EXHIBIT

Exhibit No.:	
Issue(s):	Rate of Return
Witness:	Travis Allen
Type of Exhibit:	Rebuttal
Sponsoring Party:	Public Counsel
Case Number:	ER-2004-0570
Date Testimony Prepared:	November 4, 2004

REBUTTAL TESTIMONY

OF

TRAVIS ALLEN

Submitted on Behalf of
the Office of the Public Counsel

THE EMPIRE DISTRICT ELECTRIC COMPANY

Case No. ER-2004-0570

November 4, 2004

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the tariff filing of The Empire District Electric Company to implement a general rate increase for retail electric service provided to customers in its Missouri service area.	)))))	Case No. ER-2004-0570

AFFIDAVIT OF TRAVIS ALLEN

STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Travis Allen, of lawful age and being first duly sworn, deposes and states:

1. My name is Travis Allen. I am a Financial Analyst for the Office of the Public Counsel.

2. Attached hereto and made a part hereof for all purposes is my rebuttal testimony consisting of pages 1 through 46, Schedules TA-1 through TA-5 and Attachments Corrected Direct Schedule TA-1, Corrected Direct Schedule TA-13 and Corrected Appendix F.

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.

Travis Allen

Subscribed and sworn to me this 4th day of November 2004.

KATHLEEN HARRISON
Notary Public - State of Missouri
County of Cole
My Commission Expires Jan. 31, 2006

Kathleen Harrison
Notary Public

My commission expires January 31, 2006.

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OF

TRAVIS ALLEN

EMPIRE DISTRICT ELECTRIC COMPANY

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TRAVIS ALLEN

EMPIRE DISTRICT ELECTRIC COMPANY

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INTRODUCTION

Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

A. Travis Allen, 200 Madison St., P.O. Box 2230, Jefferson City Mo., 65102.

Q. ARE YOU THE SAME TRAVIS ALLEN WHO FILED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF THIS TESTIMONY?

A. I will respond to the direct testimony of Empire District Electric Company's (Empire, or Company) witnesses James H. Vander Weide, Donald A. Murry, and Brad P. Beecher and make corrections to my direct testimony.

REBUTTAL OF DONALD A. MURRY DIRECT

Missouri Ratemaking:

Q. IN MISSOURI, ARE RATES SET IN SUCH A WAY AS TO GUARANTEE THAT REGULATED UTILITIES WILL EARN THEIR ALLOWED EQUITY RETURNS?

A. No. In Missouri, rates are set in such a way as to allow a prudent and efficiently run utility the **opportunity** to earn its allowed return.

Q. DOES IT APPEAR AS THOUGH COMPANY WITNESS DONALD A. MURRY IS CONFUSSED ON THIS ISSUE?

A. Yes. On page 29, lines 4-6 of his direct testimony, witness Donald A. Murry had the following to say about the discounted cash flow (DCF) method.

> The method does not account for unforeseen influences that may inhibit the ability of a utility to earn its allowed return. It has no cushion in this return to **assure** (emphasis added) that the regulated company will earn its allowed return.

Regulatory Research Associates:

Q. ON PAGE 15 OF HIS DIRECT TESTIMONY, LINES 10-15, WITNESS DONALD A. MURRY STATES THAT REGULATORY RESEARCH ASSOCIATES (RRA) CURRENTLY RANKS MISSOURI'S REGULATORY COMMISSION BELOW ALL BUT FIVE OTHER STATES WITH A RATING OF AVERAGE-3. IS THIS CORRECT?

A. No. While witness Donald A. Murry is correct that RRA currently ranks Missouri as "Average-3", he is not correct in stating that Missouri's Regulatory Commission is ranked below all but five other states. According to the July 7, 2004 State Regulatory Evaluations Report, RRA has sixteen other states, three of which border Missouri, categorized as Average-3. The following states are grouped into the Average-3 category along with Missouri: Arizona, Arkansas, California, Colorado, Connecticut, Idaho, Illinois, Kansas, Louisiana, Maine, New Hampshire, New Mexico,

Pennsylvania, Utah, Vermont, and Wyoming. Consequently, RRA does not rate Missouri's regulatory climate as poorly as witness Donald A. Murry would like this Commission to believe.

Q. HAVE OTHER COST OF CAPITAL WITNESSES RECENTLY TESTIFIED ON MISSOURI'S CURRENT REGULATORY ENVIRONMENT?

A. Yes, on page 21 of the Report and Order for Case Number GR-2004-0209, the Commission had the following to say:

> *Furthermore, Dunn's contention that MGE should receive a higher return on equity because it is regulated by the Missouri Commission is undercut by Dr. Morin's testimony that the Missouri Commission is perceived by the investment community as an "average, fair, reasonable, supportive" commission.*

Q. DO YOU BELIEVE THAT THIS COMMISSION SHOULD PUT MUCH WEIGHT ON THE EQUITY RETURNS ALLOWED FOR OTHER UTILITIES IN OTHER JURISDICTIONS?

A. No. While I believe that this Commission should certainly be cognizant of allowed equity returns in other jurisdictions, I do not believe that this Commission should put a great deal of weight on them.

Q. COULD YOU PLEASE EXPLAIN YOUR POSITION?

A. Yes. I firmly believe that the equity returns authorized by this Commission for Missouri utilities should be based on the individual utility's cost of equity. I believe that authorizing returns in this manner is the best way to balance the interest of shareholders and ratepayers. If a Commission were to put a great deal of weight on allowed equity returns from other jurisdictions, it would run the risk

of authorizing returns that either overstated or understated the utility's actual cost of equity. Allowing a rate of return that overstates a utility's actual cost of equity would result in the utility collecting excessive revenues from ratepayers, while allowing a rate of return that understates a utility's actual cost of equity would result in the utility not collecting enough revenue from ratepayers. Clearly, the best way to balance the interests of shareholders and ratepayers is to authorize returns that are based on the utility's market derived cost of equity and not to simply authorize returns that are in line with the allowed returns of other jurisdictions.

Q. DON'T THE EQUITY RETURNS ALLOWED FOR UTILITIES IN OTHER JURISDICTIONS REPRESENT THE COST OF EQUITY FOR THOSE COMPANIES?

A. Not necessarily. There are a myriad of reasons why the equity return that a Commission allows a firm the opportunity to earn could differ from that firm's actual cost of equity. For example, a Commission might allow a utility the opportunity to earn a return on equity higher than its actual cost of equity as a reward for running it operations efficiently. Another possibility is that a particular Commission might use the return on equity as a "fall out" number in its effort to achieve a desired revenue increase. Consequently, allowed returns from other jurisdictions do not represent an appropriate benchmark for determining what return investors actually require.

