Exhibit No.:	501NP
Witness:	Michael Gorman
Type of Exhibit:	Direct Testimony
Issues:	Rate of Return
Sponsoring Parties:	Enbridge Energy, LP Explorer Pipeline Company General Mills Praxair, Inc. Wal-Mart Stores, Inc.
Case No.:	ER-2008-0093

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of The Empire District Electric Company of Joplin, Missouri for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Missouri Service Area of the Company	))))))	**Case No. ER-2008-0093**

Direct Testimony and Schedules of

Michael Gorman

On behalf of

Enbridge Energy, LP
Explorer Pipeline Company
General Mills
Praxair, Inc.
Wal-Mart Stores, Inc.

Industrial Intervenors
Exhibit No. 501
Case No(s). ER-2008-0093
Date 5-12-08 Rptr KF

February 22, 2008

BRUBAKER & ASSOCIATES, INC.
ST. LOUIS, MO 63141-2000

NON-PROPRIETARY

Project 8875

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of The Empire District Electric Company of Joplin, Missouri for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Missouri Service Area of the Company	))))))	**Case No. ER-2008-0093**

STATE OF MISSOURI	)	
	)	**SS**
COUNTY OF ST. LOUIS	)	

Affidavit of Michael Gorman

Michael Gorman, being first duly sworn, on his oath states:

1. My name is Michael Gorman. I am a consultant with Brubaker & Associates, Inc., having its principal place of business at 1215 Fern Ridge Parkway, Suite 208, St. Louis, Missouri 63141-2000. We have been retained by Enbridge Energy, LP; Explorer Pipeline Company; General Mills; Praxair, Inc. and Wal-Mart Stores, Inc. in this proceeding on their behalf.

2. Attached hereto and made a part hereof for all purposes is my direct testimony and exhibits on rate of return issues which were prepared in written form for introduction into evidence in Missouri Public Service Commission Case No. ER-2008-0093.

3. I hereby swear and affirm that the testimony and exhibits are true and correct and that they show the matters and things that they purport to show.

Michael Gorman

Subscribed and sworn to before this 21st day of February, 2008.

TAMMY S. KLOSSNER
Notary Public - Notary Seal
STATE OF MISSOURI
St. Charles County
My Commission Expires: Mar. 14, 2011
Commission # 07024862

Notary Public

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of The Empire District Electric Company of Joplin, Missouri for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Missouri Service Area of the Company	))))))	**Case No. ER-2008-0093**

Direct Testimony of Michael Gorman

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A My name is Michael Gorman and my business address is 1215 Fern Ridge Parkway, Suite 208, St. Louis, MO 63141-2000.

Q WHAT IS YOUR OCCUPATION?

A I am an energy advisor and a consultant in the field of public utility regulation and a managing principal with the firm of Brubaker & Associates, Inc. (BAI).

Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND EXPERIENCE.

A These are set forth in Appendix A.

Introduction and Summary

Q ON WHOSE BEHALF ARE YOU APPEARING IN THIS PROCEEDING?

A I am appearing on behalf of Enbridge Energy, LP; Explorer Pipeline Company; General Mills; Praxair, Inc. and Wal-Mart Stores, Inc. These companies purchase substantial amount of electric power from The Empire District Electric Company

(Empire or Company) and are vitally concerned about the level and structure of rates that will be determined as a result of this proceeding. As reflected in the testimony of Maurice Brubaker, these customers have seen large rate increases in the last several years – over 40% since 2000. It is not surprising, therefore, that more of these large industrial customers begin to show their concern through participation in this proceeding and other Commission dockets.

Q WHAT IS THE SUBJECT OF YOUR TESTIMONY?

A I will recommend a fair return on common equity and overall rate of return for Empire. I will also comment on the need for regulatory amortization expense as permitted under Empire's current Regulatory Plan.

Q PLEASE SUMMARIZE YOUR RATE OF RETURN RECOMMENDATIONS.

A I recommend the Missouri Public Service Commission (MPSC or the Commission) award Empire a return on common equity to be in the range of 9.5% to 10.3% and recommended a return of 10.0% be used to set rates.

My recommended return on equity for Empire is based on a DCF model, Risk Premium (RP) model and Capital Asset Pricing Model (CAPM) analyses. These analyses estimate a fair return on equity based on observable market information for a group of publicly traded electric utility companies that proxy Empire's going-forward investment risk.

I also recommend an adjustment to Empire's proposed capital structure in this proceeding. Empire's proposed capital structure includes a projected common equity issuance of **_____**. However, in December 2007, Empire's public

disclosures indicate that it sold 3 million shares of stock at a price of $23 per share and received net proceeds of $65.8 million. Hence, I adjusted the capital structure to remove the projected equity infusion and substituted the $65.8 million actual equity issuance. This lowered common equity as a percent of total capital from the Company's proposed **___** down to **___**.

Q WOULD YOUR RECOMMENDED RETURN ON EQUITY CHANGE IF THE COMMISSION APPROVES A FUEL ADJUSTMENT MECHANISM FOR EMPIRE IN THIS PROCEEDING?

A Yes, because a fuel adjustment mechanism will produce a meaningful reduction to Empire's operating risk. As such, Empire's investment risk will decrease because of the implementation of the fuel adjustment clause. As set forth below, I am estimating a return on equity that is based on Empire's existing operating and financial risk. If the Commission implements regulatory mechanisms that reduce Empire's operating risk, then my return on equity would compensate Empire for risk included in that rate of return that it no longer is assuming.

As such, it may be necessary to reduce the authorized return on equity if the Commission implements a fuel adjustment mechanism that meaningfully shifts a portion of fuel cost recovery risk from Empire to Empire's ratepayers.

However, I would note that a reduced return on equity may impact the amount of regulatory amortization expense needed to be included in Empire's cost of service in order to maintain the credit metric guidelines consistent with its Regulatory Plan.

Nevertheless, customers would be better off paying regulatory amortization expense, compared to an excessive return on equity, because the regulatory amortization will mitigate future increases to rates. Hence, customers receive the benefit of lower rates later by paying regulatory amortization expense now.

Q IF THE COMMISSION APPROVES A FUEL ADJUSTMENT MECHANISM THAT REQUIRES EMPIRE TO CONTINUE TO ASSUME FUEL COST RECOVERY RISK, WOULD THAT CHANGE ANY OF YOUR FINDINGS?

A No. If Empire under-recovers some fuel cost and its return on equity is lowered by, for example, 0.5%, then its equity return would be reduced from 10% down to 9.5%. At this return, I would note that Empire's earned return on equity would still be within the range (9.5% to 10.3%) I have estimated as fair compensation for Empire's total investment risk. Also, a return on equity of 9.5% based on the credit metric calculations in this proceeding could still produce credit metrics that support Empire's Regulatory Plan credit metrics targets.

As such, a fuel adjustment mechanism that continues to place some cost recovery risk on Empire can be designed without eroding Empire's financial integrity, or ability to earn a fair rate of return. Further, I would note that if Empire was required to take some fuel cost recovery risk, it may be able to put that risk off onto a third-party supplier, or financial counterparty through traditional fuel procurement activities. As such, Empire has the ability to manage fuel cost recovery risk through creditworthy counterparties in a manner that exceeds customers' abilities to manage this volatile cost.

Q WHAT ARE YOUR FINDINGS CONCERNING THE NEED FOR AMORTIZATION EXPENSE AS OUTLINED IN EMPIRE'S REGULATORY PLAN IN SUPPORT OF ITS CAPITAL EXPENDITURE PROGRAM?

A As set forth below, at my recommended return on equity and adjusted capital structure, no regulatory amortization expense is needed in order to support credit metrics derived from Empire's jurisdictional Missouri cost of service up to the target credit metric ratios included in Empire's Regulatory Plan.

However, in reaching this conclusion, I take exception to the calculation of the credit metrics offered by Empire witness Roger W. Sager. As set forth below, Mr. Sager did not fully include an adjustment to Funds From Operations (FFO) associated with imputed amortization expense from off-balance-sheet lease obligations, and off-balance-sheet purchased power agreements as prescribed by Standard & Poor's credit metric ratio calculation definitions.

Further, Mr. Sager also made an error in calculating the FFO to interest coverage ratio in that he included cash interest expense in the numerator, and total interest expense (cash interest plus debt amortization) in the denominator. S&P guidelines require just the opposite so all amortization expense is included in the numerator (with FFO), to fully describe the amount of FFO available to meet cash interest obligations. Conservatively, I will use total interest in both numerator and denominator to match the ratio with jurisdictional cost of service.

These and other issues concerning the credit metrics and the Regulatory Plan are discussed in detail below. The bottom line is, however, that with my recommended return on equity and capital structure, no Regulatory Plan amortization expense is needed to allow Empire to earn the credit metrics on jurisdictional utility operations that are at the Regulatory Plan credit metric targets.

Q DO YOU HAVE ANY GENERAL COMMENTS CONCERNING EMPIRE'S REGULATORY PLAN AND ITS ABILITY TO MITIGATE EMPIRE'S CONSTRUCTION AND FINANCIAL RISK?

A Yes. Empire's Regulatory Plan supplements traditional ratemaking in order to provide Empire fair compensation and supportive cash flows during its major construction period. Under traditional regulation, utilities are allowed to accrue Allowance for Funds Used During Construction (AFUDC) on construction work in progress (CWIP). This AFUDC accrual includes a return on equity to the extent the CWIP balance exceeds short-term debt balances. As a utility accrues AFUDC earnings, it receives an enhancement to its earned return on common equity during construction. However, the earnings related to CWIP are non-cash earnings. As such, a company can have strong earnings during construction, but may have weak cash flows.

The Regulatory Plan supplements traditional ratemaking investor rewards by enhancing weak cash flows during construction. Cash flows are enhanced if regulatory amortization expense is allowed to be recovered from customers.

Hence, the combination of traditional regulation and Empire's Regulatory Plan will benefit and mitigate the construction risk to both equity investors and debt investors by allowing for AFUDC earnings and cash flow enhancement during major construction programs.

Utility Industry Market Perspective

Q PLEASE DESCRIBE THE MARKET'S PERCEPTION OF THE ELECTRIC UTILITY INDUSTRY OVER THE LAST SEVERAL YEARS.

A The Edison Electric Institute (EEI), an electric utility industry trade organization, provided an assessment of the credit rating history of U.S. electric utilities over the

period 2002-2007. EEI's highlights of its credit rating assessment of the electric power industry are stated as follows:

> Highlights
> - Industry credit quality improved for the third consecutive year in 2007 as upgrades outnumbered downgrades by a 3:2 ratio.
> - The industry's average credit rating remained at a solid BBB in 2007 for a fourth consecutive year. The year's 121 total ratings actions, just above last year's 110, were also at a consistent level for a fourth year.
> - Nearly half of the year's downgrades were tied to regulatory uncertainty in Illinois. TXU received significant downgrades based on its debt-financed acquisition by a group of private equity investors.
> - As the year progressed, rising capital expenditures and the accompanying debt were becoming a more frequent concern cited by the ratings agencies.[1]

Further, Standard & Poor's (S&P) also acknowledges the improving credit standing of the electric utility industry in its report. S&P states:

> **Key Credit Trends**
> The U.S. utility industry demonstrated stable credit quality in the fourth quarter of 2006, and should continue to do so in 2007 despite increasing capital spending needs related to reliability enhancements and environmental requirements. A general refocus by the industry in recent years on restoring balance sheet health and selling noncore business operations has enhanced its ability to withstand the pressure that substantial capital spending will bring.
>
> A credit element during this coming growth phase, however, will be fair and equitable treatment by state regulators as utilities seek to recover the capital expenditures they will incur to address declining reserve margins, aging and increasingly fragile infrastructure, and environmental mandates. Standard & Poor's Ratings Services expects that most utilities will seek pre-approval from regulators of any substantial spending program, or at least a broad understanding of the principles that regulators will apply in granting recovery. Of comparable significance to supporting credit quality is regulatory approval for timely recovery of fuel costs, especially in an environment of elevated commodity prices.[2]

[1] "Q4 2007 Credit Ratings," EEI Q4 2007 *Financial Update*.
[2] "Despite Demands For Increased Capital Spending, U.S. Utility Ratings Should Remain Stable," Standard & Poor's *RatingsDirect*, January 12, 2007, at 1.

