%	-1.0%	13.0%							
30	Xcel Energy Inc.	-4.5%	-8.5%	3.0%							
31	**Average**	**-0.8%**	**0.0%**	**5.2%**	**2.9%**	**2.6%**	**3.0%**	**5.7%**	**5.2%**	**5.0%**	**4.8%**

Sources:
The Value Line Investment Survey for November 7, November 28, and December 26, 2008.
* *Blue Chip Economic Indicators,* October 10, 2008, at 15.

Schedule MPG-7

Aquila Missouri

Current and Projected Payout Ratios

Line	Company	Dividends Per Share		Earnings Per Share		Payout Ratio	
		2007 (1)	3-5 Years (2)	2007 (3)	3-5 Years (4)	2007 (5)	3-5 Years (6)
1	ALLETE	$1.64	$1.90	$3.08	$2.75	53.25%	69.09%
2	Alliant Energy	$1.27	$1.92	$2.69	$3.30	47.21%	58.18%
3	Ameren Corp.	$2.54	$2.54	$2.98	$3.75	85.23%	67.73%
4	Amer. Elec. Power	$1.58	$1.90	$2.86	$3.75	55.24%	50.67%
5	Avista Corp.	$0.60	$1.15	$0.72	$1.75	83.33%	65.71%
6	Cen. Vermont Pub. Serv.	$0.92	$0.92	$1.49	$1.65	61.74%	55.76%
7	Cleco Corp.	$0.90	$1.55	$1.32	$2.50	68.18%	62.00%
8	Consol. Edison	$2.32	$2.42	$3.48	$3.30	66.67%	73.33%
9	DTE Energy	$2.12	$2.55	$2.66	$3.75	79.70%	68.00%
10	Edison Int'l	$1.16	$1.64	$3.34	$4.50	34.73%	36.44%
11	Empire Dist. Elec.	$1.28	$1.40	$1.09	$2.00	117.43%	70.00%
12	Entergy Corp.	$2.58	$3.30	$5.60	$8.00	46.07%	41.25%
13	FPL Group	$1.64	$2.20	$3.27	$5.00	50.15%	44.00%
14	FirstEnergy Corp.	$2.05	$3.05	$4.22	$6.50	48.58%	46.92%
15	Hawaiian Elec.	$1.24	$1.30	$1.11	$1.75	111.71%	74.29%
16	IDACORP, Inc.	$1.20	$1.20	$1.86	$2.25	64.52%	53.33%
17	NiSource Inc.	$0.92	$1.00	$1.14	$1.50	80.70%	66.67%
18	Northeast Utilities	$0.78	$1.10	$1.59	$2.25	49.06%	48.89%
19	NSTAR	$1.33	$1.85	$2.07	$3.00	64.25%	61.67%
20	PG&E Corp.	$1.41	$2.04	$2.78	$3.50	50.72%	58.29%
21	Pinnacle West Capital	$2.10	$2.22	$2.96	$3.10	70.95%	71.61%
22	Portland General	$0.93	$1.20	$2.33	$2.25	39.91%	53.33%
23	Progress Energy	$2.44	$2.54	$2.69	$3.40	90.71%	74.71%
24	Southern Co.	$1.60	$2.00	$2.28	$3.00	70.18%	66.67%
25	TECO Energy	$0.78	$0.90	$1.27	$1.75	61.42%	51.43%
26	UIL Holdings	$1.73	$1.73	$1.87	$2.10	92.51%	82.38%
27	Vectren Corp.	$1.27	$1.47	$1.83	$2.25	69.40%	65.33%
28	Westar Energy	$1.08	$1.36	$1.84	$2.00	58.70%	68.00%
29	Wisconsin Energy	$1.00	$1.95	$2.84	$4.25	35.21%	45.88%
30	Xcel Energy Inc.	$0.91	$1.06	$1.35	$2.00	67.41%	53.00%
31	**Average**	**$1.44**	**$1.78**	**$2.35**	**$3.10**	**65.83%**	**60.15%**

Source:
The Value Line Investment Survey for November 7, November 28, and December 26, 2008.

Aquila Missouri

Sustainable Growth Rate

Line	Company	Dividends Per Share (1)	Earnings Per Share (2)	Book Value Per Share (3)	ROE (4)	Payout Ratio (5)	Retention Rate (6)	Internal Growth Rate (7)	Growth Rate Plus S * V[1] (8)
					3 to 5 Year Projections				
1	ALLETE	$1.90	$2.75	$28.50	9.65%	69.09%	30.91%	2.98%	3.72%
2	Alliant Energy	$1.92	$3.30	$31.50	10.48%	58.18%	41.82%	4.38%	4.32%
3	Ameren Corp.	$2.54	$3.75	$35.50	10.56%	67.73%	32.27%	3.41%	3.29%
4	Amer. Elec. Power	$1.90	$3.75	$34.25	10.95%	50.67%	49.33%	5.40%	5.32%
5	Avista Corp.	$1.15	$1.75	$21.00	8.33%	65.71%	34.29%	2.86%	2.70%
6	Cen. Vermont Pub. Serv.	$0.92	$1.65	$21.60	7.64%	55.76%	44.24%	3.38%	3.32%
7	Cleco Corp.	$1.55	$2.50	$21.75	11.49%	62.00%	38.00%	4.37%	4.38%
8	Consol. Edison	$2.42	$3.30	$37.70	8.75%	73.33%	26.67%	2.33%	2.38%
9	DTE Energy	$2.55	$3.75	$41.75	8.98%	68.00%	32.00%	2.87%	2.88%
10	Edison Int'l	$1.64	$4.50	$39.45	11.41%	36.44%	63.56%	7.25%	7.25%
11	Empire Dist. Elec.	$1.40	$2.00	$18.50	10.81%	70.00%	30.00%	3.24%	3.09%
12	Entergy Corp.	$3.30	$8.00	$60.75	13.17%	41.25%	58.75%	7.74%	7.34%
13	FPL Group	$2.20	$5.00	$37.50	13.33%	44.00%	56.00%	7.47%	7.60%
14	FirstEnergy Corp.	$3.05	$6.50	$43.25	15.03%	46.92%	53.08%	7.98%	7.98%
15	Hawaiian Elec.	$1.30	$1.75	$16.75	10.45%	74.29%	25.71%	2.69%	3.26%
16	IDACORP, Inc.	$1.20	$2.25	$28.90	7.79%	53.33%	46.67%	3.63%	3.57%
17	NiSource Inc.	$1.00	$1.50	$20.40	7.35%	66.67%	33.33%	2.45%	2.38%
18	Northeast Utilities	$1.10	$2.25	$25.75	8.74%	48.89%	51.11%	4.47%	3.87%
19	NSTAR	$1.85	$3.00	$21.00	14.29%	61.67%	38.33%	5.48%	5.48%
20	PG&E Corp.	$2.04	$3.50	$29.95	11.69%	58.29%	41.71%	4.87%	5.11%
21	Pinnacle West Capital	$2.22	$3.10	$39.10	7.93%	71.61%	28.39%	2.25%	1.99%
22	Portland General	$1.20	$2.25	$25.00	9.00%	53.33%	46.67%	4.20%	2.95%
23	Progress Energy	$2.54	$3.40	$36.45	9.33%	74.71%	25.29%	2.36%	2.45%
24	Southern Co.	$2.00	$3.00	$21.50	13.95%	66.67%	33.33%	4.65%	5.51%
25	TECO Energy	$0.90	$1.75	$12.50	14.00%	51.43%	48.57%	6.80%	6.79%
26	UIL Holdings	$1.73	$2.10	$18.80	11.17%	82.38%	17.62%	1.97%	2.64%
27	Vectren Corp.	$1.47	$2.25	$19.55	11.51%	65.33%	34.67%	3.99%	4.39%
28	Westar Energy	$1.36	$2.00	$27.50	7.27%	68.00%	32.00%	2.33%	1.35%
29	Wisconsin Energy	$1.95	$4.25	$35.25	12.06%	45.88%	54.12%	6.52%	6.53%
30	Xcel Energy Inc.	$1.06	$2.00	$18.00	11.11%	53.00%	47.00%	5.22%	5.22%
31	**Average**	**$1.78**	**$3.10**	**$28.98**	**10.61%**	**60.15%**	**39.85%**	**4.32%**	**4.30%**