DCF Analysis:

Q. WHAT DCF RETURN ON EQUITY (ROE) RANGE DID WITNESS DONALD A. MURRY SELECT?

A. Witness Donald A. Murry's selected DCF ROE range is 11.88% - 13.53%.

Q. HOW DID WITNESS DONALD A. MURRY DEVELOP THIS RANGE?

A. Witness Donald A. Murry developed this range by selecting the high end of his "Current" DCF analysis on Empire and the high end of his "52-Week" DCF analysis on Empire, 11.88% and 13.53% respectively. These results are illustrated on schedules DAM-17 and DAM-18 of witness Donald A. Murry's direct testimony.

Q. WHAT GROWTH RATE DOES WITNESS DONALD A. MURRY UTILIZE IN DEVELOPING THIS RANGE?

A. He utilizes a growth rate of 6.00%.

Q. HOW DID HE DEVELOP THIS GROWTH RATE RECOMMENDATION?

A. It appears from looking at Schedules DAM-17 and DAM-18 of his direct testimony that he adopted the Value Line growth rate projection.

Q. IS THE VALUE LINE GROWTH RATE PROJECTION THE OPINION OF A SINGLE ANALYST OR IS IT THE OPINION OF A CONSENSUS OF ANALYSTS?

A. The Value Line growth rate projection is the opinion of only one analyst.

Q. DO YOU AGREE WITH THIS 6.00% GROWTH RATE?

A. No, I believe that a 6.00% growth rate for Empire is very unrealistic and drastically overstates investor expectations.

Q. COULD YOU PLEASE EXPLAIN YOUR POSITION?

A. Yes, Empire has historically maintained a very high dividend payout ratio. Consequently, it has historically paid out a substantial portion of its yearly earnings in dividends.

Q. HOW DOES THIS AFFECT A COMPANY'S ABILITY TO GROW IN THE LONG RUN?

A. If a company continuously pays out a substantial portion of its earnings in dividends, it constrains its resources and hinders its ability to invest in positive Net Present Value (NPV) projects and thus, constrains its ability to grow its business in the long run.

Q WHAT IS THE AVERAGE DIVIDEND PAYOUT RATIO OF THE ELECTRIC UTILITY INDUSTRY

A. According to the most recent issue of C.A. Turner Utility Reports, the October 2004 issue, the average payout ratio is **70%**.

Q. WHAT IS EMPIRE'S CURRENT DIVIDEND PAYOUT RATIO?

A. According to the October 2004 issue of C.A. Turner Utility Reports, Empire's current dividend payout ratio is **125%**.

Q. WHAT DOES A DIVIDEND PAYOUT RATIO GREATER THAN 100% MEAN?

A. It means that the company is paying more out in dividends than it is earning.

Q. IS THIS A NEW PHENOMENON FOR EMPIRE?

A. No. In fact, Empire has had a dividend payout ratio well above 100% in three of the last five years, 1999, 2001, and 2002.

Q. WHAT WAS EMPIRE'S DIVIDEND PAYOUT RATIO IN 2000 AND 2003?

A. Empire's dividend payout ratio in 2000 was approximately 95% and its dividend payout ratio in 2003 was approximately 99%.

Q. WHAT IMPLICATIONS DOES THIS HAVE ON EMPIRE'S SUSTAINABLE GROWTH RATE?

A. In general, you would expect Empire's sustainable growth rate to be lower than the average electric utility.

Q. WHY?

A. Because a firm cannot indefinitely payout more in dividends than it earns.

Q. WHY CAN'T A FIRM INDEFINITELY PAYOUT MORE IN DIVIDENDS THAN IT EARNS?

A. Because the money needed to pay dividends must come from somewhere. In the short-run (i.e. one or two years) a firm may be able to fund its dividend payment with any cash stockpiles it has but in the long-run, the firm would be forced to either access the capital markets or sell off assets in order to raise the cash needed to fund its dividend payment. If the firm continually relied on debt issuances to raise the needed cash, it would soon find itself in a highly leveraged position. This ever-increasing leverage would begin to strain the company's resources, threaten its bond rating, and eventually deteriorate the overall value of the firm. Conversely, if the company continually relied on equity issuances to raise the needed cash, the shareholders of the firm would be adversely affected. This is because shareholders would experience a decline in their ownership interest and a decline in the overall market value of their equity holdings.

Q. WHAT OTHER GROWTH RATE PROJECTION DID WITNESS DONALD A. MURRY REVIEW IN HIS ANALYSIS.

A. Witness Donald A. Murry reviewed Standard & Poor's (S&P) growth rate projections.

Q. WHAT WAS THE S&P GROWTH RATE PROJECTION FOR EMPIRE?

A. S&P is projecting a growth rate for Empire of 2.00%.

Q. IS THE STANDARD AND POOR'S GROWTH RATE PROJECTION THE OPINION OF A SINGLE ANALYST OR IS IT THE OPINION OF A CONSENSUS OF ANALYSTS?

A. It is the consensus estimate of four analysts.

Q. COULD YOU EXPLAIN WHAT A CONSENSUS GROWTH RATE FORECAST IS?

A. Yes, a consensus growth rate forecast is simply the average growth rate forecast of a group of professional analysts who follow a firm for a living.

Q. DOES IT APPEAR AS THOUGH WITNESS DONALD A. MURRY GIVES ANY CREDENCE TO THIS GROWTH RATE PROJECTION?

A. No, it does not. Witness Donald A. Murry simply disregards this consensus growth rate projection and goes with the high growth rate projection offered by a single analyst at Value Line. This has the very real effect of artificially increasing witness Donald A. Murry's ROE recommendation.

Q. IN GENERAL DO YOU THINK THAT IT IS BETTER TO PUT MORE WEIGHT ON A SINGLE ANALYSTS' GROWTH RATE FORECAST OR ON A CONSENSUS GROWTH RATE FORECAST?

A. In general, I believe that more weight should be put on consensus growth rate forecast. The blind adoption of a single analysts growth rate projection by a cost of capital witness can, and in witness Donald A. Murry's case did, subject his analysis to a great deal of error.

Q. DOES IT APPEAR AS THOUGH EMPIRE'S OTHER COST OF CAPITAL WITNESS AGREES THAT A CONSENSUS GROWTH RATE ESTIMATE IS MORE RELIABLE THAN THE GROWTH RATE ESTIMATE OF A SINGLE ANALYST?