The electric utility industry and utilities in general are currently in a capital spending cycle that is producing very strong growth in rate base, and in related earnings and dividends. For the reasons set forth below, the industry is in a very strong growth period, which is tracking its capital expenditures for meeting growing demand, environmental compliance and system upgrades and improvements. This indicates that the market is providing capital to the industry for significant capital improvements, and the market is attracted to the safe investment characteristics of regulated utility companies, which generally receive very positive regulatory treatment in terms of cost recovery of prudent and reasonable expenses. This is providing a vehicle for strong growth over at least the next three to five years.

Empire's Credit Rating

Q PLEASE PROVIDE AN OVERVIEW OF EMPIRE'S INVESTMENT RISK.

A Empire has a senior secured investment bond rating of "BBB+", an unsecured investment bond rating of "BBB-" and a business profile score of '6' from S&P. Empire's investment grade bond rating and business profile score support its access to external capital under reasonable terms, conditions, and prices.

Projected Interest Rates and Capital Market Costs

Q SHOULD THE COMMISSION PLACE HEAVY RELIANCE ON PROJECTED INTEREST RATES AND FUTURE CAPITAL MARKET COSTS RELATIVE TO TODAY'S OBSERVABLE CAPITAL MARKET COSTS?

A No. While projected interest rates should be given some consideration, the determination of Empire's cost of capital today should be based primarily on observable and verifiable actual current market costs. This is appropriate because

projected changes to interest rates are highly uncertain and their accuracy is at best problematic. Indeed, this is clearly evident by a review of projected changes to interest rates made over the last five years, in comparison to how accurate these projections turned out to be. This analysis clearly illustrates that observable interest rates today are as accurate as are economists' consensus projections of future interest rates.

An analysis supporting this conclusion is illustrated on my Schedule MPG-1. On this Schedule, under Columns 1 and 2, I show the actual market yield at the time a projection was made for Treasury bond yields two years in the future. In Column 1, I show the actual Treasury yield and, in Column 2, I show the projected yield two years out.

As shown in Columns 1 and 2, over the last five years, Treasury yields were projected to increase relative to the actual Treasury yields at the time of the projection.

In Column 4, I show what the Treasury yield actually turned out to be two years after the forecast. Under Column 5, I show the actual yield change at the time of the projections relative to the projected yield change.

As shown on this Schedule, over the last five years, economists have been typically pessimistic in their view of interest rates and have consistently projected increases to interest rates. However, as demonstrated under Column 5, **those yield projections have turned out to be overstated in virtually every case**. Indeed, actual Treasury yields have decreased or remained flat over the last five years, rather than increase as the economists' projections indicated.

This review of the experience with projected interest rates clearly illustrates that interest rate projection accuracy is highly problematic. Indeed, current

observable interest rates are just as likely a reasonable projection of future interest rates as are economists' projections. Accordingly, while I will use projected interest rates to provide some sense of the market's expectations of future capital market costs in my models, I will not use them exclusively. Rather, my analyses will be based on the combination of current observable interest rates and projected interest rates. Thus, my analyses will capture a return on equity range reflecting a broad range of potential actual capital market costs during the period rates determined in this proceeding will be in effect.

Q ARE THERE OTHER REASONS NOT TO RELY EXCLUSIVELY ON UNCERTAIN PROJECTED INCREASES TO INTEREST RATES?

A Yes. The ratemaking process itself provides a utility with protection against the increasing cost of capital. Indeed, if Empire's rate of return is set based on today's market cost of capital, and capital costs increase in the future, then Empire is free to file for a rate change to reflect higher capital costs in the future when or if costs change. Hence, the regulatory mechanism itself provides utilities a hedge against increasing capital costs.

Depriving ratepayers of today's low cost capital market environment is prejudicial, especially given the demonstrated inaccuracy of interest rate projections, and unreasonably tilts the regulatory balance in favor of investors.

Empire's Proposed Capital Structure

Q WHAT CAPITAL STRUCTURE IS THE COMPANY REQUESTING TO USE TO DEVELOP ITS OVERALL RATE OF RETURN FOR ELECTRIC OPERATIONS IN THIS PROCEEDING?

A Empire's proposed capital structure, as supported by Ms. Jayna R. Long, is shown below in Table 1.

TABLE 1

Empire's Proposed Capital Structure

Description	Percent of Total Capital
Debt	** __%**
Preferred Stock	** __%**
Common Equity	** __%**
Total Regulatory Capital Structure	100.00%

Source: Vander Weide Highly Confidential Direct at 41.

Q ARE YOU PROPOSING ANY ADJUSTMENTS TO MS. LONG'S RECOMMENDED CAPITAL STRUCTURE TO SET EMPIRE'S OVERALL RATE OF RETURN IN THIS PROCEEDING?

A Yes. Ms. Long's capital structure includes a projected **_____** equity issuance adjustment to the June 30, 2007 capital structure. However, in a press release to investors dated January 31, 2008, the Company indicated that in December 2007, it sold 3 million shares of stock at $23 a share and received net proceeds of $65.8 million. Hence, I removed Ms. Long's projected equity issuance amount and replaced it with the actual net proceeds from this common stock sale conducted in

December of 2007. Short-term debt (STD) is not included because the balance of STD is smaller than Empire's Construction Work in Progress (CWIP) balance. This indicates STD is not supporting Empire's rate base. As a result, the adjustment to Empire's capital structure and the one I propose to set rates is shown below in Table 2.

TABLE 2

Gorman Proposed Capital Structure

Description	Percent of Total Capital
Debt	**__%**
Preferred Stock	**__%**
Common Equity	**__%**
Total Regulatory Capital Structure	100.00%

Q WHAT OVERALL RATE OF RETURN DO YOU RECOMMEND FOR EMPIRE IN THIS PROCEEDING?

A As shown on Highly Confidential Schedule MPG-2HC, I recommend the Commission set Empire's overall rate of return at 8.52%.

Q HOW DOES YOUR PROPOSED CAPITAL STRUCTURE COMPARE TO EMPIRE'S ACTUAL CAPITAL STRUCTURE OVER THE LAST FIVE YEARS?

A Empire's actual capital structure as reported to the Federal Energy Regulatory Commission over the last five years is shown on my Schedule MPG-3. As shown on that schedule, Empire's common equity ratio has been steadily increasing from 44.68% in 2002 up to 53.54% in 2006. Its test year capital structure reflects both

debt and equity issuances in 2007. The common equity ratio in 2007 is generally consistent with Empire's actual common equity ratio over the last five years.

Q WILL YOUR PROPOSED CAPITAL STRUCTURE SUPPORT EMPIRE'S INVESTMENT GRADE BOND RATING?

A Yes. My adjustment to Empire's capital structure will support credit metrics that support Empire's investment grade bond rating. This is discussed in more detail in the portion of my testimony where I review Empire's Regulatory Plan. Hence, I believe my proposed capital structure reasonably reflects Empire's actual capital structure during the test year, is consistent with Empire's actual capitalization mix over the last few years although reflects an increasing common equity ratio, and will support Empire's current credit strength and financial integrity, and is consistent with S&P credit metrics for a "BBB"-rated utility company.

Return on Common Equity

Q PLEASE DESCRIBE THE FRAMEWORK FOR DETERMINING A REGULATED COMPANY'S COST OF COMMON EQUITY.

A In general, determining a fair cost of common equity for a regulated utility has been framed by two decisions of the U.S. Supreme Court, in Bluefield Water Works & Improvement Co. v. Public Serv. Comm'n of West Virginia, 26 U.S. 679 (1923) and Federal Power Comm'n v. Hope Natural Gas Co., 320 U.S. 591 (1944).

These decisions identify the general standards to be considered in establishing the cost of common equity for a public utility. Those general standards are that the authorized return should: (1) be sufficient to maintain financial integrity;

(2) attract capital under reasonable terms; and (3) be commensurate with returns investors could earn by investing in other enterprises of comparable risk.

Q PLEASE DESCRIBE WHAT IS MEANT BY "UTILITY'S COST OF COMMON EQUITY."

A The utility's cost of common equity is the return investors expect, or require, in order to make an investment. Investors expect to achieve their return requirement from receiving dividends and stock price appreciation.

Q PLEASE DESCRIBE THE METHODS YOU HAVE USED TO ESTIMATE THE COST OF COMMON EQUITY FOR EMPIRE.

A I have used several models based on financial theory to estimate Empire's cost of common equity. These models are: (1) a constant growth Discounted Cash Flow (DCF) model, (2) a two-stage growth DCF model, (3) a Risk Premium (RP) model, and (4) a Capital Asset Pricing Model (CAPM). I have applied these models to a group of publicly traded utilities that I have determined represent the investment risk of Empire.

Q PLEASE DESCRIBE THE PROXY GROUP YOU USED TO ESTIMATE EMPIRE'S RETURN ON EQUITY IN THIS PROCEEDING.

A I independently selected regulated utility companies that I find to be risk comparable to Empire. I started with all the electric utility companies followed by the *Value Line* Investment Survey.[3] I then removed companies that do not meet the following criteria:

[3] Empire is followed by *Value Line* as an electric utility.

1. S&P's senior secured bond rating in the "BBB" and "lower A-range" categories.

2. Moody's senior secured bond rating in the "Baa" and "lower A-range" categories.

3. Consensus analyst growth rates estimates available from Zacks, Reuters and SNL Financial.

4. Had not suspended dividends over the last two years.

5. Common equity ratios to total capital between 40% and 60%.

6. No significant merger and acquisition activities.

7. Not exposed to corporate or market restructuring.

As noted above, my selection criteria resulted in a proxy group that reasonably reflects Empire's total investment risk. Hence, my proxy group represents an average operating business risk for integrated electric utility companies.

Q HOW DOES YOUR PROXY GROUP'S INVESTMENT RISK COMPARE TO EMPIRE'S INVESTMENT RISK?

A My proposed proxy group is shown on my Highly Confidential Schedule MPG-4HC. This proxy group has an average bond rating from S&P and Moody's of "BBB+" and "Baa1," respectively. This proxy group's average bond ratings are identical to Empire's senior secured credit ratings from S&P and Moody's of "BBB+" and "Baa1," respectively. The identical credit rating indicates that this proxy group is comparable in investment risk to Empire.

My proxy group has an average common equity ratio of 50% (excluding short-term debt) from *Value Line* and 46% (including short-term debt) from AUS. In

comparison, my proposed common equity ratio for Empire is **___**, excluding short-term debt, and **___**, with short-term debt. As such, this proxy group has comparable financial risk to Empire. Based on this assessment, I believe my proxy group has reasonably comparable investment risk as Empire.