Sources:

The Value Line Investment Survey for November 7, November 28, and December 26, 2008.

[1] Page 2, Column 9.

Aquila Missouri

Sustainable Growth

Line	Company	13-Week Average Stock Price[1] (1)	3-5 Year Book Value P/S Projection[2] (2)	Market to Book Ratio (3)	Common Shares Outstanding (in Millions)[2] 2007 (4)	3-5 Years (5)	Growth (6)	S Factor[3] (7)	V Factor[4] (8)	S * V (9)
1	ALLETE	$32.61	$28.50	1.14	30.80	39.50	5.10%	5.84%	12.61%	0.74%
2	Alliant Energy	$29.23	$31.50	0.93	110.36	115.00	0.83%	0.77%	-7.75%	-0.06%
3	Ameren Corp.	$32.44	$35.50	0.91	208.30	223.00	1.37%	1.25%	-9.44%	-0.12%
4	Amer. Elec. Power	$31.09	$34.25	0.91	400.43	419.00	0.91%	0.83%	-10.16%	-0.08%
5	Avista Corp.	$18.51	$21.00	0.88	52.91	56.50	1.32%	1.17%	-13.42%	-0.16%
6	Cen. Vermont Pub. Serv.	$20.44	$21.60	0.95	10.24	10.80	1.07%	1.01%	-5.65%	-0.06%
7	Cleco Corp.	$21.91	$21.75	1.01	59.94	65.00	1.63%	1.65%	0.73%	0.01%
8	Consol. Edison	$39.73	$37.70	1.05	272.02	284.00	0.87%	0.91%	5.10%	0.05%
9	DTE Energy	$35.31	$41.75	0.85	163.23	163.00	-0.03%	-0.02%	-18.23%	0.00%
10	Edison Int'l	$32.40	$39.45	0.82	325.81	326.00	0.01%	0.01%	-21.77%	0.00%
11	Empire Dist. Elec.	$17.48	$18.50	0.95	33.61	38.50	2.75%	2.60%	-5.81%	-0.15%
12	Entergy Corp.	$80.93	$60.75	1.33	193.12	182.00	-1.18%	-1.57%	24.93%	-0.39%
13	FPL Group	$47.22	$37.50	1.26	407.35	418.00	0.52%	0.65%	20.58%	0.13%
14	FirstEnergy Corp.	$51.96	$43.25	1.20	304.84	304.85	0.00%	0.00%	16.76%	0.00%
15	Hawaiian Elec.	$24.10	$16.75	1.44	83.43	89.00	1.30%	1.87%	30.50%	0.57%
16	IDACORP, Inc.	$28.26	$28.90	0.98	45.06	51.60	2.75%	2.69%	-2.28%	-0.06%
17	NiSource Inc.	$11.61	$20.40	0.57	274.18	276.50	0.17%	0.10%	-75.64%	-0.07%
18	Northeast Utilities	$22.71	$25.75	0.88	156.22	200.00	5.07%	4.47%	-13.40%	-0.60%
19	NSTAR	$33.86	$21.00	1.61	106.81	106.81	0.00%	0.00%	37.99%	0.00%
20	PG&E Corp.	$36.76	$29.95	1.23	378.39	398.00	1.02%	1.25%	18.53%	0.23%
21	Pinnacle West Capital	$30.54	$39.10	0.78	100.49	106.60	1.19%	0.93%	-28.04%	-0.26%
22	Portland General	$18.46	$25.00	0.74	62.53	79.00	4.79%	3.53%	-35.45%	-1.25%
23	Progress Energy	$38.62	$36.45	1.06	260.10	280.00	1.49%	1.57%	5.62%	0.09%
24	Southern Co.	$35.49	$21.50	1.65	763.10	815.00	1.32%	2.19%	39.42%	0.86%
25	TECO Energy	$12.23	$12.50	0.98	210.90	217.00	0.57%	0.56%	-2.17%	-0.01%
26	UIL Holdings	$29.86	$18.80	1.59	25.03	26.50	1.15%	1.82%	37.05%	0.68%
27	Vectren Corp.	$25.13	$19.55	1.29	76.36	81.80	1.39%	1.78%	22.22%	0.40%
28	Westar Energy	$19.20	$27.50	0.70	95.46	112.00	3.25%	2.27%	-43.25%	-0.98%
29	Wisconsin Energy	$41.52	$35.25	1.18	116.94	117.00	0.01%	0.01%	15.11%	0.00%
30	Xcel Energy Inc.	$17.90	$18.00	0.99	428.78	458.00	1.33%	1.32%	-0.53%	-0.01%
31	**Average**	**$30.58**	**$28.98**	**1.06**	**191.89**	**202.00**	**1.40%**	**1.38%**	**-0.20%**	**-0.02%**

Sources:

[1] http://moneycentral.msn.com, downloaded on January 20, 2009.