A. Yes. Witness Vander Weide excluded companies from his electric and gas proxy groups if they did not have at least three analysts contributing to their I/B/E/S growth rate forecasts because *"the I/B/E/S estimate may be less reliable if the I/B/E/S average growth estimate is based on the inputs of very few analysts."* (Vander Weide Direct, p.30, Lines 4-6)

Q. DID YOU PROVIDE A CONSENSUS GROWTH RATE FORECAST FOR EMPIRE IN YOUR DIRECT TESTIMONY?

A. Yes, I did. As seen on Schedule TA-9, Page 2, Line 34 of my direct testimony, the Thomson Financial earnings-per-share consensus growth rate forecast for Empire is 2.50%.

Q. HOW MANY ANALYSTS CONTRIBUTED TO THE THOMPSON FINANCIAL CONSENSUS GROWTH RATE?

A. The Thompson Financial earnings growth rate is a consensus forecast of four analysts.

Q. WHAT ARE UTILITY FUND MANAGERS EXPECTING GROWTH TO BE?

A. In the May 10, 2004 publishing of Electric Utility Week Bill Tilles, portfolio manager for The Kinetic Utility Funds, had the following to say;

> *"The current trend to "basics" business plans is a signal companies over-reached for growth rates of 8% using unregulated ventures...Utilites should not chase exorbitant growth rates because the best profit potential for the industry will continue to be in the regulated sector...Growth rates for utilities have been trending down, and a 3%-4% rate is more realistic than the rates and expectations of previous years."*

Q. WHAT ARE TRADE JOURNALS EXPECTING INDUSTRY GROWTH TO BE?

A. In the October 2004 issue of "Public Utilities Fortnightly", George W. Bilicic and Ian C. Connor had the following to say:

> *"Further, it is almost certainly the case that the current average long-term growth rate for the U.S. electric industry of 4.6 percent is too optimistic.* ***The industry's true long-term growth proposition is closer to 2 to 3 percent****, and then only if the industry is able to successfully execute on cost-cutting initiatives. In this regard, it is worth noting that during the past 30 years the industry has achieved a compound average growth rate of only 1 percent."* (p. 68) (emphasis added).

Q. AFTER REVIEWING ALL OF THIS EVIDENCE, WHAT IS YOUR TAKE ON THE VALUE LINE GROWTH RATE PROJECTION OF 6.00%?

A. I believe it is clear that this single analyst's 6.00% growth rate projection is an outlier and simply does not represent the consensus opinion of investor expectations.

Q. WHAT WOULD WITNESS DONALD A. MURRY'S DCF ROE RANGE BE IF YOU ADJUSTED HIS RECOMMENDED GROWTH RATE TO A MORE REALISTIC LEVEL OF 3.00%?

A. It would be 8.88% - 10.53%.

Q. WITH RESPECT TO THE HIGH END OF HIS DCF ROE RANGE, 13.53%, DID WITNESS DONALD A. MURRY CALCULATE THE DIVIDEND YIELD OVER A 52-WEEK PERIOD?

A. Yes, as stated earlier, the high end of witness Donald A. Murry's selected DCF range was taken from the high end of his "52-week" DCF analysis on Empire. As seen on Schedule DAM-17 of his direct testimony, witness Donald A. Murry calculated the dividend yield range in his "52-week" DCF analysis by dividing Empire's expected dividend by its 52-week high and 52-week low trading price.

Q. DO YOU BELIEVE THAT THIS IS APPROPRIATE?

A. No. Calculating the dividend yield in this manner provides no useful information for this Commission because the data is simply too old to give an accurate representation of what investors are currently expecting. For example, as illustrated on schedule DAM-17 of his direct testimony, witness Donald A. Murry used Empire's 52-week low trading price of $17.00 in calculating the high end of his dividend yield, 13.53%. This $17.00 trading price dates back to March 2003. Interestingly, Empire's stock has not been trading in the $17.00 range since April 2003. To say that data from April 2003 is representative of current investor expectations is simply not realistic.

Q. WHAT HAPPENDED TO THE LEVEL OF INTEREST RATES OVER WITNESS DONALD A. MURRY'S 52-WEEK SAMPLE PERIOD?

A. Between March 2003 and March 2004, the effective federal funds rate declined from 1.25% to 1.00%. Thus, in general, the overall cost of capital had declined between March 2003 and March 2004.

Q. WITH RESPECT TO THE LOW END OF HIS DCF ROE RECOMMENDATION, 11.88%, DID WITNESS DONALD A. MURRY CALCULATE HIS DIVIDEND YIELD OVER A TWO-WEEK PERIOD?

A. Yes, as stated earlier, the low end of witness Donald A. Murry's selected DCF range was taken from the high end of his "current" DCF analysis on Empire. As seen on Schedule DAM-18 of his direct testimony, witness Donald A. Murry calculated the dividend yield range in his "current" DCF analysis by dividing Empire's expected dividend by its average two-week high and average two-week low stock price.

Q. OVER WHAT TWO-WEEK PERIOD DID WITNESS DONALD A. MURRY CALCULATE THE AVERAGE HIGH AND LOW STOCK PRICES?

A. Looking at witness Donald A. Murry's work papers, provided in response to OPC data request number 2017, the average high and low stock prices were calculated over a two-week period beginning January 26, 2004 and ending February 6, 2004.

Q. DO YOU BELIEVE THAT THIS IS APPROPRIATE?

A. No. Similar to the problem with witness Donald A. Murry's 52-week sample, this data is simply too old to give an accurate representation of current investor expectations. Witness Donald A. Murry filed his direct testimony on April 30, 2004, to say that data from January 2004 was representative of current investor expectations on April 30, 2004 is a stretch.

Q. WHAT WAS THE DISREGARDED LOW END OF WITNESS DONALD A. MURRY'S ''CURRENT'' AND ''52-WEEK'' DCF ANALYZES?

A. As illustrated on schedules DAM-17 and DAM-18 of his direct testimony, they were 7.80% and 7.70% respectively.

Q. WHAT WAS WITNESS DONALD A. MURRY'S JUSTIFICATION FOR SELECTING THE HIGH END OF HIS ''CURRENT'' AND ''52-WEEK'' DCF RANGES?

A. Witness Donald A. Murry justifies his selection on page 22, lines 15-17 of his direct testimony:

> *"... Empire's financial situation leaves no margin for error in this case. For this reason, and the nature of the DCF method itself, the high end of the range of estimates is more realistic for Empire."*

Q. DO YOU AGREE WITH WITNESS DONALD A. MURRY'S JUSTIFICATION?

A. No, I do not. Putting aside, for the moment, the fact that I believe witness Donald A. Murry's ROE recommendation is heavily inflated to begin with, I believe witness Donald A. Murry's method for selecting his ROE range unjustly shifts all the risk of his analysis onto the shoulders of ratepayers. By selecting the high end of his range because there is "no margin for error", witness Donald A. Murry is essentially saying that he is not really sure where Empire's actual cost of equity falls in his estimated range and that if there is any error in his recommendation, he wants to make sure that the error costs ratepayers and not Empire. Consequently, if this Commission adopts witness Donald A. Murry's ROE recommendation, there is a good possibility that ratepayers will be paying excessive rates correlating to an allowed ROE that is higher than Empire's actual cost of capital.