Discounted Cash Flow Model

Q PLEASE DESCRIBE THE DCF MODEL.

A The DCF model posits that a stock price is valued by summing the present value of expected future cash flows discounted at the investor's required rate of return (ROR) or cost of capital. This model is expressed mathematically as follows:

$$Po = \frac{D1}{(1+K)^1} + \frac{D2}{(1+K)^2} \ldots . \frac{D\infty}{(1+K)\infty} \quad \text{where} \qquad \text{(Equation 1)}$$

Po= Current stock price
D = Dividends in periods 1 - ∞
K = Investor's required return

This model can be rearranged in order to estimate the discount rate or investor required return, "K." If it is reasonable to assume that earnings and dividends will grow at a constant rate, then Equation 1 can be rearranged as follows:

$$K = D1/Po + G \qquad \text{(Equation 2)}$$

K = Investor's required return
D1 = Dividend in first year
Po = Current stock price
G = Expected constant dividend growth rate

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

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

A As shown under Equation 2 above, the DCF model requires a current stock price, expected dividend, and expected growth rate in dividends.

Q WHAT STOCK PRICE AND DIVIDEND HAVE YOU RELIED ON IN YOUR CONSTANT GROWTH DCF MODEL?

A I relied on the average of the weekly high and low stock prices over a 13-week period ended February 8, 2008. An average stock price is less susceptible to market price variations than is a spot price. Therefore, an average stock price is less susceptible to aberrant market price movements, which may not be reflective of the stock's long-term value.

A 13-week average stock price is short enough to contain data that reasonably reflects current market expectations, but is not too short a period to be susceptible to market price variations that may not be reflective of the security's long-term value. Therefore, in my judgment, a 13-week average stock price is a reasonable balance between the need to reflect current market expectations and to capture sufficient data to smooth out aberrant market movements.

I used the most recently paid quarterly dividend, as reported in the *Value Line* Investment Survey. This dividend was annualized (multiplied by 4) and adjusted for next year's growth to produce the D1 factor for use in Equation 2 above.

Q WHAT DIVIDEND GROWTH RATES HAVE YOU USED IN YOUR CONSTANT GROWTH DCF MODEL?

A There are several methods one can use in order to estimate the expected growth in dividends. However, for purposes of determining the market required return on common equity, one must attempt to estimate investors' consensus about what the dividend or earnings growth rate will be, and not what an individual investor or analyst may use to form individual investment decisions.

Security analysts' growth estimates have been shown to be more accurate predictors of future returns than growth rates derived from historical data[4] because they are more reliable estimates, and assuming the market generally makes rational investment decisions, analysts' growth projections are the most likely growth estimates considered by the market that influence observable stock prices.

For my constant growth DCF analysis, I have relied on a consensus, or mean, of professional security analysts' earnings growth estimates as a proxy for the investor consensus dividend growth rate expectations. I used the average of three sources of ratepayer growth rate estimates: Zacks, Reuters, and SNL Financial. All consensus analyst projections used were available on February 13, 2008, as reported on-line.

Each consensus growth rate projection is based on a survey of security analysts. The consensus estimate is a simple arithmetic average or mean of surveyed analysts' earnings growth forecasts. A simple average of the growth forecast gives equal weight to all surveyed analysts' projections. It is problematic as to whether any particular analyst's forecast is most representative of general market expectations. Therefore, a simple average, or arithmetic mean, analyst forecast is a good proxy for market consensus expectations. The growth rates I used in my DCF analysis are shown on Schedule MPG-5.

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

A As shown on my Schedule MPG-6, the constant growth DCF return for my comparable group is 11.54%.

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

Q DO YOU HAVE ANY COMMENTS CONCERNING THE RESULTS OF YOUR CONSTANT GROWTH DCF ANALYSIS?

A Yes. The average three to five-year growth rate for my comparable group is 7.40%. This growth rate is too high to be a rational estimate of long-term sustainable growth. This inflated growth rate results in an inflated constant growth DCF result. Therefore, I will not place significant weight on this result in forming my recommended return on equity.

Q WHY DO YOU BELIEVE THE PROXY GROUP'S THREE TO FIVE-YEAR GROWTH RATE IS NOT A RATIONAL ESTIMATE OF LONG-TERM SUSTAINABLE GROWTH?

A The proxy group's three to five-year growth rate exceeds the growth rate of the overall U.S. economy. Based on consensus economic projections, as published by Blue Chip Economic Indicators, the five and ten-year GDP growth is estimated at a nominal rate of 5.0%.[5] A company cannot grow, indefinitely, at a faster rate than the market in which it sells its products. The U.S. economy, or GDP, growth projection represents a ceiling, or high end, sustainable growth rate for a utility over an indefinite period of time.

Utilities cannot sustain a growth rate that exceeds the growth rate of the overall economy, because utilities' earnings/dividend growth is created by increased utility investment, which in turn is driven by service area economic growth. In other words, utilities invest in plant to meet sales demand growth, and sales growth in turn is tied to economic growth in their service areas. Hence, nominal GDP growth is a proxy for sales growth, utility rate base growth, and earnings growth. Therefore, GDP

[5] Blue Chip Economic Indicators, October 10, 2007 at 15.

growth is the highest sustainable long-term growth rate of a utility.

Moreover, the proxy group's projected growth rate of 7.40% is considerably higher than the historical growth rates the proxy group has achieved over the last five to ten years, and that is projected over the next three to five years. As shown on Schedule MPG-7, the historical growth of my proxy group's dividend is substantially lower than the nominal GDP growth, and actually less than the projected inflation growth.

Further, the current and projected payout ratios of my group are 63% and 60%, respectively. This indicates the utilities are retaining a large percentage of their earnings, which will help support future growth through earnings and dividends. Using an internal growth rate model, with a payout ratio of 60%, in order to achieve a long-term sustainable growth rate of 7.4%, the proxy group would have to earn a return on book value of 18.5%.[6]

Finally, both the current and projected dividend-to-book ratios of my comparable utility group are 6.2%. This indicates that the dividend is affordable in today's low-cost capital market environment, and utilities could support that dividend at an authorized return on equity well under 10% and still retain adequate earnings to fund future growth.

Q IS THERE RESEARCH THAT SUPPORTS YOUR CONTENTION THAT OVER THE LONG TERM, A COMPANY'S EARNINGS AND DIVIDENDS CANNOT GROW AT A RATE GREATER THAN THE GROWTH OF THE U.S. GDP?

A Yes. This concept is supported both in published analyst literature and in academic work. Specifically, in a textbook entitled "Fundamentals of Financial Management,"

[6] Internal growth rate model is based on G = ROE x earnings retention. Hence, ROE = G ÷ earnings retention, or 7.4% ÷ 40% = 18.5%.

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

> The constant growth model is most appropriate for mature companies with a stable history of growth and stable future expectations. Expected growth rates vary somewhat among companies, but dividends for mature firms are often expected to grow in the future at about the same rate as nominal gross domestic product (real GDP plus inflation).[7]

Also, Ibbotson Associates' "Stocks, Bonds, Bills and Inflation" Valuation Edition tracked dividends of the stock market in comparison to GDP growth over the period 1926 through the end of 2006. Based on that study, the authors found that earnings and dividends have historically grown in tandem with the overall economy.[8]

Q WHY DO YOU BELIEVE GROWTH RATES FOR ELECTRIC UTILITY COMPANIES ARE PROJECTED TO BE ABNORMALLY HIGH OVER THE NEXT THREE TO FIVE YEARS?

A Electric utility companies are in the midst of major construction programs, which are significantly increasing their outstanding capital and net plant investment. In the fourth quarter 2007, EEI published a Stock Performance assessment for electric utility stocks. EEI stated the following concerning rate base growth:

> **Accelerating Regulated Rate Base Growth**
>
> U.S. electricity demand is growing slowly but steadily and reserve margins are shrinking in many power markets nationwide. The utility industry is in the early stages of a sizeable long-term capital investment cycle that includes rising spending on emissions control equipment, transmission and distribution upgrades and, over the longer term, a new round of baseload generation. Much of this will likely be built in regulated rate base.
>
> EEI's spring 2007 study of industry capital spending based on 10K data and discussions with companies indicated that the industry is projecting $73.1 billion of capital expenditures in 2007 – a 21.1% rise from the $60.3 billion spent in 2006 and 51.1% above the $48.4 billion

[7] At page 298, emphasis added.
[8] Morningstar "Stocks, Bonds, Bills and Inflation," 2007 Yearbook Valuation Edition at 92.

> in 2005. Based on current projections, industry capex should reach at least $75 billion in 2008 and $75.5 billion in 2009. And Wall Street analysts forecast strong investment by the industry beyond the end of the decade. The prospect of carbon regulation adds to the potential longevity of the current build cycle, should carbon capture and sequestration become the most economically viable way of complying with likely future carbon limits. (Emphasis added).

EEI's assessment indicates that annual capital spending will increase through 2009. After that date, the amount of capital expenditures by utilities may stay at a relatively constant rate, albeit one that is significantly higher than it had been in prior years. This elevated capital spending level may continue over a relatively long period of time. This indicates that rate base growth will drive abnormal earnings growth over the next three to five years. Afterwards, the relatively high level of capital expenditures and related increase in rate base and earnings will slow to a lower sustainable level.

Q SINCE YOU HAVE CONCLUDED THAT THE GROWTH RATE USED IN YOUR CONSTANT GROWTH DCF MODEL IS NOT A REASONABLE ESTIMATE OF LONG-TERM SUSTAINABLE GROWTH, DO YOU BELIEVE THAT THE RESULTS OF YOUR CONSTANT GROWTH DCF MODEL FOR YOUR PROXY GROUP IS REASONABLE?

A No, the results of my constant growth DCF model are unreasonably high because it reflects a growth rate that is not sustainable over an indefinite period of time, as required by this DCF model. However, the growth rate is based on consensus analysts' growth rate projections, so it is a reasonable short-term reflection of rational investment expectations, but a poor reflection of rational long-term expectations. The constant growth DCF model requires a rational long-term expectation. The limitation on the constant growth DCF model is that it cannot reflect a rational expectation that

a period of abnormally high/low short-term growth can be followed by a change in growth to a rate that is more reflective of long-term sustainable growth. A two-stage growth DCF model can capture this expectation. Hence, I will perform a two-stage DCF analysis to reflect this outlook of changing growth expectations.

Two-Stage DCF Model

Q PLEASE DESCRIBE YOUR TWO-STAGE DCF MODEL.

A The two-stage DCF growth model reflects the possibility of non-constant growth to the company over time. The two-stage model reflects two growth periods: (1) a short-term growth period, which consists of the first five years; and (2) a long-term growth period, which consists of each year starting in year six through perpetuity. For the short-term growth period, I relied on the consensus analysts' growth projections described above in relationship to my constant growth DCF model. For the long-term growth period, I assumed each company's growth would increase toward the maximum sustainable growth rate for a utility company as proxied by the consensus analysts' projected growth for the U.S. GDP.

Q WHAT STOCK PRICE AND DIVIDEND DID YOU USE IN YOUR MULTI-STAGE DCF ANALYSIS?