[2] *The Value Line Investment Survey* for November 7, November 28, and December 26, 2008.

[3] Expected Growth in the Number of Shares.

[4] Expected Profit of Stock Investment.

Aquila Missouri

Composite Long-Term Growth DCF Model

Line	Company	13-Week AVG Stock Price[1] (1)	Analysts' Growth[2] (2)	Sustainable Growth[3] (3)	Composite Growth (4)	Annual Dividend[4] (5)	Adjusted Yield (6)	Constant Growth DCF (7)
1	ALLETE	$32.61	5.75%	3.72%	5.07%	$1.72	5.54%	10.61%
2	Alliant Energy	$29.23	5.55%	4.32%	5.14%	$1.40	5.04%	10.18%
3	Ameren Corp.	$32.44	4.75%	3.29%	4.26%	$2.54	8.16%	12.43%
4	Amer. Elec. Power	$31.09	5.15%	5.32%	5.21%	$1.64	5.55%	10.76%
5	Avista Corp.	$18.51	7.75%	2.70%	6.07%	$0.72	4.12%	10.19%
6	Cen. Vermont Pub. Serv.	$20.44	N/A	3.32%	N/A	$0.92	N/A	N/A
7	Cleco Corp.	$21.91	14.30%	4.38%	10.99%	$0.90	4.56%	15.55%
8	Consol. Edison	$39.73	2.67%	2.38%	2.57%	$2.34	6.04%	8.61%
9	DTE Energy	$35.31	4.75%	2.88%	4.13%	$2.12	6.25%	10.38%
10	Edison Int'l	$32.40	7.00%	7.25%	7.08%	$1.22	4.03%	11.12%
11	Empire Dist. Elec.	$17.48	N/A	3.09%	N/A	$1.28	N/A	N/A
12	Entergy Corp.	$80.93	9.88%	7.34%	9.03%	$3.00	4.04%	13.07%
13	FPL Group	$47.22	9.67%	7.60%	8.98%	$1.78	4.11%	13.08%
14	FirstEnergy Corp.	$51.96	8.34%	7.98%	8.22%	$2.20	4.58%	12.80%
15	Hawaiian Elec.	$24.10	3.75%	3.26%	3.59%	$1.24	5.33%	8.92%
16	IDACORP, Inc.	$28.26	5.50%	3.57%	4.86%	$1.20	4.45%	9.31%
17	NiSource Inc.	$11.61	2.75%	2.38%	2.63%	$0.92	8.13%	10.76%
18	Northeast Utilities	$22.71	9.25%	3.87%	7.46%	$0.85	4.03%	11.49%
19	NSTAR	$33.86	6.70%	5.48%	6.29%	$1.40	4.39%	10.69%
20	PG&E Corp.	$36.76	7.25%	5.11%	6.54%	$1.56	4.52%	11.06%
21	Pinnacle West Capital	$30.54	5.00%	1.99%	4.00%	$2.10	7.15%	11.15%
22	Portland General	$18.46	5.90%	2.95%	4.92%	$0.98	5.57%	10.49%
23	Progress Energy	$38.62	4.94%	2.45%	4.11%	$2.46	6.63%	10.74%
24	Southern Co.	$35.49	5.50%	5.51%	5.50%	$1.68	4.99%	10.50%
25	TECO Energy	$12.23	8.18%	6.79%	7.71%	$0.80	7.04%	14.76%
26	UIL Holdings	$29.86	7.00%	2.64%	5.55%	$1.73	6.11%	11.66%
27	Vectren Corp.	$25.13	6.20%	4.39%	5.60%	$1.34	5.63%	11.22%
28	Westar Energy	$19.20	5.00%	1.35%	3.78%	$1.16	6.27%	10.05%
29	Wisconsin Energy	$41.52	9.50%	6.53%	8.51%	$1.08	2.82%	11.33%
30	Xcel Energy Inc.	$17.90	6.90%	5.22%	6.34%	$0.95	5.65%	11.99%
31	**Average**	**$30.58**	**6.60%**	**4.30%**	**5.86%**	**$1.51**	**5.38%**	**11.25%**

Sources:

[1] http://moneycentral.msn.com, downloaded on January 20, 2009.

[2] Schedule MPG-4, Column 5.

[3] Schedule MPG-9, page 1 of 2, Column 8.

[4] *The Value Line Investment Survey* for November 7, November 28, and December 26, 2008.

Aquila Missouri

Long-Term Sustainable GDP Growth Rate

| Line | Date | 20-Year Yield[1] | | Inflation |
| | | Treasury | TIPS | |
		(1)	(2)	(3)
1	10/24/08	4.46%	2.82%	1.64%
2	10/31/08	4.59%	3.20%	1.39%
3	11/07/08	4.58%	3.07%	1.51%
4	11/14/08	4.49%	2.89%	1.60%
5	11/21/08	4.14%	2.91%	1.23%
6	11/28/08	3.84%	3.14%	0.70%
7	12/05/08	3.44%	2.51%	0.93%
8	12/12/08	3.38%	2.44%	0.94%
9	12/19/08	3.04%	2.17%	0.87%
10	12/30/08	2.93%	2.16%	0.77%
11	01/02/09	3.02%	2.32%	0.70%
12	01/09/09	3.40%	2.57%	0.83%
13	01/16/09	3.23%	2.29%	0.94%
14	**Average**	**3.73%**	**2.65%**	**1.08%**
15	Real GDP (1929-2008)[2]			3.47%
16	**Long-Term Sustainable GDP Growth**			**4.55%**

Sources:
[1] St. Louis Federal Reserve Bank.
[2] www.bea.gov.