Capital Asset Pricing Model:

Q. DOES WITNESS DONALD A. MURRY INCLUDE A SIZE PREMIUM ADJUSTMENT IN ONE OF HIS CAPM ANALYZES?

A. Yes.

Q. DO YOU AGREE WITH INCLUDING SUCH A SIZE PREMIUM ADJUSTMENT?

A. No, the CAPM is a market-based model. Therefore, the simple fact that Empire is a small cap company does not merit any "risk adjustment". This is because any risk associated with Empire's small size is already factored into its market derived stock price and is therefore already factored into its beta and CAPM return. Consequently, there is no need to make a sized based risk adjustment.

Q. WHAT WOULD BE THE RESULT OF THE CAPM ANALYSIS ON SCHEDULE DAM-21 WITHOUT THIS IMPROPER SIZE ADJUSTMENT?

A. The cost of equity would be 9.60%, (4.55% dividend yield + 5.05% risk-free rate).

Q. WHAT MARKET RETURN DID WITNESS DONALD A. MURRY USE IN HIS SECOND CAPM ANALYSIS SHOWN ON SCHEDULE DAM-20 OF HIS DIRECT TESTIMONY?

A. Witness Donald A. Murry used a market total return of 14.55%.

Q. HOW DID WITNESS DONALD A. MURRY DEVELOP THIS MARKET RETURN?

A. Witness Donald A. Murry developed this return by averaging the Ibbotson Associates published 1926-2002 total arithmetic return on large company stocks with the 1926-2002 total arithmetic return on small company stocks, [(12.2% + 16.9%)/2].

Q. IS THIS APPROPRIATE?

A. No.

Q. WHY NOT?

A. Because the total arithmetic return on small company stocks is calculated on the common equity of not only New York Stock Exchange (NYSE) listed companies but also on American Stock Exchange (AMEX) listed companies and National Association of Securities Dealers Automated Quotations (NASDAQ) listed companies.

Q. WHY IS THIS A PROBLEM?

A. This is a problem because the beta that witness Donald A. Murry uses in this CAPM analysis is provided by Value Line.

Q. HOW DOES VALUE LINE CALCULATE COMPANY BETAS?

A. Value Line calculates company betas by measuring the historical sensitivity of the their stock price to the overall fluctuations in the New York Stock Exchange Composite Index. Consequently, witness Donald A. Murry is using a beta that measures the sensitivity of Empire's stock price to fluctuations in the NYSE but uses a market return that encompasses not only NYSE listed companies but also AMEX listed companies and NASDAQ listed companies. This is a fundamental mismatch that results in an inaccurate cost of equity measurement.

Q. WHAT MARKET RETURN ESTIMATE SHOULD WITNESS DONALD A. MURRY HAVE USED?

A. Since witness Donald A. Murry is using a beta that measures the sensitivity of Empire's stock price to fluctuations in the NYSE, he should have used the arithmetic mean total return on large company stocks provided by Ibbotson Associates.

Q. WHY?

A. Because Ibbotson Associates uses the S&P 500, a good proxy for the NYSE, for its calculation of the total return on large company stocks.

Q. WHAT IS THE TOTAL RETURN ON LARGE COMPANY STOCKS PROVIDED BY IBBOTSON AND ASSOCIATES?

A. According to the 2004 Ibbotson and Associates Yearbook, the arithmetic mean (average) return on large company stocks is 12.40%, 215 basis points lower than witness Donald A. Murry's estimate.

Q. WHAT WOULD BE THE RESULT OF WITNESS DONALD A. MURRY'S SECOND CAPM ANALYSIS IF HE HAD CORRECTLY USED THE ARITHMETIC MEAN MARKET RETURN OF 12.40%?

A. The result would be as follows:

ROE = 5.54% + 0.65 * (12.40% - 6.20%)

ROE = 9.57%

Q. WHAT RISK-FREE RATE DID WITNESS DONALD A. MURRY USE IN HIS SECOND CAPM ANALYSIS SHOWN ON SCHEDULE DAM-20 OF HIS DIRECT TESTIMONY?

A. Witness Donald A. Murry uses two risk-free rate estimates. First he uses the arithmetic mean return on long-term corporate bonds provided by Ibbotson and Associates, 6.20%, to produce his risk premium estimate, (i.e. he subtracts this 6.20% from his estimate of the total market return). Then, witness Donald A. Murry adds the average January 2004 return on Moody's Aaa rated bonds, another proxy for the risk-free rate, of 5.54% to his beta adjusted risk premium, 5.43%, to come up with his ROE estimate of 10.97%.

Q. WHERE DID WITNESS DONALD A. MURRY OBTAIN THIS SECOND ESTIMATE FOR THE RISK-FREE RATE?

A. It appears as though he obtained it from a Federal Reserve Statistical Release dated February 9, 2004.

Q. SO WITNESS DONALD A. MURRY USES TWO VALUES FOR THE RISK-FREE RATE IN HIS SECOND CAPM ANALYSIS?

A. Yes.

Q. ISN'T THIS ESSENTIALLY A RISK-PREMIUM ANALYSIS?

A. Yes.

Q. DO YOU AGREE WITH WITNESS DONALD A. MURRY'S USE OF TWO DIFFERENT RISK-FREE RATE PROXIES?

A. No.

Q. WHY NOT?

A. Because the theoretical idea behind this type of analysis is to determine the risk premium that investors require for investing in the market as opposed to investing in risk-free securities. Generally, a historical time period is analyzed in order to estimate this risk premium and then the estimated risk premium, adjusted for the subject companies beta, is applied to the current yield on the selected proxy for the risk-free rate to develop an estimate for the subject company's cost of equity. Consequently, an analyst must stay consistent with the risk-free rate proxy used in the determination of the risk premium and the determination of the current yield on risk-free securities. This is because the risk premium an investor requires varies depending on the instrument used as a proxy for the risk-free rate. For example, the risk premium that investors require in order for them to invest their money in the market as opposed to long-term corporate bonds will generally be smaller than the risk premium that investors require in order for them to invest their money in the market as opposed to U.S. treasury securities. This is because long-term corporate bonds are assumed to have more risk than U.S. treasury securities. Consequently, it is inappropriate for an analyst to use one proxy for the risk-free rate when determining the market risk premium and another when determining the current yield on risk-free securities. An analyst that performs his or her analysis in this manner could produce virtually any desired result.