A I relied on the same 13-week stock price, the most recent quarterly dividend payment, and consensus analysts' growth rate projections discussed above in my constant growth DCF model. For the long-term sustainable growth rate starting in year six, I used the consensus economists' five to ten-year projected nominal GDP growth rate of 5.0%.

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

A As shown on my Schedule MPG-8, the DCF return on equity for my proxy group is 9.46%.

Risk Premium Model

Q PLEASE DESCRIBE YOUR BOND YIELD PLUS RISK PREMIUM MODEL.

A This model is based on the principle that investors require a higher ROR to assume greater risk. Common equity investments have greater risk than bonds because bonds have more security of payment in bankruptcy proceedings than common equity and the coupon payments on bonds represent contractual obligations. In contrast, companies are not required to pay dividends on common equity, or to guarantee returns on common equity investments. Therefore, common equity securities are considered to be more risky than bond securities.

This risk premium model is based on two estimates of an equity risk premium. First, I estimated the difference between the required return on utility common equity investments and Treasury bonds. The difference between the required return on common equity and the bond yield is the risk premium. I estimated the risk premium on an annual basis for each year over the period 1986 through June 2007. The common equity required returns were based on regulatory commission-authorized returns for electric utility companies. Authorized returns are typically based on expert witnesses' estimates of the contemporary investor required return.

The second equity risk premium method is based on the difference between regulatory commission authorized returns on common equity and contemporary A-rated utility bond yields. This time period was selected because over the period 1986 through June 2007, public utility bond yields have consistently traded at a

premium to book value. This is illustrated on my Schedule MPG-9, where the market to book ratio since 1986 for the electric utility industry was consistently above 1.0. Therefore, over this time period, regulatory authorized returns were sufficient to support market prices that at least exceeded book value. This is an indication that regulatory authorized returns on common equity supported a utility's ability to issue additional common stock, without diluting existing shares. This is an indication that utilities were able to access equity markets without a detrimental impact on current shareholders.

Based on this analysis, as shown on Schedule MPG-10, the average indicated equity risk premium of authorized electric utility common equity returns over U.S. Treasury bond yields has been 5.04%. Of the 22 observations, 16 indicated risk premiums fall in the range of 4.4% to 5.9%. Since the risk premium can vary depending upon market conditions and changing investor risk perceptions, I believe using an estimated range of risk premiums provides the best method to measure the current return on common equity using this methodology.

As shown on Schedule MPG-11, the average indicated authorized electric utility common equity returns over contemporary Moody's utility bond yields was 3.67% over the period 1986 through June 2007. The equity risk premium estimates based on this analysis primarily fall in the range of 3.0% to 4.4% over this time period.

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

A The equity risk premium should reflect the relative market perception of risk in the utility industry today. I have gauged investor perceptions in utility risk today on Schedule MPG-12. On that schedule, I show the yield spread between utility bonds

and Treasury bonds over the last 27 years. As shown on this schedule, the 2007 utility bond yield spreads over treasury bonds for "A" rated and "Baa" rated utility bonds are 1.24% and 1.50%, respectively. These utility bond yield spreads over Treasury bond yields are among the lowest yield spreads in the last 27 years, and are below the 27-year average "A" and "Baa" yield spreads of 1.57% and 1.93%, respectively. Hence, this comparison of utility bond yield spreads indicates the market perception of utility risk to be below the average industry risk over this historical time period.

Recognizing a robust nature and the current market's low-risk valuation of utility investments, I believe it is appropriate to use an average market equity risk premium to estimate the current market-required return on equity.

Q HOW DID YOU ESTIMATE EMPIRE'S COST OF COMMON EQUITY WITH THIS MODEL?

A I added a projected long-term Treasury bond yield to my estimated equity risk premium over Treasury yields. Blue Chip Financial Forecasts projects the 30-year Treasury bond yields to be 4.6%, and a 10-year Treasury bond to be 4.1% (Blue Chip Financial Forecast, February 1, 2008 at 2). Using the projected 30-year bond yield of 4.6%, and a Treasury bond risk premium of 4.4% to 5.9%, produces an estimated common equity return in the range of 9.0% to 10.5%, with a midpoint estimate at 9.75%.

I next added my equity risk premium over utility bond yields to a current 13-week average yield on "Baa" rated utility bonds for the period ending February 8, 2008 of 6.42%. This current "Baa" utility bond yield is developed on Schedule MPG-13. Adding the utility equity risk premium of 3.0% to 4.4% to a "Baa" rated bond

yield of 6.42%, produces a cost of equity in the range of 9.42% to 10.82%, with a midpoint of 10.12%.

My risk premium analyses produce a return estimate in the range of 9.75% to 10.12%, with a midpoint estimate of 9.94%.

Capital Asset Pricing Model

Q PLEASE DESCRIBE THE CAPM.

A The CAPM method of analysis is based upon the theory that the market required rate of return (ROR) for a security is equal to the risk-free ROR, plus a risk premium associated with the specific security. This relationship between risk and return can be expressed mathematically as follows:

Ri = Rf + Bi x (Rm - Rf) where:

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

The stock specific risk term in the above equation is beta. Beta represents the investment risk that cannot be diversified away when the security is held in a diversified portfolio. When stocks are held in a diversified portfolio, firm-specific risks can be eliminated by balancing the portfolio with securities that react in the opposite direction to firm-specific risk factors (e.g., business cycle, competition, product mix and production limitations).

The risks that cannot be eliminated when held in a diversified portfolio are nondiversifiable risks. Nondiversifiable risks are related to the market in general and are referred to as systematic risks. Risks that can be eliminated by diversification are regarded as nonsystematic risks. In a broad sense, systematic risks are market risks,

and nonsystematic risks are business risks. The CAPM theory suggests that the market will not compensate investors for assuming risks that can be diversified away. Therefore, the only risk that investors will be compensated for are systematic or nondiversifiable risks. The beta is a measure of the systematic or nondiversifiable risks.

Q PLEASE DESCRIBE THE INPUTS TO YOUR CAPM.

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

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

A The Blue Chip Financial Forecasts' projected 30-year Treasury bond yield is 4.6%. The current 30-year bond yield is 4.3% (Blue Chip Financial Forecast, February 1, 2008 at 2). I used the Blue Chip Financial Forecasts' projected 30-year Treasury bond yield of 4.6% for my CAPM.

Q WHY DID YOU USE LONG-TERM TREASURY BOND YIELDS AS AN ESTIMATE OF THE RISK-FREE RATE?

A Treasury securities are backed by the full faith and credit of the United States government. Therefore, long-term Treasury bonds are considered to have negligible credit risk. Also, long-term Treasury bonds have an investment horizon similar to that of common stock. As a result, investor-anticipated long-run inflation expectations are reflected in both common stock required returns and long-term bond yields. Therefore, the nominal risk-free rate (or expected inflation rate and real risk-free rate)

included in a long-term bond yield is a reasonable estimate of the nominal risk-free rate included in common stock returns.

Treasury bond yields, however, do include risk premiums related to unanticipated future inflation and interest rates. Therefore, a Treasury bond yield is not a risk-free rate. Risk premiums related to unanticipated inflation and interest rates are systematic or market risks. Consequently, for companies with betas less than 1.0, using the Treasury bond yield as a proxy for the risk-free rate in the CAPM analysis can produce an overstated estimate of the CAPM return.

Q WHAT BETA DID YOU USE IN YOUR ANALYSIS?

A My proxy group current average and median *Value Line* beta estimates are 0.88 and 0.85, respectively, as shown on my Schedule MPG-14. However, the five-year average and median *Value Line* betas are 0.83 and 0.80, respectively. Based on this data, I will use a beta of 0.85 for my CAPM analysis, which is very conservative, high in comparison to historical estimates.

Q DO YOU RECOMMEND A CAREFUL CONSIDERATION OF A UTILITY BETA FOR USE IN A CAPM STUDY?

A Yes. Utility betas have been increasing over the last five years, as shown on Schedule MPG-14, largely because electric utility stocks have outperformed the overall market. While this increasing beta gives the impression of increasing risk, that interpretation is incorrect.

Indeed, electric utility risk factors have been decreasing as these companies revert to a back-to-basics investment strategy that lowers their operating risks, and they have been divesting non-regulated businesses to reduce debt and strengthen

balance sheets, which is lowering risk. *Value Line* notes this in a recent review of the electric utility industry. *Value Line* states as follows:

> **Better Finances**
> This decade, utilities have distanced themselves from risky unregulated business forays, including commodities trading, foreign energy operations, water services and aircraft leasing. Currently, *Dominion Resources* plans to sell its oil and gas production business, *Duke* is spinning its mid-stream gas operations to shareholders, *Northeast Utilities* is divesting its merchant power generation business, and *Progress Energy* is shedding power plant and natural gas assets. Such actions have improved earnings performance and strengthened capital ratios. Companies are targeting a nearly equal weighting of debt and equity on their balance sheets, a goal that should be met by 2009-2011.
>
> Revenue-backed and tax-exempt bonds will provide economical funding for planned capital improvements. This will further support overall finances. (*The Value Line Investment Survey*, Electric Utility (East) Industry, December 1, 2006, p. 157).

Further, *Value Line* notes an increase in the common equity ratio and fixed charge coverage ratio over the last three to five years. These *Value Line* parameters indicate lower financial risk and stronger earnings and cash flow coverages of financial obligations. This reduces utilities' risk and limits the variability to market factors that can inhibit the utilities' ability to meet investors' earnings and cash flow expectations.

These risk reductions have resulted in robust stock return performance for electric utility stocks, as shown on my Schedule MPG-15. As illustrated on this schedule, electric utility stocks have outperformed the market over the last five years. This utility stock performance has contributed to an increase in betas and given the impression that electric utility stock variability is comparable to the overall market, but other risk factors clearly show that that is a false indication.

Reliance on the group median beta, which is a beta that is stronger than the beta has been over the last five years, is more reflective of the majority of the individual company betas included in my proxy group.

Q HOW DID YOU DERIVE YOUR MARKET PREMIUM ESTIMATE?

A I derived two market premium estimates, a forward-looking estimate and one based on a long-term historical average.

The forward-looking estimate was derived by estimating the expected return on the market (S&P 500) and subtracting the risk-free rate from this estimate. I estimated the expected return on the S&P 500 by adding an expected inflation rate to the long-term historical arithmetic average real return on the market. The real return on the market represents the achieved return above the rate of inflation.

The Ibbotson Associates' Stocks, Bonds, Bills and Inflation 2007 Year Book publication estimates the historical arithmetic average real market return over the period 1926-2006 as 9.1%. A current consensus analyst inflation projection, as measured by the Consumer Price Index, is 2.3% (Blue Chip Financial Forecasts, February 1, 2008 at 2). Using these estimates, the expected market return is 11.6%.[9] The market premium then is the difference between the 11.6% expected market return, and my 4.6% risk-free rate estimate, or 7.0%.

The historical estimate of the market risk premium was also estimated by Ibbotson Associates in the Stock, Bonds, Bills and Inflation, 2007 Year Book. Over the period 1926 through 2006, Ibbotson's study estimated that the arithmetic average of the achieved total return on the S&P 500 was 12.3%, and the total return on long-

[9] { [(1 + 0.091) * (1 + 0.023)] – 1] } * 100.

term Treasury bonds was 5.8%. The indicated equity risk premium is 6.5% (12.3% - 5.8% = 6.5%).

Q WHAT ARE THE RESULTS OF YOUR CAPM ANALYSIS?