Aquila Missouri

Two-Stage Growth DCF Model

Line	Company	13-Week AVG Stock Price[1] (1)	Annual Dividend[2] (2)	First Stage Growth (3)	Second Stage Growth[3] (4)	Two-Stage Growth DCF (5)
1	ALLETE	$32.61	$1.72	5.75%	4.90%	10.64%
2	Alliant Energy	$29.23	$1.40	5.55%	4.90%	10.07%
3	Ameren Corp.	$32.44	$2.54	4.75%	4.90%	13.06%
4	Amer. Elec. Power	$31.09	$1.64	5.15%	4.90%	10.49%
5	Avista Corp.	$18.51	$0.72	7.75%	4.90%	9.52%
6	Cen. Vermont Pub. Serv.	$20.44	$0.92	N/A	4.90%	N/A
7	Cleco Corp.	$21.91	$0.90	14.30%	4.90%	11.25%
8	Consol. Edison	$39.73	$2.34	2.67%	4.90%	10.51%
9	DTE Energy	$35.31	$2.12	4.75%	4.90%	11.16%
10	Edison Int'l	$32.40	$1.22	7.00%	4.90%	9.23%
11	Empire Dist. Elec.	$17.48	$1.28	N/A	4.90%	N/A
12	Entergy Corp.	$80.93	$3.00	9.88%	4.90%	9.71%
13	FPL Group	$47.22	$1.78	9.67%	4.90%	9.75%
14	FirstEnergy Corp.	$51.96	$2.20	8.34%	4.90%	10.05%
15	Hawaiian Elec.	$24.10	$1.24	3.75%	4.90%	10.03%
16	IDACORP, Inc.	$28.26	$1.20	5.50%	4.90%	9.47%
17	NiSource Inc.	$11.61	$0.92	2.75%	4.90%	12.49%
18	Northeast Utilities	$22.71	$0.85	9.25%	4.90%	9.65%
19	NSTAR	$33.86	$1.40	6.70%	4.90%	9.59%
20	PG&E Corp.	$36.76	$1.56	7.25%	4.90%	9.83%
21	Pinnacle West Capital	$30.54	$2.10	5.00%	4.90%	12.14%
22	Portland General	$18.46	$0.98	5.90%	4.90%	10.71%
23	Progress Energy	$38.62	$2.46	4.94%	4.90%	11.59%
24	Southern Co.	$35.49	$1.68	5.50%	4.90%	10.00%
25	TECO Energy	$12.23	$0.80	8.18%	4.90%	12.75%
26	UIL Holdings	$29.86	$1.73	7.00%	4.90%	11.53%
27	Vectren Corp.	$25.13	$1.34	6.20%	4.90%	10.81%
28	Westar Energy	$19.20	$1.16	5.00%	4.90%	11.27%
29	Wisconsin Energy	$41.52	$1.08	9.50%	4.90%	8.23%
30	Xcel Energy Inc.	$17.90	$0.95	6.90%	4.90%	10.97%
31	**Average**	**$30.58**	**$1.51**	**6.60%**	**4.90%**	**10.59%**

Sources:

[1] http://moneycentral.msn.com, downloaded on January 20, 2009.

[2] *The Value Line Investment Survey* for November 7, November 28, and December 26, 2008.

[3] *Blue Chip Economic Indicators*, October 10, 2008.

Aquila Missouri

Multi-Stage Growth DCF Model

Line	Company	13-Week AVG Stock Price[1] (1)	Annual Dividend[2] (2)	First Stage Growth (3)	Second Stage Growth — Year 6 (4)	Year 7 (5)	Year 8 (6)	Year 9 (7)	Year 10 (8)	Third Stage Growth[3] (9)	Multi-Stage Growth DCF (10)
1	ALLETE	$32.61	$1.72	5.75%	5.61%	5.47%	5.33%	5.18%	5.04%	4.90%	10.72%
2	Alliant Energy	$29.23	$1.40	5.55%	5.44%	5.33%	5.23%	5.12%	5.01%	4.90%	10.13%
3	Ameren Corp.	$32.44	$2.54	4.75%	4.78%	4.80%	4.83%	4.85%	4.88%	4.90%	13.04%
4	Amer. Elec. Power	$31.09	$1.64	5.15%	5.11%	5.07%	5.03%	4.98%	4.94%	4.90%	10.52%
5	Avista Corp.	$18.51	$0.72	7.75%	7.28%	6.80%	6.33%	5.85%	5.38%	4.90%	9.76%
6	Cen. Vermont Pub. Serv.	$20.44	$0.92	N/A	N/A	N/A	N/A	N/A	N/A	4.90%	N/A
7	Cleco Corp.	$21.91	$0.90	14.30%	12.73%	11.17%	9.60%	8.03%	6.47%	4.90%	12.26%
8	Consol. Edison	$39.73	$2.34	2.67%	3.04%	3.41%	3.78%	4.16%	4.53%	4.90%	10.29%
9	DTE Energy	$35.31	$2.12	4.75%	4.78%	4.80%	4.83%	4.85%	4.88%	4.90%	11.14%
10	Edison Int'l	$32.40	$1.22	7.00%	6.65%	6.30%	5.95%	5.60%	5.25%	4.90%	9.40%
11	Empire Dist. Elec.	$17.48	$1.28	N/A	N/A	N/A	N/A	N/A	N/A	4.90%	N/A
12	Entergy Corp.	$80.93	$3.00	9.88%	9.05%	8.22%	7.39%	6.56%	5.73%	4.90%	10.15%
13	FPL Group	$47.22	$1.78	9.67%	8.87%	8.08%	7.28%	6.49%	5.69%	4.90%	10.17%
14	FirstEnergy Corp.	$51.96	$2.20	8.34%	7.76%	7.19%	6.62%	6.05%	5.47%	4.90%	10.36%
15	Hawaiian Elec.	$24.10	$1.24	3.75%	3.94%	4.13%	4.33%	4.52%	4.71%	4.90%	9.93%
16	IDACORP, Inc.	$28.26	$1.20	5.50%	5.40%	5.30%	5.20%	5.10%	5.00%	4.90%	9.52%
17	NiSource Inc.	$11.61	$0.92	2.75%	3.11%	3.47%	3.83%	4.18%	4.54%	4.90%	12.24%
18	Northeast Utilities	$22.71	$0.85	9.25%	8.53%	7.80%	7.08%	6.35%	5.63%	4.90%	10.02%
19	NSTAR	$33.86	$1.40	6.70%	6.40%	6.10%	5.80%	5.50%	5.20%	4.90%	9.74%
20	PG&E Corp.	$36.76	$1.56	7.25%	6.86%	6.47%	6.08%	5.68%	5.29%	4.90%	10.04%
21	Pinnacle West Capital	$30.54	$2.10	5.00%	4.98%	4.97%	4.95%	4.93%	4.92%	4.90%	12.16%
22	Portland General	$18.46	$0.98	5.90%	5.73%	5.57%	5.40%	5.23%	5.07%	4.90%	10.81%
23	Progress Energy	$38.62	$2.46	4.94%	4.93%	4.93%	4.92%	4.91%	4.91%	4.90%	11.60%
24	Southern Co.	$35.49	$1.68	5.50%	5.40%	5.30%	5.20%	5.10%	5.00%	4.90%	10.05%
25	TECO Energy	$12.23	$0.80	8.18%	7.63%	7.08%	6.54%	5.99%	5.45%	4.90%	13.14%
26	UIL Holdings	$29.86	$1.73	7.00%	6.65%	6.30%	5.95%	5.60%	5.25%	4.90%	11.76%
27	Vectren Corp.	$25.13	$1.34	6.20%	5.98%	5.77%	5.55%	5.33%	5.12%	4.90%	10.94%
28	Westar Energy	$19.20	$1.16	5.00%	4.98%	4.97%	4.95%	4.93%	4.92%	4.90%	11.28%
29	Wisconsin Energy	$41.52	$1.08	9.50%	8.73%	7.97%	7.20%	6.43%	5.67%	4.90%	8.54%
30	Xcel Energy Inc.	$17.90	$0.95	6.90%	6.57%	6.23%	5.90%	5.57%	5.23%	4.90%	11.18%
31	**Average**	**$30.58**	**$1.51**	**6.60%**	**6.32%**	**6.03%**	**5.75%**	**5.47%**	**5.18%**	**4.90%**	**10.75%**