Risk Comparison:

Q. IS WITNESS DONALD A. MURRY CORRECT IN STATING THAT EMPIRE HAS A VALUE LINE SAFETY RANK OF 3?

A. Yes. According to Value Line, Empire has an "average" Safety Rank, indicating that it is riskier than witness Donald A. Murry's sample group. However, as of June 18, 2004, Value Line rates Empire's Timeliness at 4.

Q. COULD YOU PLEASE DEFINE WHAT THE VALUE LINE TIMELINESS RATING MEASURES?

A. Yes. The Value Line's Timeliness rating of a stock ranks that stock's probable relative market performance in the year ahead.

Q. WHAT DOES A TIMELINESS RATING OF 4 INDICATE?

A. According to Value Line, companies with a Timeliness rating of 4 are not expected to outperform most stocks over the next 12 months (i.e. they are not as risky as the market).

Q. HOW ARE WITNESS DONALD A. MURRY'S SAMPLE COMPANIES RATED WITH RESPECT TO TIMELINESS?

A. All but one of witness Donald A. Murry's sample companies have a Value Line Timeliness rating of 4. The one exception, CH Energy Group, has a Timeliness rating of 5 indicating a higher level of risk for this company.

Q. SO WHAT DOES VALUE LINE'S TIMELINESS RATING INDICATE ABOUT EMPIRE'S RISK COMPARED TO WITNESS DONALD A. MURRY'S SAMPLE COMPANIES?

A. It indicates that Empire is not riskier than witness Donald A. Murry's sample group.

Q. SO VALUE LINE'S SAFETY AND TIMELINESS RATINGS PROVIDE CONFLICTING EVIDENCE ON EMPIRE'S RISK COMPARED TO WITNESS DONALD A. MURRY'S PROXY GROUP?

A. Yes.

Q. IS THERE ANOTHER WAY TO MEASURE THE RISK OF A COMPANY?

A. Yes, an analyst could look at a company's beta.

Q. WHAT DOES BETA MEASURE?

A. Beta measures the sensitivity of a stocks return to changes in the return on the market portfolio. A company with a beta less than 1.0 is assumed to have less risk than the market, a company with a beta equal to 1.0 is assumed to be just as risky as the market, and a company with a beta greater than 1.0 is assumed to be riskier than the market.

Q. WHAT ARE THE BETAS OF WITNESS DONALD A. MURRY'S SAMPLE COMPANIES?

A. They are as follows:

Company		Beta
Central Vermont		0.50
MGE Energy		0.60
Hawaiian Electric		0.65
NSTAR		0.70
CH Energy Group		0.80
Pinnacle West		0.80

Q. WHAT IS EMPIRE'S BETA?

A. Empire's beta is 0.65.

Q. SO EMPIRE'S BETA FALLS APPROXIMATELY IN THE MIDDLE OF THE BETA RANGE FOR WITNESS DONALD A. MURRY'S SAMPLE GROUP?

A. Yes.

Q. WHAT DOES THIS INDICATE EMPIRE'S LEVEL OF RISK IS COMPARED TO WITNESS DONALD A. MURRY'S SAMPLE GROUP?

A. It indicates that Empire is marginally riskier than approximately half of witness Donald A. Murry's sample group and is marginally less risky than approximately half of witness Donald A. Murry's sample group.

REBUTTAL OF WITNESS JAMES H. VANDER WEIDE

Review of Witness Vander Weide's Methodology:

Q. PLEASE EXPLAIN HOW WITNESS VANDER WEIDE DEVELOPED HIS RATE OF RETURN RECOMMENDATION FOR EMPIRE.

A. Witness Vander Weide developed his rate of return recommendation in the following manner. First, he performed a DCF analysis on a proxy group of electric companies and a DCF analysis on a proxy group of natural gas companies (LDC's). He then averaged these two estimates to produce a DCF return on equity estimate of 9.90%. Next, witness Vander Weide performed an "ex-ante" risk premium analysis on a proxy group of electric companies and an "ex-ante" risk premium analysis on a proxy group of natural gas companies. He then averaged these two estimates to produce an "ex-ante" risk premium return on equity estimate of 11.02%. Finally, witness Vander Weide performed an "ex-post" risk premium analysis that resulted in a return on equity estimate of 11.20%. Upon reviewing all three of his return on equity estimates, witness Vander Weide determined that the cost of equity for his proxy companies was 10.70%.

After estimating the cost of equity for his proxy groups, witness Vander Weide developed a rate of return (ROR) estimate for both his electric proxy group and his natural gas proxy group, 7.71% and 8.08% respectively. Witness Vander Weide averaged these two ROR estimates together to produce a proxy group ROR estimate of 7.90%. Next, witness Vander Weide deemed that Empire's ROR should be equal to the average ROR of his proxy groups and thus estimated Empire's ROR to be 7.90%. Upon developing an estimate of Empire's ROR, witness Vander Weide backed into his ROE recommendation for Empire of 11.27%.

Capital Structure\Risk Comparison:

Q. DOES WITNESS VANDER WEIDE COMPARE EMPIRE'S CAPITAL STRUCTURE TO THE CAPITAL STUCTURES OF HIS ELECTRIC AND NATURAL GAS PROXY GROUPS ON PAGE 51 OF HIS DIRECT TESTIMONY?

A. Yes.

Q. IS THIS AN ACCURATE COMPARISON?

A. Absolutely not.

Q. WHY NOT?

A. Because witness Vander Weide compares Empire's **book value** capital structure to the **market/book hybrid** capital structures of his electric and natural gas proxy groups.

Q. PLEASE EXPLAIN WHAT A BOOK CAPITAL STRUCTURE IS.

A. A book capital structure represents the actual mix of capital used by a firm. It is based on the actual dollar amount of each form of capital (i.e. common equity, long-term debt, and preferred stock)

appearing on the books of the firm. With respect to regulated companies, it represents the actual funds used in the construction or acquisition of rate base assets.

Q. PLEASE EXPLAIN THE MARKET/BOOK HYBRID CAPITAL STRUCTURE THAT WITNESS VANDER WEIDE ILLUSTRATES FOR HIS ELECTRIC AND NATURAL GAS PROXY GROUPS IN TABLES 3 & 4 OF HIS DIRECT TESTIMONY.

A. Witness Vander Weide's proxy company capital structures are comprised of the **market value** of equity and the **book value** of long-term debt and preferred stock. Witness Vander Weide calculated the market value of equity by multiplying the average three-month high/low trading price by the number of shares outstanding. The book value of long-term debt and preferred stock was taken from Value Line.