A As shown on Schedule MPG-16, based on my historical risk premium of 6.5% and prospective market risk premium of 7.0%, a beta of 0.85 and a risk-free rate of 4.6% produces a CAPM return of 10.34%.

Return on Equity Summary

Q BASED ON THE RESULTS OF YOUR RATE OF RETURN ON COMMON EQUITY ANALYSES DESCRIBED ABOVE, WHAT RETURN ON COMMON EQUITY DO YOU RECOMMEND FOR EMPIRE?

A Based on my analyses, I estimate Empire's current market cost of equity to be 10.0%.

TABLE 2

Return on Common Equity Summary

Description	Gorman's Proxy Group
Two-Stage DCF	9.46%
Risk Premium	9.94%
CAPM	10.34%

My recommended return on equity of 10.0% is at approximately the midpoint of my estimated return on equity range for Empire of 9.5% to 10.3%. The high end of my estimated range is based on my CAPM. The low end of my estimated range is

based on my two-stage DCF analyses. My recommended return is near the risk premium return estimate and near the midpoint (9.9%) of my estimated range.

Regulatory Plan Credit Metric Ratios

Q PLEASE COMMENT ON EMPIRE WITNESS ROBERT SAGER'S DETERMINATION OF THE REGULATORY PLAN'S AMORTIZATION EXPENSE.

A Based on the Company's proposed rate of return, Mr. Sager concludes Empire is not requesting additional amortization because the credit metric calculations he offers on his Schedule RWS-1 results in credit metrics that meet the Regulatory Plan's target financial ratios.

Q DO YOU HAVE ANY COMMENTS CONCERNING MR. SAGER'S DEVELOPMENT OF THE CREDIT METRIC CALCULATIONS ON HIS SCHEDULE RWS-1?

A Yes. Mr. Sager has understated the amount of Funds From Operations (FFO) available to support Empire's debt interest and debt balances in these credit metric calculations. For example, Mr. Sager recognized an imputation of amortization expense associated with capital leases. This imputed amortization will increase FFO. However, in calculating the adjusted FFO to interest coverage ratio, Mr. Sager did not include this operating lease depreciation adjustment to FFO but he does show it on line 37 of his Schedule RWS-1. This had the effect of understating the FFO interest coverage ratio on line 47. Further, Mr. Sager did not include an imputed amortization expense associated with purchased power off-balance-sheet debt obligations.

In a report published March 30, 2007, "Imputed Debt Calculation for U.S. Utilities' Power Purchase Agreements," S&P stated as follows:

> **How is the depreciation expense related to PPAs calculated?**
> We noted in our November article that we now add an implied depreciation expense to funds from operations (FFO) to align the analytical treatment of PPAs with the concept of purchased power as a substitute for self-build. We observed that we calculate imputed depreciation expense in conformity with the methodology used for calculating a depreciation adjustment as an offset to debt equivalents created by leases.
>
> The imputed depreciation expense is calculated for any given year by taking the scheduled fixed capacity payment commitment for that year and subtracting from it the implied interest expense calculated from the NPV of the stream of capacity payments associated with that year. The calculated depreciation proxy is added to FFO in the numerator as part of the calculation of both the FFO-to-interest and FFO-to-debt ratios. (Emphasis added).

S&P began the process of expanding its recognition of off-balance-sheet debt obligations by imputing a purchased power debt equivalent, imputed interest expense, and now also includes an imputed PPA amortization expense. Mr. Sager's credit metric ratio calculations should be adjusted to reflect S&P's updated methodology and should include an imputed amortization expense associated with purchased power off-balance sheet debt obligations.

Further, in the calculation of the FFO interest coverage, Mr. Sager included cash interest paid (line 30) as the denominator in his FFO interest coverage ratio and included total interest expense, including amortization of debt costs in the denominator. Mr. Sager has it backwards. The amortization of debt expense will increase FFO available to cover cash interest payments. Therefore, consistent with S&P ratio calculation formulas, total interest should be included in the numerator and cash interest in the denominator.

Q HAVE YOU UPDATED MR. SAGER'S CREDIT METRIC FINANCIAL RATIOS CONSISTENT WITH EMPIRE'S REGULATORY PLAN AND ADJUSTED THE FINANCIAL RATIOS TO REFLECT YOUR RECOMMENDED RETURN ON EQUITY AND CAPITAL STRUCTURE IN THIS PROCEEDING?

A Yes. This is shown on the attached Highly Confidential Schedule MPG-17HC. On this schedule, I adjust the FFO interest coverage ratio to include both the amortization expense of operating leases, and imputed amortization expense for purchased power debt equivalents. I also adjust the calculation of the FFO to interest ratio to include the amortization of debt interest obligations in the numerator and in the denominator. I also adjusted the FFO to total debt ratio to reflect imputed amortization expense associated with purchased power off-balance-sheet debt equivalents.

Q DO THE CREDIT METRICS IN YOUR PROPOSED RETURN ON EQUITY AND RECOMMENDED CAPITAL STRUCTURE SUPPORT CREDIT METRICS THAT MEET THE TARGET RATIOS?

A Yes. My proposed rate of return produces credit metrics that support the target credit metrics included in Empire's Regulatory Plan. Therefore, no additional Regulatory Plan amortization expense should be allowed in this proceeding.

Quarterly Survey

Q IS THERE ANYTHING ELSE YOU WOULD LIKE TO ADD?

A Yes. For the Commission's information, as shown below in Table 3, I have provided on a quarterly basis the industry average authorized returns on equity for electric

utility companies as published by the Edison Electric Institute (EEI) Rate Case Summary for the fourth quarter 2007.

TABLE 3

Authorized Returns on Equity for Electric Utility Companies

Quarter	Average Awarded ROE
Q1 2004	11.00
Q2 2004	10.64
Q3 2004	10.75
Q4 2004	10.91
Q1 2005	10.55
Q2 2005	10.13
Q3 2005	10.84
Q4 2005	10.57
Q1 2006	10.38
Q2 2006	10.39
Q3 2006	10.06
Q4 2006	10.38
Q1 2007	10.30
Q2 2007	10.27
Q3 2007	10.02
Q4 2007	10.44

Source: Edison Electric Institute (EEI) Rate Case Summary for the fourth quarter 2007.

Q DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?

A Yes.

Qualifications of Michael Gorman

Q PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A Michael P. Gorman. My business mailing address is P. O. Box 412000, 1215 Fern Ridge Parkway, Suite 208, St. Louis, Missouri 63141-2000.

Q PLEASE STATE YOUR OCCUPATION.

A I am a consultant in the field of public utility regulation and a principal with Brubaker & Associates, Inc., energy, economic and regulatory consultants.

Q PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND WORK EXPERIENCE.

A In 1983 I received a Bachelors of Science Degree in Electrical Engineering from Southern Illinois University, and in 1986, I received a Masters Degree in Business Administration with a concentration in Finance from the University of Illinois at Springfield. I have also completed several graduate level economics courses.

In August of 1983, I accepted an analyst position with the Illinois Commerce Commission (ICC). In this position, I performed a variety of analyses for both formal and informal investigations before the ICC, including: marginal cost of energy, central dispatch, avoided cost of energy, annual system production costs, and working capital. In October of 1986, I was promoted to the position of Senior Analyst. In this position, I assumed the additional responsibilities of technical leader on projects, and my areas of responsibility were expanded to include utility financial modeling and financial analyses.

In 1987, I was promoted to Director of the Financial Analysis Department. In this position, I was responsible for all financial analyses conducted by the staff.

Among other things, I conducted analyses and sponsored testimony before the ICC on rate of return, financial integrity, financial modeling and related issues. I also supervised the development of all Staff analyses and testimony on these same issues. In addition, I supervised the Staff's review and recommendations to the Commission concerning utility plans to issue debt and equity securities.

In August of 1989, I accepted a position with Merrill-Lynch as a financial consultant. After receiving all required securities licenses, I worked with individual investors and small businesses in evaluating and selecting investments suitable to their requirements.

In September of 1990, I accepted a position with Drazen-Brubaker & Associates, Inc. In April 1995 the firm of Brubaker & Associates, Inc. (BAI) was formed. It includes most of the former DBA principals and Staff. Since 1990, I have performed various analyses and sponsored testimony on cost of capital, cost/benefits of utility mergers and acquisitions, utility reorganizations, level of operating expenses and rate base, cost of service studies, and analyses relating industrial jobs and economic development. I also participated in a study used to revise the financial policy for the municipal utility in Kansas City, Kansas.

At BAI, I also have extensive experience working with large energy users to distribute and critically evaluate responses to requests for proposals (RFPs) for electric, steam, and gas energy supply from competitive energy suppliers. These analyses include the evaluation of gas supply and delivery charges, cogeneration and/or combined cycle unit feasibility studies, and the evaluation of third-party asset/supply management agreements. I have also analyzed commodity pricing indices and forward pricing methods for third party supply agreements, and have also conducted regional electric market price forecasts.

In addition to our main office in St. Louis, the firm also has branch offices in Phoenix, Arizona and Corpus Christi, Texas.

Q HAVE YOU EVER TESTIFIED BEFORE A REGULATORY BODY?

A Yes. I have sponsored testimony on cost of capital, revenue requirements, cost of service and other issues before the regulatory commissions in Arizona, California, Delaware, Georgia, Illinois, Indiana, Iowa, Louisiana, Michigan, Missouri, New Mexico, New Jersey, Oklahoma, Oregon, Tennessee, Texas, Utah, Vermont, Washington, West Virginia, Wisconsin, Wyoming, and before the provincial regulatory boards in Alberta and Nova Scotia, Canada. I have also sponsored testimony before the Board of Public Utilities in Kansas City, Kansas; presented rate setting position reports to the regulatory board of the municipal utility in Austin, Texas, and Salt River Project, Arizona, on behalf of industrial customers; and negotiated rate disputes for industrial customers of the Municipal Electric Authority of Georgia in the LaGrange, Georgia district.

Q PLEASE DESCRIBE ANY PROFESSIONAL REGISTRATIONS OR ORGANIZATIONS TO WHICH YOU BELONG.

A I earned the designation of Chartered Financial Analyst (CFA) from the Association for Investment Management and Research (AIMR). The CFA charter was awarded after successfully completing three examinations which covered the subject areas of financial accounting, economics, fixed income and equity valuation and professional and ethical conduct. I am a member of AIMR's Financial Analyst Society.