Sources:

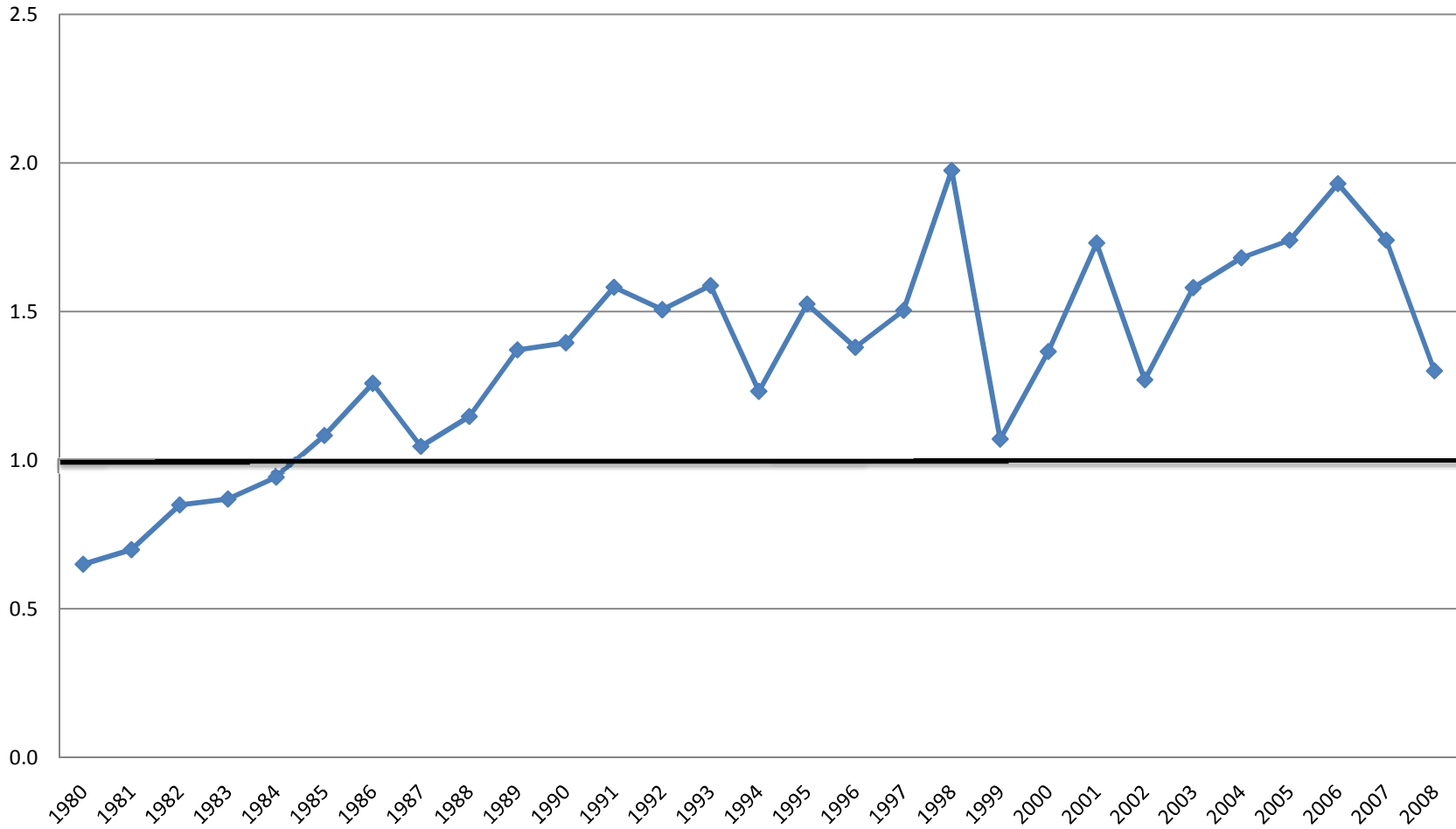[1] http://moneycentral.msn.com, downloaded on January 20, 2009.

[2] *The Value Line Investment Survey* for November 7, November 28, and December 26, 2008.

[3] *Blue Chip Economic Indicators*, October 10, 2008.

Aquila Missouri

Electric Common Stock Market/Book Ratio

Schedule MPG-14

Aquila Missouri

Equity Risk Premium - Treasury Bond

Line	Date	Authorized Electric Returns[1] (1)	Treasury Bond Yield[2] (2)	Indicated Risk Premium (3)
1	1986	13.93%	7.78%	6.15%
2	1987	12.99%	8.59%	4.40%
3	1988	12.79%	8.96%	3.83%
4	1989	12.97%	8.45%	4.52%
5	1990	12.70%	8.61%	4.09%
6	1991	12.55%	8.14%	4.41%
7	1992	12.09%	7.67%	4.42%
8	1993	11.41%	6.59%	4.82%
9	1994	11.34%	7.37%	3.97%
10	1995	11.55%	6.88%	4.67%
11	1996	11.39%	6.71%	4.68%
12	1997	11.40%	6.61%	4.79%
13	1998	11.66%	5.58%	6.08%
14	1999	10.77%	5.87%	4.90%
15	2000	11.43%	5.94%	5.49%
16	2001	11.09%	5.49%	5.60%
17	2002	11.16%	5.43%	5.73%
18	2003	10.97%	4.96%	6.01%
19	2004	10.75%	5.05%	5.70%
20	2005	10.54%	4.65%	5.89%
21	2006	10.36%	4.91%	5.45%
22	2007	10.36%	4.84%	5.52%
23	2008[3]	10.51%	4.48%	6.03%
24	**Average**	**11.60%**	**6.50%**	**5.09%**

Sources:

[1] Regulatory Research Associates, Inc., *Regulatory Focus,* Jan. 85 - Dec. 06, and *Regulatory Focus*, Oct 3, 2008.