Q. PLEASE EXPLAIN WHY IT IS INAPPROPRIATE FOR WITNESS VANDER WEIDE TO COMPARE EMPIRE'S BOOK VALUE CAPITAL STRUCTURE TO THE MARKET/BOOK HYBRID CAPITAL STRUCTURES OF HIS PROXY GROUPS.

A. Simply put, it is an apples to oranges comparison. The faulty capital structure methodology that witness Vander Weide used for his proxy groups artificially increases common equity's share of the capital structure and decreases long-term debt's share of the capital structure.

Q. WHAT WOULD EMPIRE'S CAPITAL STRUCTURE BE USING WITNESS VANDER WEIDE'S FAULTY MARKET/BOOK VALUE CAPITAL STRUCTURE METHODOLOGY?

A. Empire's capital structure would be as follows:

Capital	Amount	Percentage
Long-Term Debt	$337,427,748.00	37.10%
Preferred Stock	$48,115,245.00	5.29%
Common Equity	$524,001,479.00	57.61%
	$909,544,472.00	100.00%

Consequently, witness Vander Weide's claim on page 50, lines 7-9 of his direct testimony that Empire's capital structure is more highly leveraged than the average capital structures of his proxy groups is simply not true. Clearly, Empire is shown to have less leverage, 37.10% long-term debt as compared to electric's 41.76% and LDC's 37.39%, than the average capital structures of witness Vander Weide's proxy groups when an apples to apples comparison is made based on witness Vander Weide's own methodology.

Q. DOES WITNESS VANDER WEIDE EXPLAIN THAT HE COMPARED EMPIRE'S BOOK VALUE CAPITAL STRUCTURE TO THE MARKET/BOOK VALUE CAPITAL STRUCTURES OF HIS PROXY COMPANIES IN HIS DIRECT TESTIMONY?

A. No, witness Vander Weide makes no mention of this apples to oranges comparison in his direct testimony.

Q. DOES WITNESS VADER WEIDE ILLUSTRATE THE CALCULATION OF HIS MARKET/BOOK VALUE CAPITAL STRUCTURES IN THE SCHEDULES ATTACHED TO HIS DIRECT TESTIMONY?

A. No. In order to investigate the capital structure tables on page 51 of his direct testimony, I had to decipher witness Vander Weide's work papers to expose his flawed and misleading methodology.

Q. DOES WITNESS VANDER WEIDE USE THE AVERAGE VALUE LINE SAFETY RANKING AND S&P BOND RATINGS OF HIS PROXY GROUPS TO SUPPORT HIS CLAIM THAT EMPIRE IS RISKIER THAN HIS PROXY GROUP?

A. Yes he did. However, witness Vander Weide neglected to point out the fact that Empire's beta, 0.65, is smaller than the average beta of both his LDC and electric proxy groups, 0.75 and 0.78 respectively. Empire's smaller beta contradicts witness Vander Weide's claim that his LDC and electric groups are conservative risk proxies for Empire.

<u>DCF Analysis</u>:

Q. DOES WITNESS VANDER WEIDE PERFORM A DCF ANALYSIS ON THE COMMON EQUITY OF EMPIRE?

A. No. Witness Vander Weide relied solely on proxy groups in his analysis of Empire's cost of capital.

Q DO YOU THINK THAT THIS IS APPROPRIATE?

A. Absolutely not. While proxy groups certainly are relied upon when a subject company does not have publicly traded stock, they generally should not be the primary focus of an analysis when the subject company has publicly traded stock. By neglecting to analyze Empire directly, witness Vander Weide has improperly ignored a vital source of relevant company specific information.

Q. WHY DIDN'T WITNESS VANDER WEIDE PERFORM A DCF ANALYSIS ON THE COMMON EQUITY OF EMPIRE?

A. The following is an excerpt from OPC data request number 2098:

Q. Please explain why witness Vander Weide did not perform a DCF analysis on the common equity of Empire District Electric Company, stock ticker symbol EDE.

A. ...Since there were fewer than three analysts included in the I/B/E/S average growth forecast for Empire, Empire was not included in the proxy company group.

Q. DO YOU THINK THAT THIS IS A LEGITIMATE REASON NOT TO PERFORM A DCF ANALYSIS ON THE COMMON EQUITY OF EMPIRE?

A. No.

Q. WHY NOT?

A. Because witness Vander Weide could have used a different consensus growth rate forecast to perform his analysis.

Q. WHAT OTHER CONSENSUS FORECASTS COULD WITNESS VANDER WEIDE HAVE USED?

A. He could have used the consensus forecast published by S&P or the consensus forecast published by Thomson.

Q. WOULD BOTH OF THESE CONSENSUS FORECAST ESTIMATES HAVE MEET WITNESS VANDER WEIDE'S SELECTION CRITERIA OF HAVING AT LEAST THREE CONTRIBUTING ANALYSTS?

A. Yes. As mentioned before, both the S&P growth rate estimate for Empire and the Thomson growth rate estimate for Empire are consensus estimates with each having four contributing analysts.

Q. USING HIS OWN METHODOLOGY, WHAT WOULD WITNESS VANDER WEIDE'S DCF RESULT FOR EMPIRE HAVE BEEN USING THE S&P CONSENSUS GROWTH RATE ESTIMATE FOR EMPIRE OF 2.00%?

A. Using his own DCF methodology, I determined that witness Vander Weide would have calculated Empire's ROE to be 8.22%. This calculation is illustrated in Rebuttal Schedule TA-1.

Q. USING HIS OWN METHODOLOGY, WHAT WOULD WITNESS VANDER WEIDE'S DCF RESULT FOR EMPIRE HAVE BEEN USING THE THOMSON CONSENSUS GROWTH RATE ESTIMATE FOR EMPIRE OF 3.00%?

A. Using his own DCF methodology, I determined that witness Vander Weide would have calculated Empire's ROE to be 9.30%. This calculation is illustrated in Rebuttal Schedule TA-1.

Q. WHAT WAS WITNESS VANDER WEIDE'S DCF RESULTS FOR HIS ELECTRIC COMPANY PROXY GROUP?

A. Witness Vander Weide's DCF results for his electric company proxy group was 9.4%.

Q. WHAT WAS WITNESS VANDER WEIDE'S DCF RESULTS FOR HIS NATURAL GAS PROXY GROUP?

A. Witness Vander Weide's DCF results for his natural gas proxy group was 10.4%.

Q. WHAT FORM OF THE DCF MODEL DID WITNESS VANDER WEIDE USE IN HIS ANALYSIS?

A. Witness Vander Weide used the quarterly form of the DCF model.

Q. DO YOU AGREE WITH WITNESS VANDER WEIDE'S USE OF THE QUARTERLY DCF MODEL?

A. No.

Q. WHY NOT?

A. The quarterly form of the DCF model is not appropriate because the expected quarterly dividends are calculated by adjusting the previous quarterly dividends by the entire amount of the expected growth rate. Consequently, the quarterly form of the DCF model tends to overstate the ROE expectations of investors.