The Empire District Electric Company

Accuracy of Interest Rate Forecasts

(Long-Term Treasury Bond Yields - Projected Vs. Actual)

Line	Date	Publication Data: Actual Yield (1)	Publication Data: Projected Yield (2)	Publication Data: For Quarter (3)	Actual Yield in Projected Quarter (4)	Projected Yield Higher (Lower) Than Actual Yield* (5)	Actual Yields Differential** (6)
1	Dec-00	5.8%	5.8%	1Q, 02	5.6%	0.2%	0.2%
2	Mar-01	5.7%	5.6%	2Q, 02	5.8%	-0.2%	-0.1%
3	Jun-01	5.4%	5.8%	3Q, 02	5.2%	0.6%	0.2%
4	Sep-01	5.7%	5.9%	4Q, 02	5.1%	0.8%	0.6%
5	Dec-01	5.5%	5.7%	1Q, 03	4.9%	0.8%	0.6%
6	Mar-02	5.3%	5.9%	2Q, 03	4.7%	1.2%	0.6%
7	Jun-02	5.6%	6.2%	3Q, 03	5.2%	1.0%	0.4%
8	Sep-02	5.8%	5.9%	4Q, 03	5.2%	0.7%	0.6%
9	Dec-02	5.2%	5.7%	1Q, 04	4.9%	0.8%	0.3%
10	Mar-03	5.1%	5.7%	2Q, 04	5.4%	0.3%	-0.3%
11	Jun-03	5.0%	5.4%	3Q, 04	5.1%	0.3%	-0.1%
12	Sep-03	4.7%	5.8%	4Q, 04	4.9%	0.9%	-0.2%
13	Dec-03	5.2%	5.9%	1Q, 05	4.8%	1.1%	0.4%
14	Mar-04	5.2%	5.9%	2Q, 05	4.6%	1.3%	0.6%
15	Jun-04	4.9%	6.2%	3Q, 05	4.5%	1.7%	0.4%
16	Sep-04	5.4%	6.0%	4Q, 05	4.8%	1.2%	0.6%
17	Dec-04	5.1%	5.8%	1Q, 06	4.6%	1.2%	0.4%
18	Mar-05	4.9%	5.6%	2Q, 06	5.1%	0.5%	-0.3%
19	Jun-05	4.8%	5.5%	3Q, 06	5.0%	0.5%	-0.2%
20	Sep-05	4.6%	5.2%	4Q, 06	4.7%	0.5%	-0.2%
21	Dec-05	4.5%	5.3%	1Q, 07	4.8%	0.5%	-0.3%
22	Mar-06	4.8%	5.1%	2Q, 07	5.0%	0.1%	-0.2%
23	Jun-06	4.6%	5.3%	3Q, 07	4.9%	0.4%	-0.3%
24	Sep-06	5.1%	5.2%	4Q, 07	4.6%	0.6%	0.5%
25	Oct-06	5.0%	5.1%	1Q, 08			
26	Nov-06	5.0%	5.1%	1Q, 08			
27	Dec-06	5.0%	5.0%	1Q, 08			
28	Jan-07	4.7%	5.1%	2Q, 08			
29	Feb-07	4.7%	5.1%	2Q, 08			
30	Mar-07	4.7%	5.1%	2Q, 08			
31	Apr-07	4.8%	5.0%	3Q, 08			
32	May-07	4.8%	5.1%	3Q, 08			
33	Jun-07	4.8%	5.1%	3Q, 08			
34	Jul-07	5.0%	5.4%	4Q, 08			
35	Aug-07	5.0%	5.2%	4Q, 08			
36	Sep-07	5.0%	5.2%	4Q, 08			
37	Oct-07	4.9%	5.2%	1Q, 09			
38	Nov-07	4.9%	5.1%	1Q, 09			
39	Dec-07	4.9%	4.8%	1Q, 09			
40	Jan-08	4.6%	4.9%	2Q, 09			
41	Feb-08	4.6%	4.6%	2Q, 09			

Source:
Blue Chip Financial Forecasts, Various Dates.
* Col. 2 - Col. 4.
** Col. 1 - Col. 4.

Non-Proprietary

The Empire District Electric Company

Proposed Rate of Return

Line	Description	Amount (1)	Weight (2)	Cost (3)	Weighted Cost (4)
1	Long-Term Debt				
2	Trust Preferred Stock				
3	Common Equity				
4	**Total**				**8.52%**

Source:
Company's response to Praxair/Explorer Data Request 1, "Actual Filing.xls", Section H, Schedule 1.

The Empire District Electric Company

Capital Structures

Line	Description	2002 (1)	2003 (2)	2004 (3)	2005 (4)	2006 (5)
1	Long-term Debt	$ 358,049	$ 357,147	$ 357,248	$ 357,128	$ 356,886
2	Preferred Stock	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000
3	Common Equity	$ 329,543	$ 379,053	$ 379,409	$ 393,687	$ 468,865
4	**Total**	**$ 737,592**	**$ 786,200**	**$ 786,657**	**$ 800,815**	**$ 875,751**
5	Total Debt	48.54%	45.43%	45.41%	44.60%	40.75%
6	Preferred Stock	6.78%	6.36%	6.36%	6.24%	5.71%
7	Common Equity	44.68%	48.21%	48.23%	49.16%	53.54%
8	**Total**	**100%**	**100%**	**100%**	**100%**	**100%**

Source:
FERC Form-1.

Non-Proprietary

The Empire District Electric Company

Gorman Comparable Group

Line	Utility Companies	Bond Ratings[1] S&P (1)	Bond Ratings[1] Moody's (2)	2006 Common Equity Ratios AUS[1] (3)	2006 Common Equity Ratios Value Line[2] (4)	EEI Risk Assessment[3] (5)
1	Ameren Corp.	BBB	Baa2	49%	55%	Regulated
2	Avista Corp.	BBB+	Baa3	46%	46%	Mostly Regulated
3	Cleco Corp.	BBB	A3	56%	58%	Regulated
4	DTE Energy	A-	A3	40%	44%	Mostly Regulated
5	Empire District	BBB+	Baa1	45%	50%	Regulated
6	Entergy Corp.	A-	Baa2	41%	47%	Regulated
7	Exelon Corp.	A-	A3	48%	45%	Mostly Regulated
8	FirstEnergy	BBB	Baa1	43%	51%	Mostly Regulated
9	IDACORP.	A-	A3	48%	55%	Regulated
10	NiSource, Inc.	BBB	Baa2	43%	49%	Mostly Regulated
11	OGE Energy	BBB+	Baa2	53%	54%	Mostly Regulated
12	Pepco Holdings	BBB+	Baa1	42%	45%	Mostly Regulated
13	PG&E Corp.	BBB+	Baa1	47%	53%	Regulated
14	Pinnacle West	BBB-	Baa2	50%	52%	Regulated
15	PNM Resources	BBB	Baa2	47%	49%	Mostly Regulated
16	Xcel Energy Inc.	A-	A3	43%	47%	Regulated
17	**Average**	**BBB+**	**Baa1**	**46%**	**50%**	**Regulated**
18	Empire District Electric	BBB+	Baa1	[4]	[4]	Regulated

Sources:

[1] AUS Utility Reports; February 2008.

[2] The Value Line Investment Survey; November 30, December 28, 2007, and February 8, 2008.

[3] Edison Electric Institute (EEI), Stock Performance. Financial Update, 4Q, 2007.

[4] Gorman Direct HC at 15.

The Empire District Electric Company

Growth Rate Estimates

Line	Electric Utility	Zacks Estimated Growth %[1] (1)	Zacks Number of Estimates[1] (2)	Reuters Estimated Growth %[2] (3)	Reuters Number of Estimates[2] (4)	SNL Estimated Growth %[3] (5)	SNL Number of Estimates[3] (6)	AVG of Growth Rates (7)
1	Ameren Corp.	6.20%	5	7.00%	5	7.00%	3	6.73%
2	Avista Corp.	5.00%	1	4.50%	2	4.50%	2	4.67%
3	Cleco Corp.	9.50%	2	15.50%	2	15.60%	2	13.53%
4	DTE Energy	6.00%	3	6.40%	5	5.00%	1	5.80%
5	Empire District	N/A	N/A	6.00%	1	8.40%	2	7.20%
6	Entergy Corp.	13.33%	3	8.75%	4	11.00%	5	11.03%
7	Exelon Corp.	12.00%	3	10.90%	8	9.30%	5	10.73%
8	FirstEnergy	7.50%	4	9.50%	6	7.60%	5	8.20%
9	IDACORP.	5.00%	1	6.00%	2	6.00%	2	5.67%
10	NiSource, Inc.	2.75%	4	2.73%	4	3.60%	5	3.03%
11	OGE Energy	4.00%	1	3.00%	2	N/A	N/A	3.50%
12	Pepco Holdings	12.00%	2	11.00%	4	12.70%	3	11.90%
13	PG&E Corp.	8.50%	4	8.49%	8	8.90%	8	8.63%
14	Pinnacle West	6.67%	3	6.23%	4	-5.00%	1	2.63%
15	PNM Resources	6.25%	4	10.86%	5	10.90%	4	9.34%
16	Xcel Energy Inc.	5.20%	5	6.12%	6	6.00%	3	5.77%
17	**Average**	**7.33%**	**3**	**7.69%**	**4**	**7.43%**	**3**	**7.40%**

Sources:

[1] www.zacksadvisor.com, Detailed Research, downloaded on February 13, 2008.

[2] www.investor.reuters.com, Earnings Estimates on February 13, 2008.

[3] http://www.snl.com, Long-term Growth Rate Estimates on February 13, 2008.

The Empire District Electric Company

Constant Growth DCF Model

Line	Electric Utility	13-Week AVG Stock Price[1] (1)	AVG (%) Growth (2)	Annual Dividend[2] (3)	Adjusted Yield (4)	Constant Growth DCF (5)
1	Ameren Corp.	$51.28	6.73%	$2.54	5.29%	12.02%
2	Avista Corp.	$20.91	4.67%	$0.60	3.00%	7.67%
3	Cleco Corp.	$27.07	13.53%	$0.90	3.77%	17.31%
4	DTE Energy	$45.75	5.80%	$2.12	4.90%	10.70%
5	Empire District	$22.86	7.20%	$1.28	6.00%	13.20%
6	Entergy Corp.	$116.33	11.03%	$3.00	2.86%	13.89%
7	Exelon Corp.	$80.74	10.73%	$1.76	2.41%	13.15%
8	FirstEnergy	$71.63	8.20%	$2.00	3.02%	11.22%
9	IDACORP.	$34.12	5.67%	$1.20	3.72%	9.38%
10	NiSource, Inc.	$18.56	3.03%	$0.92	5.11%	8.13%
11	OGE Energy	$35.13	3.50%	$1.39	4.10%	7.60%
12	Pepco Holdings	$27.77	11.90%	$1.04	4.19%	16.09%
13	PG&E Corp.	$44.06	8.63%	$1.44	3.55%	12.18%
14	Pinnacle West	$41.68	2.63%	$2.10	5.17%	7.80%
15	PNM Resources	$21.24	9.34%	$0.92	4.74%	14.07%
16	Xcel Energy Inc.	$22.14	5.77%	$0.92	4.40%	10.17%
17	**Average**	**$42.58**	**7.40%**	**$1.51**	**4.14%**	**11.54%**

Sources:
[1] http://moneycentral.msn.com, downloaded on February 13, 2008.
[2] The Value Line Investment Survey; November 30, December 28, 2007, and February 8, 2008.