[2] Economic Report of the President 2007: Table 73. The yields from 2002 to 2005 represent the 20-Year Treasury yields obtained from the Federal Reserve Bank.

[3] The 2008 Treasury Bond Yield includes the period January to September 2008.

Aquila Missouri

Equity Risk Premium - Utility Bond

Line	Date	Authorized Electric Returns[1] (1)	Average "A" Rating Utility Bond Yield[2] (2)	Indicated Risk Premium (3)
1	1986	13.93%	9.58%	4.35%
2	1987	12.99%	10.10%	2.89%
3	1988	12.79%	10.49%	2.30%
4	1989	12.97%	9.77%	3.20%
5	1990	12.70%	9.86%	2.84%
6	1991	12.55%	9.36%	3.19%
7	1992	12.09%	8.69%	3.40%
8	1993	11.41%	7.59%	3.82%
9	1994	11.34%	8.31%	3.03%
10	1995	11.55%	7.89%	3.66%
11	1996	11.39%	7.75%	3.64%
12	1997	11.40%	7.60%	3.80%
13	1998	11.66%	7.04%	4.62%
14	1999	10.77%	7.62%	3.15%
15	2000	11.43%	8.24%	3.19%
16	2001	11.09%	7.76%	3.33%
17	2002	11.16%	7.37%	3.79%
18	2003	10.97%	6.58%	4.39%
19	2004	10.75%	6.16%	4.59%
20	2005	10.54%	5.65%	4.89%
21	2006	10.36%	6.07%	4.29%
22	2007	10.36%	6.07%	4.29%
23	2008[3]	10.51%	6.29%	4.22%
24	**Average**	**11.60%**	**7.91%**	**3.69%**

Sources:

[1] Regulatory Research Associates, Inc., *Regulatory Focus,* Jan. 85 - Dec. 06, and *Regulatory Focus*, Oct 3, 2008.

[2] Economic Report of the President 2007: Table 73. The yields from 2002 to 2005 represent the 20-Year Treasury yields obtained from the Federal Reserve Bank.

[3] The 2008 Treasury Bond Yield includes the period January to September 2008.

Aquila Missouri

Bond Yield Spreads

			Public Utility Bond Yields				Corporate Bond Yields				
Line	Year	T-Bond Yield[1] (1)	A[2] (2)	Baa[2] (3)	A-T-Bond Spread (4)	Baa-T-Bond Spread (5)	Aaa[1] (6)	Baa[1] (7)	Aaa-T-Bond Spread (8)	Baa-T-Bond Spread (9)	Baa Utility - Corporate (10)
1	1980	11.27%	13.34%	13.95%	2.07%	2.68%	11.94%	13.67%	0.67%	2.40%	0.28%
2	1981	13.45%	15.95%	16.60%	2.50%	3.15%	14.17%	16.04%	0.72%	2.59%	0.56%
3	1982	12.76%	15.86%	16.45%	3.10%	3.69%	13.79%	16.11%	1.03%	3.35%	0.34%
4	1983	11.18%	13.66%	14.20%	2.48%	3.02%	12.04%	13.55%	0.86%	2.37%	0.65%
5	1984	12.41%	14.03%	14.53%	1.62%	2.12%	12.71%	14.19%	0.30%	1.78%	0.34%
6	1985	10.79%	12.47%	12.96%	1.68%	2.17%	11.37%	12.72%	0.58%	1.93%	0.24%
7	1986	7.78%	9.58%	10.00%	1.80%	2.22%	9.02%	10.39%	1.24%	2.61%	-0.39%
8	1987	8.59%	10.10%	10.53%	1.51%	1.94%	9.38%	10.58%	0.79%	1.99%	-0.05%
9	1988	8.96%	10.49%	11.00%	1.53%	2.04%	9.71%	10.83%	0.75%	1.87%	0.17%
10	1989	8.45%	9.77%	9.97%	1.32%	1.52%	9.26%	10.18%	0.81%	1.73%	-0.21%
11	1990	8.61%	9.86%	10.06%	1.25%	1.45%	9.32%	10.36%	0.71%	1.75%	-0.30%
12	1991	8.14%	9.36%	9.55%	1.22%	1.41%	8.77%	9.80%	0.63%	1.66%	-0.25%
13	1992	7.67%	8.69%	8.86%	1.02%	1.19%	8.14%	8.98%	0.47%	1.31%	-0.12%
14	1993	6.59%	7.59%	7.91%	1.00%	1.32%	7.22%	7.93%	0.63%	1.34%	-0.02%
15	1994	7.37%	8.31%	8.63%	0.94%	1.26%	7.96%	8.62%	0.59%	1.25%	0.01%
16	1995	6.88%	7.89%	8.29%	1.01%	1.41%	7.59%	8.20%	0.71%	1.32%	0.09%
17	1996	6.71%	7.75%	8.17%	1.04%	1.46%	7.37%	8.05%	0.66%	1.34%	0.12%
18	1997	6.61%	7.60%	7.95%	0.99%	1.34%	7.26%	7.86%	0.65%	1.25%	0.09%
19	1998	5.58%	7.04%	7.26%	1.46%	1.68%	6.53%	7.22%	0.95%	1.64%	0.04%
20	1999	5.87%	7.62%	7.88%	1.75%	2.01%	7.04%	7.87%	1.17%	2.00%	0.01%
21	2000	5.94%	8.24%	8.36%	2.30%	2.42%	7.62%	8.36%	1.68%	2.42%	0.00%
22	2001	5.49%	7.76%	8.02%	2.27%	2.53%	7.08%	7.95%	1.59%	2.46%	0.07%
23	2002	5.43%	7.37%	8.02%	1.94%	2.59%	6.49%	7.80%	1.06%	2.37%	0.22%
24	2003	4.96%	6.57%	6.83%	1.61%	1.87%	5.67%	6.77%	0.71%	1.81%	0.06%
25	2004	5.05%	6.14%	6.37%	1.09%	1.32%	5.63%	6.39%	0.58%	1.34%	-0.02%
26	2005	4.65%	5.66%	5.93%	1.01%	1.29%	5.24%	6.06%	0.59%	1.41%	-0.13%
27	2006	4.91%	6.07%	6.32%	1.16%	1.41%	5.59%	6.48%	0.68%	1.57%	-0.16%
28	2007	4.84%	6.07%	6.33%	1.23%	1.49%	5.56%	6.48%	0.72%	1.64%	-0.15%
29	2008	4.28%	6.51%	7.21%	2.23%	2.93%	5.64%	7.45%	1.36%	3.17%	-0.24%
30	Average	7.63%	9.22%	9.59%	1.59%	1.96%	8.45%	9.55%	0.82%	1.92%	0.04%