Q. PLEASE EXPLAIN.

A. A simple example will clarify this point. Suppose Company X announced the following dividend payout schedule on January 1, 2004.

Dividend Date		Dividend
31-Mar-2004		$ 0.25
30-Jun-2004		$ 0.25
30-Sep-2004		$ 0.25
31-Dec-2004		$ 0.25

Suppose further that Company X announces on January 15, 2005 that it will increase its quarterly dividend to $0.30/share beginning March 31, 2005 [g = (($1.20-$1.00)/$1.00) = 20%]. It can easily be demonstrated that on average, an investor will only expect to receive about half of this 20.0% growth in dividends over the next year. This is because the dividend growth that an investor receives over the coming year is very much influenced by the timing of their investment.

Q. PLEASE DEMONSTRATE.

A. Scenario 1:

If the investor purchases a share of Company X between January 1, 2004 and March 31, 2004 and holds onto it for an entire year, then that investor's dividend income stream over the next year will be as follows:

31-Mar-2004		30-Jun-2004		30-Sep-2004		31-Dec-2004		
$0.25	+	$0.25	+	$0.25	+	$0.25	=	$1.00

Scenario 2:

If the investor purchases a share of Company X between April 1, 2004 and June 30, 2004 and holds on to it for an entire year, then that investor's dividend income stream over the next year will be as follows:

30-Jun-2004		30-Sep-2004		31-Dec-2004		31-Mar-2005		
$0.25	+	$0.25	+	$0.25	+	$0.30	=	$1.05

Scenario 3:

If the investor purchases a share of Company X between July 1, 2004 and September 30, 2004 and holds on to it for an entire year, then that investor's dividend income stream over the next year will be as follows:

30-Sep-2004		31-Dec-2004		31-Mar-2005		30-June-2005		
$0.25	+	$0.25	+	$0.30	+	$0.30	=	$1.10

Scenario 4:

If the investor purchases a share of Company X between October 1, 2004 and December 31, 2004 and holds onto it for an entire year, then that investor's dividend income stream over the next year will be as follows:

31-Dec-2004		31-Mar-2005		30-June-2005		30-Sept.-2005		
$0.25	+	$0.30	+	$0.30	+	$0.30	=	$1.15

Scenario 5:

Finally, if the investor purchases a share of Company X between December 31, 2004 and January 15, 2005, the day the dividend increase is announced, and holds onto it for an entire year, then that investor's dividend income stream over the next year will be as follows:

31-Mar-2005		30-June-2005		30-Sept.-2005		31-Dec-2005		
$0.30	+	$0.30	+	$0.30	+	$0.30	=	$1.20

As demonstrated, the only time that the investor will receive the entire amount of the 20.0% dividend growth is when he or she purchases a share of Company X between the last quarterly dividend payment and the announcement of a dividend increase (i.e. Scenario 5). Therefore, on average, a rational investor will expect to receive the mean of the possible dividend income streams, [($1.00 + $1.05 + $1.10 + $1.15 + $1.20)/5] = $1.10, [g = (($1.10-$1.00)/$1.00) = 10.0%]. The semi-annual form of the DCF model fully recognizes this phenomenon and therefore is the appropriate form of the DCF model to be used in a regulated utility's cost of equity analysis.

Q. WHAT ROE WOULD WITNESS VANDER WEIDE HAVE OBTAINED FOR HIS ELECTRIC PROXY GROUP IF HE HAD PROPERLY USED THE SEMI-ANNUAL FORM OF THE DCF MODEL?

A. Using his growth rate, price, and dividend calculation, I determined that witness Vander Weide would have calculated an ROE of 9.20% for his electric company proxy group. I have illustrated this calculation on Rebuttal Schedule TA-2.

Q. WHAT ROE WOULD WITNESS VANDER WEIDE HAVE OBTAINED FOR HIS NATURAL GAS PROXY GROUP IF HE HAD PROPERLY USED THE SEMI-ANNUAL FORM OF THE DCF MODEL?

A. Using his growth rate, price, and dividend calculation, I determined that witness Vander Weide would have calculated and ROE of 9.71% for his natural gas company proxy group. This calculation is also illustrated on Rebuttal Schedule TA-3.

Q. WHAT IS THE AVERAGE OF THESE TWO ROE RESULTS?

A. The average is 9.45%.

Q. IS THERE ANY RISK DIFFERENCE BETWEEN WITNESS VANDER WEIDE'S PROXY GROUPS AND EMPIRE THAT WOULD INDICATE TO YOU THAT EMPIRE SHOULD BE ALLOWED AN ROE HIGHER THAN THE 9.45% INDICATED BY THE AVERAGE OF THESE TWO DCF ANALYZES?

A. No. In fact, as discussed earlier, when an apples to apples comparison of capital structures is performed using witness Vander Weide's own methodology, Empire's capital structure is shown to have less leverage than the capital structures of witness Vander Weide's electric and natural gas proxy groups. This implies, all else equal, that Empire is not as risky as the proxy groups and thus does not need an ROE as high as 9.45%.

Q. DOES THIS PROVIDE FURTHER SUPPORT FOR YOUR ROE RECOMMENDATION OF 8.96% - 9.41%?

A. Yes.

<u>Ex-Ante Risk Premium Analysis</u>:

Q. HAVE YOU REVIEWED WITNESS VANDER WEIDE'S EX-ANTE RISK PREMIUM ANALYSIS?

A. Yes.

Q. DO YOU HAVE ANY CONCERNS WITH HIS METHODOLOGY?

A. Yes.

Q. WHAT ARE YOUR CONCERNS?

A. The first concern that I have with witness Vander Weide's methodology is that he calculates his risk premium over a mere 68 month period.

Q. WHY DOES THIS CONCERN YOU?

A. When an analyst performs a risk premium analysis, he or she is trying to determine the risk premium expected by investors over a long-term investment horizon. Consequently, when performing a historical analysis, analysts tend to assume that the average risk-premium realized by investors over a historically long period of time is an appropriate proxy for the risk-premium that investors expect to receive going forward. The importance of measuring the realized risk-premium over a long period of time is that short-run periods during which investors realize a risk-premium that is higher than expected are offset by short-run periods during which investors realize a risk-premium that is lower than expected. Essentially, the idea is to measure the risk premium over a long period of time in order to smooth out short-term volatility. Consequently, witness Vander Weide's mere 68 month sample window is more susceptible to short-run market volatility than a longer sample window and is therefore subject to reliability concerns.