The Empire District Electric Company

GDP and Dividend Growth Rates

Line	Electric Utility	Dividend Growth Past 5 Years (1)	Dividend Growth Past 10 Year (2)	Dividend Growth 3-5 Years Projection (3)	Inflation (CPI)* Past 5 Years (4)	Inflation (CPI)* Past 10 Years (5)	Inflation (CPI)* 3-5 Years Projection (6)	Nominal GDP* Past 5 Years (7)	Nominal GDP* Past 10 Years (8)
1	Ameren Corp.	N/A	0.5%	N/A					
2	Avista Corp.	2.5%	-8.0%	12.5%					
3	Cleco Corp.	1.0%	2.0%	6.5%					
4	DTE Energy	N/A	N/A	2.5%					
5	Empire District	N/A	N/A	1.0%					
6	Entergy Corp.	11.0%	1.5%	10.0%					
7	Exelon Corp.	N/A	N/A	6.0%					
8	FirstEnergy	4.0%	2.0%	5.5%					
9	IDACORP.	-8.5%	-4.5%	N/A					
10	NiSource, Inc.	-1.5%	1.5%	1.5%					
11	OGE Energy	N/A	N/A	2.0%					
12	Pepco Holdings	N/A	N/A	3.0%					
13	PG&E Corp.	-1.5%	-9.0%	N/A					
14	Pinnacle West	6.0%	7.5%	3.0%					
15	PNM Resources	7.5%	N/A	6.0%					
16	Xcel Energy Inc.	-10.5%	-4.5%	4.5%					
17	**Average**	**1.0%**	**-1.1%**	**4.9%**	**2.6%**	**2.5%**	**2.5%**	**5.4%**	**5.4%**

Source:
The Value Line Investment Survey; November 30, December 28, 2007, and February 8 2008.

The Empire District Electric Company

Two-Stage Growth DCF Model

Line	Electric Utility	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	Ameren Corp.	$51.28	$2.54	6.73%	5.00%	10.60%
2	Avista Corp.	$20.91	$0.60	4.67%	5.00%	7.96%
3	Cleco Corp.	$27.07	$0.90	13.53%	5.00%	10.00%
4	DTE Energy	$45.75	$2.12	5.80%	5.00%	10.04%
5	Empire District	$22.86	$1.28	7.20%	5.00%	11.45%
6	Entergy Corp.	$116.33	$3.00	11.03%	5.00%	8.52%
7	Exelon Corp.	$80.74	$1.76	10.73%	5.00%	7.93%
8	FirstEnergy	$71.63	$2.00	8.20%	5.00%	8.37%
9	IDACORP.	$34.12	$1.20	5.67%	5.00%	8.80%
10	NiSource, Inc.	$18.56	$0.92	3.03%	5.00%	9.77%
11	OGE Energy	$35.13	$1.39	3.50%	5.00%	8.89%
12	Pepco Holdings	$27.77	$1.04	11.90%	5.00%	10.26%
13	PG&E Corp.	$44.06	$1.44	8.63%	5.00%	9.02%
14	Pinnacle West	$41.68	$2.10	2.63%	5.00%	9.77%
15	PNM Resources	$21.24	$0.92	9.34%	5.00%	10.47%
16	Xcel Energy Inc.	$22.14	$0.92	5.77%	5.00%	9.51%
17	**Average**	**$42.58**	**$1.51**	**7.40%**	**5.00%**	**9.46%**

Sources:

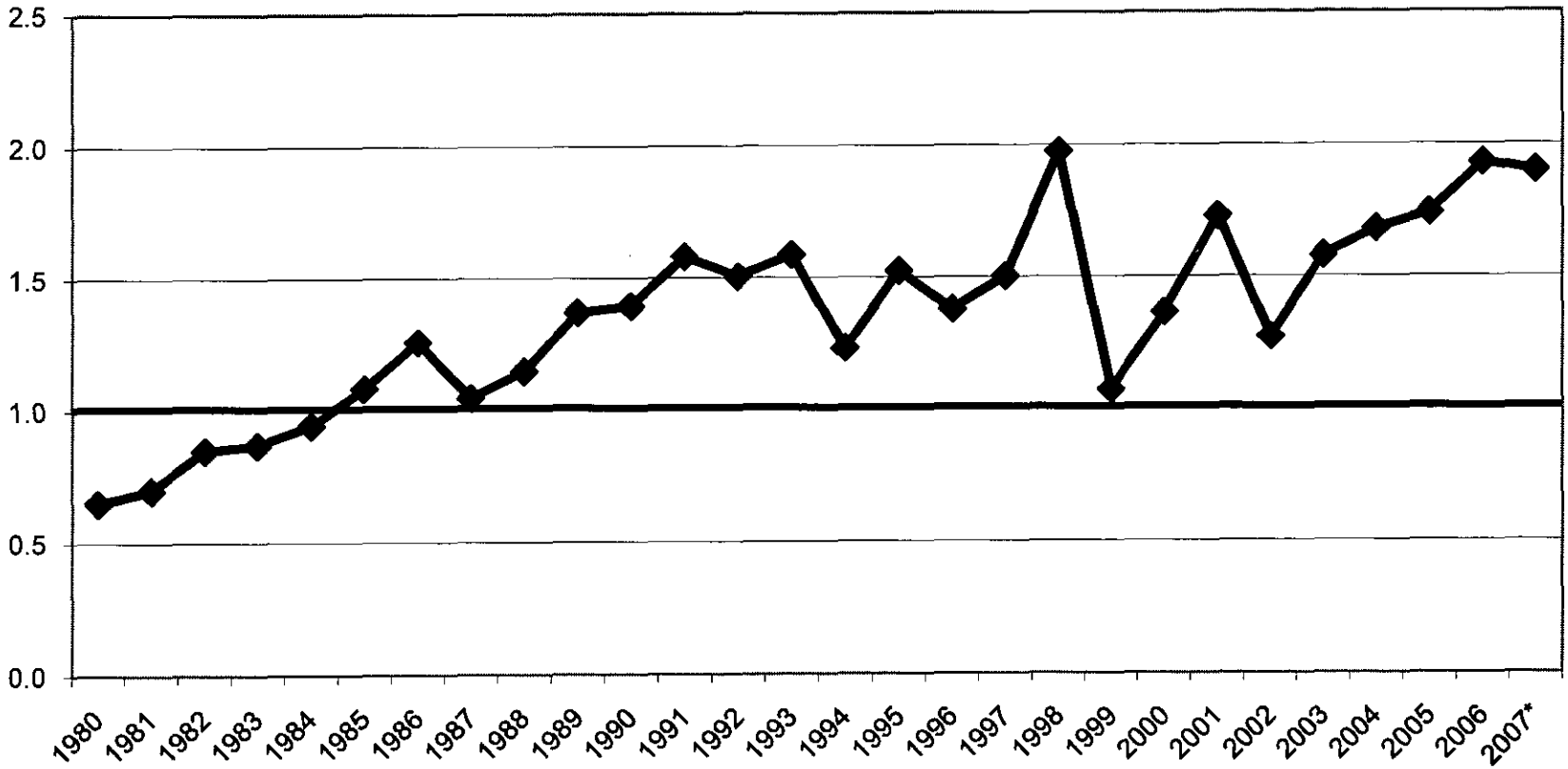
[1] http://moneycentral.msn.com, downloaded on February 13, 2008.

[2] The Value Line Investment Survey; November 30, December 28, 2007, and February 8, 2008.

[3] Blue Chip Economic Indicators, October 10, 2007.

The Empire District Electric Company

Electric Common Stock Market/Book Ratio



Sources:
2001-2006: AUS Utility Reports.
1980 - 2000: Mergent Public Utility Manual, 2003; at a15, and a17.
* The data for 2007 includes the period January - June 2007.

Schedule MPG-9

The Empire District Electric Company

Equity Risk Premium - Treasury Bond

Line	Date	Treasury Bond Yield[1] (1)	Authorized Electric Returns[2] (2)	Indicated Risk Premium (3)
1	1986	7.78%	13.93%	6.15%
2	1987	8.59%	12.99%	4.40%
3	1988	8.96%	12.79%	3.83%
4	1989	8.45%	12.97%	4.52%
5	1990	8.61%	12.70%	4.09%
6	1991	8.14%	12.55%	4.41%
7	1992	7.67%	12.09%	4.42%
8	1993	6.59%	11.41%	4.82%
9	1994	7.37%	11.34%	3.97%
10	1995	6.88%	11.55%	4.67%
11	1996	6.71%	11.39%	4.68%
12	1997	6.61%	11.40%	4.79%
13	1998	5.58%	11.66%	6.08%
14	1999	5.87%	10.77%	4.90%
15	2000	5.94%	11.43%	5.49%
16	2001	5.49%	11.09%	5.60%
17	2002	5.43%	11.16%	5.73%
18	2003	4.96%	10.97%	6.01%
19	2004	5.05%	10.75%	5.70%
20	2005	4.65%	10.54%	5.89%
21	2006	4.91%	10.36%	5.45%
22	2007[3]	4.89%	10.27%	5.38%
23	**Average**	**6.60%**	**11.64%**	**5.04%**

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] Regulatory Research Associates, Inc., Regulatory Focus, Jan. 85 - Dec. 06.

[3] The data for 2007 includes the period January - June 2007.

The Empire District Electric Company

Equity Risk Premium - Utility Bond

Line	Date	Average "A" Rating Utility Bond Yield[1] (1)	Authorized Electric Returns[2] (2)	Indicated Risk Premium (3)
1	1986	9.58%	13.93%	4.35%
2	1987	10.10%	12.99%	2.89%
3	1988	10.49%	12.79%	2.30%
4	1989	9.77%	12.97%	3.20%
5	1990	9.86%	12.70%	2.84%
6	1991	9.36%	12.55%	3.19%
7	1992	8.69%	12.09%	3.40%
8	1993	7.59%	11.41%	3.82%
9	1994	8.31%	11.34%	3.03%
10	1995	7.89%	11.55%	3.66%
11	1996	7.75%	11.39%	3.64%
12	1997	7.60%	11.40%	3.80%
13	1998	7.04%	11.66%	4.62%
14	1999	7.62%	10.77%	3.15%
15	2000	8.24%	11.43%	3.19%
16	2001	7.76%	11.09%	3.33%
17	2002	7.37%	11.16%	3.79%
18	2003	6.58%	10.97%	4.39%
19	2004	6.16%	10.75%	4.59%
20	2005	5.65%	10.54%	4.89%
21	2006	6.07%	10.36%	4.29%
22	2007[3]	6.00%	10.27%	4.27%
23	**Average**	**7.98%**	**11.64%**	**3.67%**

Sources:

[1] Mergent Public Utility Manual, Mergent Weekly News Reports, 2003. The utility yields for the period 2001-2006 were obtained from the Mergent Bond Record.

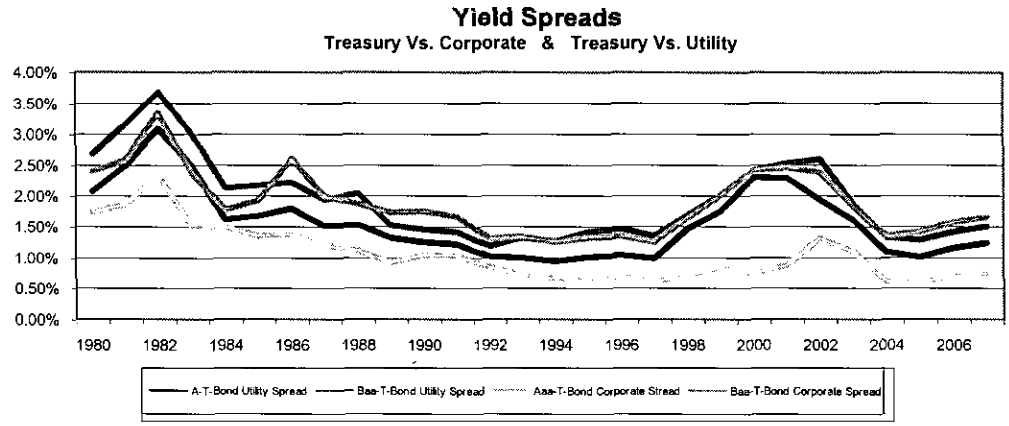
[2] Regulatory Research Associates, Inc., Regulatory Focus, Jan. 85 - Dec. 06.