Yield Spreads
Treasury Vs. Corporate & Treasury Vs. Utility
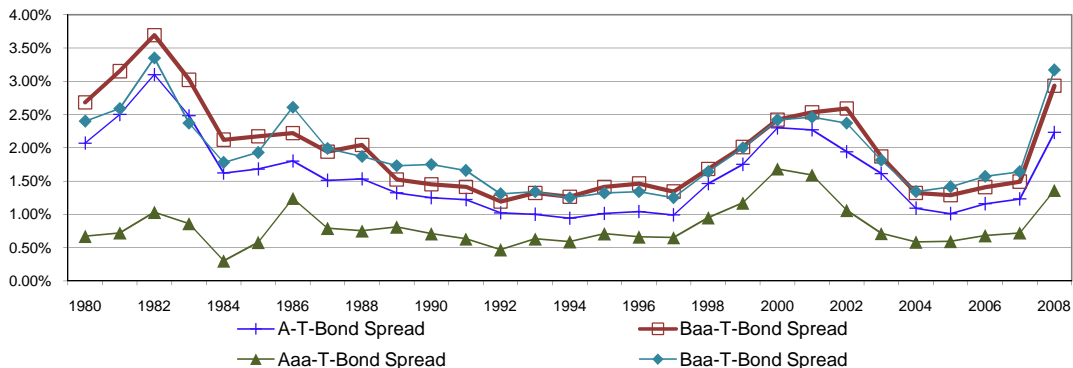
Sources:
[1] Economic Report of the President 2007: Table 73 at 316. The yields from 2002 to 2005
represent the 20-Year Treasury yields obtained from the Federal Reserve Bank.
[2] *Mergent Public Utility Manual* 2003. Moody's Daily News Reports.
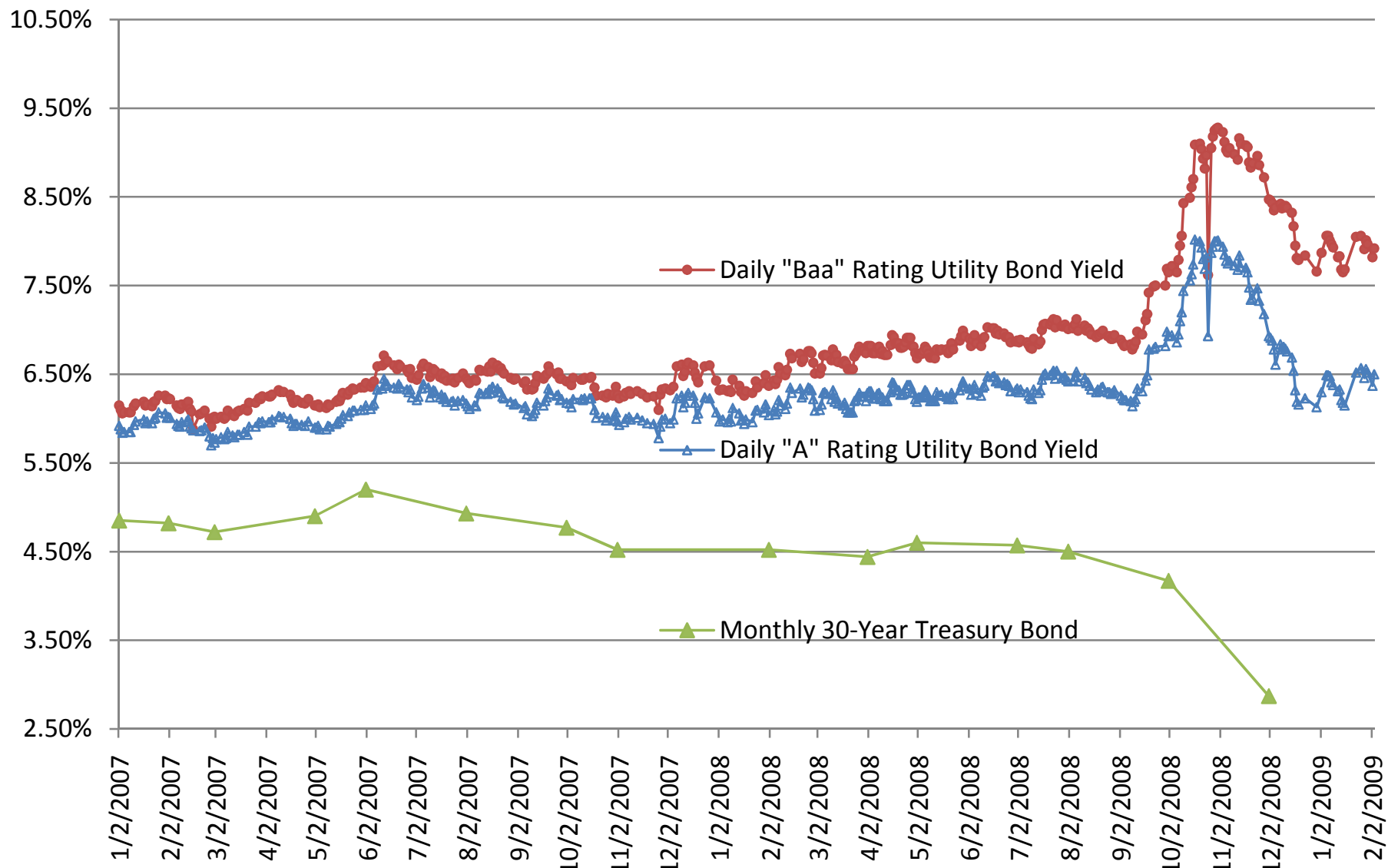
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<u>Utility Bond Yields</u>

<u>Line</u>	<u>Date</u>	"A" Rating Utility <u>Bond Yield</u> (1)	"Baa" Rating Utility <u>Bond Yield</u> (2)
1	01/16/09	6.15%	7.68%
2	01/09/09	6.38%	7.93%
3	01/02/09	6.30%	7.87%
4	12/30/08	6.13%	7.66%
5	12/19/08	6.16%	7.79%
6	12/12/08	6.76%	8.38%
7	12/05/08	6.61%	8.38%
8	11/28/08	7.18%	8.72%
9	11/21/08	7.36%	8.88%
10	11/14/08	7.71%	9.10%
11	11/07/08	7.78%	9.05%
12	10/31/08	8.01%	9.28%
13	10/24/08	7.82%	8.97%
14	**Average**	**6.95%**	**8.44%**

Source:
www.moodys.com, Bond Yields and Key Indicators.

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Trends in Utility Bond Yields

Daily "Baa" Rating Utility Bond Yield

Daily "A" Rating Utility Bond Yield

Monthly 30-Year Treasury Bond

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Beta

Line	Company	Beta (1)
1	ALLETE	0.75
2	Alliant Energy	0.70
3	Ameren Corp.	0.80
4	Amer. Elec. Power	0.75
5	Avista Corp.	0.85
6	Cen. Vermont Pub. Serv.	0.90
7	Cleco Corp.	0.80
8	Consol. Edison	0.65
9	DTE Energy	0.70
10	Edison Int'l	0.85
11	Empire Dist. Elec.	0.75
12	Entergy Corp.	0.75
13	FPL Group	0.80
14	FirstEnergy Corp.	0.85
15	Hawaiian Elec.	0.75
16	IDACORP, Inc.	0.85
17	NiSource Inc.	0.75
18	Northeast Utilities	0.75
19	NSTAR	0.70
20	PG&E Corp.	0.85
21	Pinnacle West Capital	0.75
22	Portland General	0.70
23	Progress Energy	0.60
24	Southern Co.	0.55
25	TECO Energy	0.75
26	UIL Holdings	0.70
27	Vectren Corp.	0.85
28	Westar Energy	0.80
29	Wisconsin Energy	0.65
30	Xcel Energy Inc.	0.75
31	**Average**	**0.76**

Source:
The Value Line Investment Survey for
November 7, November 28, and December 26, 2008.

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CAPM

Line	Description	Historical Premium (1)
1	Risk-Free Rate[1]	4.00%
2	Risk Premium[2]	6.50%
3	Beta[3]	0.76
4	CAPM	8.94%

Line	Description	Prospective Premium (1)
5	Risk-Free Rate[1]	4.00%
6	Risk Premium[1/2]	7.18%
7	Beta[3]	0.76
8	CAPM	9.46%
9	**CAPM Average**	**9.20%**

Sources:

[1] *Blue Chip Financial Forecasts*; January 1, 2009 at 2.

[2] *SBBI*; 2008 at 31 and 120.

[3] *The Value Line Investment Survey* for
November 7, November 28, and December 26, 2008.

Aquila Missouri

Credit Rating Financial Ratios - MPS
(ROE at 10.30%)

| Line | Description | Amount (1) | Old S&P Benchmark[1] | | New S&P Benchmark[2] | Reference |
			"A" Rating (2)	"BBB" Rating (3)	(4)	(5)
1	Rate Base	$ 1,202,225,058				Schedule RAK-1 (MPS)
2	Weighted Common Return	4.99%				Schedule MPG-1, Page 1, Line 2, Col. 4.
3	Income to Common	$ 59,941,260				Line 1 x Line 2.
4	Depreciation & Amortization	$ 60,566,615				Schedule RAK-3 (MPS)
5	Deferred Income Taxes	$ 6,935,213				Schedule RAK-3 (MPS)
6	Funds from Operations (FFO)	$ 127,443,088				Sum of Line 3 through Line 5.
7	Weighted Interest Rate	3.52%				Schedule MPG-1, Page 1, Line 1, Col. 4.
8	Interest Expense	$ 42,364,515				Line 1 x Line 7.
9	FFO Plus Interest	$ 169,807,603				Line 6 + Line 8.
10	FFO Interest Coverage	4.0x	5.2x - 4.2x	**4.2x - 3.0x**	2.0x - 3.5x	Line 9 / Line 8.
11	Total Debt Ratio	52%	40% - 48%	**48% - 58%**	45% - 60%	Schedule MPG-1, Page 1, Line 1, Col. 2.
12	FFO to Total Debt	21%	35% - 28%	**28% - 18%**	10% - 30%	Line 6 / (Line 1 x Line 11).

Sources:

[1] Standard & Poor's, "New Business Profile Scores Assigned to U.S. Utility and Power Companies; Financial Guidelines Revised," June 2, 2004; and "U.S. Integrated Electric Utility Companies, Strongest to Weakest," November 1, 2007.

[2] Standard & Poor's, "U.S. Utilities Ratings Analysis Now Portrayed in The S&P Corporate Ratings Matrix," November 30, 2007; and "U.S. Integrated Electric Utility Companies, Strongest to Weakest," August 5, 2008.

Note:

KCPL has a Business Profile Score of 6, an "Excellent" business profile and an "Aggressive" financial profile.

Aquila Missouri

Credit Rating Financial Ratios - SJLP
(ROE at 10.30%)

Line	Description	Amount (1)	Old S&P Benchmark[1]		New S&P Benchmark[2] (4)	Reference (5)
			"A" Rating (2)	"BBB" Rating (3)		
1	Rate Base	$ 305,034,038				Schedule RAK-1 (L&P)
2	Weighted Common Return	4.99%				Schedule MPG-1, Page 2, Line 2, Col. 4.
3	Income to Common	$ 15,208,570				Line 1 x Line 2.
4	Depreciation & Amortization	$ 15,782,404				Schedule RAK-3 (L&P)
5	Deferred Income Taxes	$ 332,729				Schedule RAK-3 (L&P)
6	Funds from Operations (FFO)	$ 31,323,703				Sum of Line 3 through Line 5.
7	Weighted Interest Rate	3.93%				Schedule MPG-1, Page 2, Line 1, Col. 4.
8	Interest Expense	$ 11,992,205				Line 1 x Line 7.
9	FFO Plus Interest	$ 43,315,908				Line 6 + Line 8.
10	FFO Interest Coverage	3.6x	5.2x - 4.2x	**4.2x - 3.0x**	2.0x - 3.5x	Line 9 / Line 8.
11	Total Debt Ratio	52%	40% - 48%	**48% - 58%**	45% - 60%	Schedule MPG-1, Page 2, Line 1, Col. 2.
12	FFO to Total Debt	20%	35% - 28%	**28% - 18%**	10% - 30%	Line 6 / (Line 1 x Line 11).

Sources:

[1] Standard & Poor's, "New Business Profile Scores Assigned to U.S. Utility and Power Companies; Financial Guidelines Revised," June 2, 2004; and "U.S. Integrated Electric Utility Companies, Strongest to Weakest," November 1, 2007.

[2] Standard & Poor's, "U.S. Utilities Ratings Analysis Now Portrayed in The S&P Corporate Ratings Matrix," November 30, 2007; and "U.S. Integrated Electric Utility Companies, Strongest to Weakest," August 5, 2008.

Note:

KCPL has a Business Profile Score of 6, an "Excellent" business profile and an "Aggressive" financial profile.