[3] The data for 2007 includes the period January - June 2007.

The Empire District Electric Company

Annual Average Yields

Line	Year	T-Bond Yield[1]	Public Utility Bond Yields				Corporate Bond Yields			
			A[2]	Baa[2]	A-T-Bond Spread	Baa-T-Bond Spread	Aaa[1]	Baa[1]	Aaa-T-Bond Spread	Baa-T-Bond Spread
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	1980	11.27%	13.34%	13.95%	2.07%	2.68%	11.94%	13.67%	1.73%	2.40%
2	1981	13.45%	15.95%	16.60%	2.50%	3.15%	14.17%	16.04%	1.87%	2.59%
3	1982	12.76%	15.86%	16.45%	3.10%	3.69%	13.79%	16.11%	2.32%	3.35%
4	1983	11.18%	13.66%	14.20%	2.48%	3.02%	12.04%	13.55%	1.51%	2.37%
5	1984	12.41%	14.03%	14.53%	1.62%	2.12%	12.71%	14.19%	1.48%	1.78%
6	1985	10.79%	12.47%	12.96%	1.68%	2.17%	11.37%	12.72%	1.35%	1.93%
7	1986	7.78%	9.58%	10.00%	1.80%	2.22%	9.02%	10.39%	1.37%	2.61%
8	1987	8.59%	10.10%	10.53%	1.51%	1.94%	9.38%	10.58%	1.20%	1.99%
9	1988	8.96%	10.49%	11.00%	1.53%	2.04%	9.71%	10.83%	1.12%	1.87%
10	1989	8.45%	9.77%	9.97%	1.32%	1.52%	9.26%	10.18%	0.92%	1.73%
11	1990	8.61%	9.86%	10.06%	1.25%	1.45%	9.32%	10.36%	1.04%	1.75%
12	1991	8.14%	9.36%	9.55%	1.22%	1.41%	8.77%	9.80%	1.03%	1.66%
13	1992	7.67%	8.69%	8.86%	1.02%	1.19%	8.14%	8.98%	0.84%	1.31%
14	1993	6.59%	7.59%	7.91%	1.00%	1.32%	7.22%	7.93%	0.71%	1.34%
15	1994	7.37%	8.31%	8.63%	0.94%	1.26%	7.96%	8.62%	0.66%	1.25%
16	1995	6.88%	7.89%	8.29%	1.01%	1.41%	7.59%	8.20%	0.61%	1.32%
17	1996	6.71%	7.75%	8.17%	1.04%	1.46%	7.37%	8.05%	0.68%	1.34%
18	1997	6.61%	7.60%	7.95%	0.99%	1.34%	7.26%	7.86%	0.60%	1.25%
19	1998	5.58%	7.04%	7.26%	1.46%	1.68%	6.53%	7.22%	0.69%	1.64%
20	1999	5.87%	7.62%	7.88%	1.75%	2.01%	7.04%	7.87%	0.83%	2.00%
21	2000	5.94%	8.24%	8.36%	2.30%	2.42%	7.62%	8.36%	0.74%	2.42%
22	2001	5.49%	7.78%	8.02%	2.29%	2.53%	7.08%	7.95%	0.87%	2.46%
23	2002	5.42%	7.36%	8.02%	1.94%	2.60%	6.49%	7.80%	1.31%	2.38%
24	2003	4.96%	6.57%	6.83%	1.61%	1.87%	5.67%	6.77%	1.10%	1.81%
25	2004	5.05%	6.14%	6.37%	1.09%	1.32%	5.63%	6.39%	0.58%	1.34%
26	2005	4.65%	5.66%	5.93%	1.01%	1.29%	5.24%	6.06%	0.59%	1.41%
27	2006	4.91%	6.07%	6.32%	1.16%	1.41%	5.59%	6.48%	0.68%	1.57%
28	2007	4.83%	6.07%	6.33%	1.24%	1.50%	5.56%	6.48%	0.73%	1.65%
29	**Average**	**7.75%**	**9.32%**	**9.68%**	**1.57%**	**1.93%**	**8.55%**	**9.62%**	**1.04%**	**1.88%**



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.

The Empire District Electric Company

Series "A" and "Baa" Utility Bond Yields

Line	Date	"A" Rating Utility Bond Yield (1)	"Baa" Rating Utility Bond Yield (2)
1	02/08/08	6.15%	6.51%
2	02/01/08	6.04%	6.37%
3	01/25/08	6.10%	6.35%
4	01/18/08	5.99%	6.31%
5	01/10/08	6.12%	6.44%
6	01/04/08	5.99%	6.33%
7	12/27/07	6.23%	6.60%
8	12/20/07	6.06%	6.41%
9	12/14/07	6.29%	6.63%
10	12/07/07	6.23%	6.59%
11	11/30/07	6.00%	6.34%
12	11/23/07	5.94%	6.25%
13	11/16/07	5.98%	6.28%
14	**Average**	**6.09%**	**6.42%**

Source:
www.moodys.com, Bond Yields and Key Indicators.

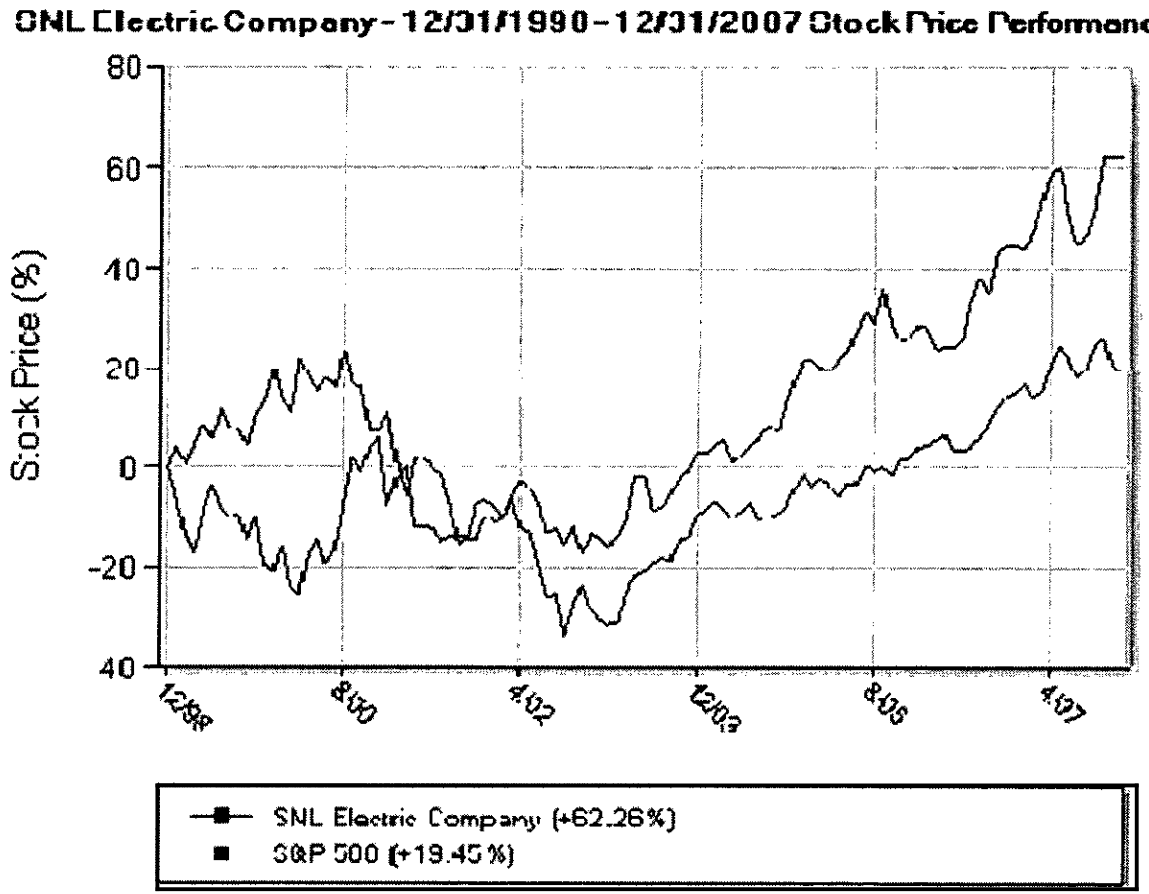
The Empire District Electric Company

Comparable Group Beta

Line	Electric Utility*	2003 (1)	2004 (2)	2005 (3)	2006 (4)	2007 (5)	5-Yr. AVG (6)
1	Ameren Corp.	0.65	0.75	0.75	0.75	0.80	0.74
2	Avista Corp.	0.75	0.85	0.90	0.95	0.95	0.88
3	Cleco Corp.	0.90	1.05	1.15	1.25	1.15	1.10
4	DTE Energy	0.60	0.65	0.70	0.75	0.80	0.70
5	Empire District	0.60	0.65	0.70	0.80	0.85	0.72
6	Entergy Corp.	0.65	0.75	0.75	0.85	0.85	0.77
7	Exelon Corp.	0.70	0.70	0.75	0.80	0.90	0.77
8	FirstEnergy	0.70	0.75	0.75	0.80	0.85	0.77
9	IDACORP.	0.75	0.85	0.95	1.00	0.95	0.90
10	OGE Energy	0.60	0.70	0.75	0.75	0.85	0.73
11	NiSource, Inc.	0.65	0.75	0.80	0.90	0.90	0.80
12	Pepco Holdings	N/A	0.90	0.90	0.85	0.95	0.90
13	PG&E Corp.	0.90	1.05	1.10	1.15	0.85	1.01
14	Pinnacle West	0.70	0.85	0.90	1.00	0.80	0.85
15	PNM Resources	0.70	0.85	0.90	1.00	0.90	0.87
16	Xcel Energy, Inc.	0.70	0.80	0.80	0.90	0.80	0.80
17	**Average**	**0.70**	**0.81**	**0.85**	**0.91**	**0.88**	**0.83**
18	**Median**	**0.70**	**0.78**	**0.80**	**0.88**	**0.85**	**0.80**

Source:
The Value Line Investment Survey; November 30, December 28, 2007, and February 8, 2008.
* The historical data was obtained from the Value Line Investment Analyzer.

The Empire District Electric Company



The Empire District Electric Company

CAPM Return Estimate

Line	Description	Historical Premium (1)
1	Risk-Free Rate[1]	4.6%
2	Risk Premium[2]	6.5%
3	Beta[3]	0.85
4	CAPM	10.1%

Line	Description	Prospective Premium (1)
5	Risk-Free Rate[1]	4.6%
6	Risk Premium[2]	7.0%
7	Beta[3]	0.85
8	CAPM	10.6%
9	**CAPM Average**	**10.34%**

Sources:

[1] Blue Chip Financial Forecasts; February 1, 2008 at 2.

[2] SBBI; 2007 at 31 and 120.

[3] The Value Line Investment Survey; November 30, December 28, 2007, and February 8, 2008.

The Empire District Electric Company

Calculation of Amortization to Meet Financial Ratio Targets

Non-Proprietary

The Empire District Electric Company

Financial Ratios Adjustments

Source:
Company's response to Praxair/Explorer Data Request 1, "Actual Filing.xls", Section H, Schedule 1 and Schedule MPG-2HC.