Q. DO YOU HAVE OTHER CONCERNS ABOUT WITNESS VANDER WEIDE'S EX-ANTE RISK PREMIUM ANALYSIS?

A. Yes, another concern I have with witness Vander Weide's ex-ante risk premium analysis is that it is heavily reliant on the accuracy of his DCF estimate. As seen on Schedules JVW-5 and JVW-6 of his direct testimony, the monthly risk premium estimate is calculated by subtracting the average monthly yield on Moody's A-rated bonds from the monthly DCF return on equity estimate. Consequently, the monthly risk premium that witness Vander Weide calculates is only as good as

his DCF estimate. As discussed earlier, witness Vander Weide reliance on the quarterly DCF model tends to overstate investor ROE expectations. Consequently, witness Vander Weide's risk premium estimate will be overstated.

Ex-Post Risk Premium Analysis:

Q. PLEASE EXPLAIN WITNESS VANDER WEIDE'S EX-POST RISK PREMIUM ANALYSIS.

A. Witness Vander Weide performed two ex-post risk premium analyzes. For his first ex-post risk premium model, witness Vander Weide calculated the yearly return on the S&P 500 and the yearly return on Moody's A-rated Utility Bonds from 1937 – 2003. He then subtracted the return on the Moody's A-rated Utility Bonds from the corresponding yearly S&P 500 return to produce an estimate of the yearly risk premium. This left him with an estimate of 66 yearly risk premiums which he then averaged to produce his estimated risk premium of 5.2%. Upon determining the risk premium, witness Vander Weide adds it to the expected yield on A-rated utility bonds, 6.3%, to develop his ROE estimate of 11.5%.

For his second ex-post risk premium analysis witness Vander Weide calculated the yearly return on the S&P Utilities Index and the yearly return on Moody's A-rated Utility Bonds from 1937 – 2003. He then subtracted the return on the Moody's A-rated Utility Bonds from the corresponding yearly S&P Utilities Index return to produce an estimate of the yearly risk premium.

This left him with an estimate of 66 yearly risk premiums which he then averaged to produce his estimated risk premium of 4.6%. Upon determining the risk premium, witness Vander Weide adds it to the expected yield of A-rated utility bonds, 6.3%, to develop his ROE estimate of 10.9%.

Q. DO YOU AGREE WITH WITNESS VANDER WEIDE'S S&P 500 EX-POST RISK PREMIUM ANALYSIS?

A. No.

Q. WHY NOT?

A. Because the risk premium that witness Vander Weide estimates and uses in his ROE determination is the **market** risk premium. Thus, it is the premium that corresponds to the markets overall risk level not Empire's overall risk level. Witness Vander Weide makes no beta adjustment to his S&P 500 ex-post risk premium analysis to account for the fact that Empire is not as risky as the market.

Q WHAT AGAIN DOES BETA MEASURE?

A. As explained earlier, beta is a relative measure of the sensitivity of a stocks return to changes in the return on the market portfolio. The market overall, the S&P 500 in this analysis, has a beta of 1.0. Firms with a beta less than 1.0 are assumed to not have as much risk relative to the market and firms with a beta greater than 1.0 are assumed to have more risk relative to the market.

Q. WHAT IS EMPIRE'S BETA?

A. Empire's beta is 0.65.

Q. HOW SHOULD WITNESS VANDER WEIDE HAVE ADJUSTED HIS S&P 500 EX-POST RISK PREMIUM ANALYSIS TO ACCOUNT FOR THE FACT THAT EMPIRE IS NOT AS RISKY AS THE MARKET?

A. He should have multiplied his estimated market risk premium 5.2%, by Empire's beta, 0.65.

Q. WHAT WOULD BE THE EFFECT OF THIS BETA ADJUSTMENT ON WITNESS VANDER WEIDE'S S&P 500 EX-POST RISK PREMIUM ANALYSIS?

A. After making the proper beta adjustment (5.2% * 0.65), witness Vander Weide's would have estimated the risk premium to be 3.38%. Consequently, his ROE estimate would have been 9.68%, (3.38% Risk Premium + 6.3% Expected Yield on A-rated Utility Bonds).

Q. ARE THERE OTHER PROBLEMS WITH WITNESS VANDER WEIDE'S S&P 500 EX-POST RISK PREMIUM ANALYSIS?

A. Yes, the risk premium is not observable via foresight or hindsight. Consequently, witness Vander Weide's market risk premium estimate of 5.2% is just simply that, an estimate. Thus, the accuracy of his S&P 500 ex-post ROE estimate hinges on the accuracy of his risk premium estimate.

Q. IS THERE A WAY TO SCALE THE ACCURACY OF WITNESS VANDER WEIDE'S MARKET RISK PREMIUM ESTIMATE?

A. Yes, a good way to scale witness Vander Weide's market risk premium estimate is to look at its standard deviation.

Q. PLEASE DEFINE STANDARD DEVIATION.

A. Standard deviation is defined as a measure of the dispersion of possible outcomes around the expected value of a random variable. Essentially, it is a measure of the volatility around the mean.

Q. WHAT IS THE STANDARD DEVIATION OF WITNESS VANDER WEIDE'S MARKET RISK PREMIUM ESTIMATE?

A. As illustrated on Rebuttal Schedule TA-4, the standard deviation of witness Vander Weide's market risk premium estimate is 16.85%. Thus, the standard deviation of witness Vander Weide's market risk premium estimate is more than three times larger than the mean, 5.2%. This indicates substantial volatility.

Q. WHAT DOES THIS LARGE STANDARD DEVIATION SAY ABOUT THE RELIABILITY OF WITNESS VANDER WEIDE'S MARKET RISK PREMIUM ESTIMATE?

A. This large standard deviation indicates that witness Vander Weide's market risk premium estimate is very questionable. Statistically speaking, the true value of this normally distributed random variable has a 68% chance of lying within plus or minus one standard deviation of the mean and a 95% chance of lying within plus or minus two standard deviations of the mean. Therefore, the smaller the standard deviation, the more reliable the mean estimate is. However, with respect to witness Vander Weide's market risk premium, the standard deviation is so large that the resulting intervals are virtually meaningless.

Q. PLEASE EXPLAIN.

A. As stated above, the mean and standard deviation of witness Vander Weide's risk premium is 5.2% and 16.9%, respectively. Thus, witness Vander Weide can only be 68% sure that the true risk

premium falls between –11.70% and 22.10% and can only be 95% sure that the true risk premium falls between –28.6% and 39.0%. Consequently, witness Vander Weide's risk premium estimate posts serious reliability concerns.

Q. DOES WITNESS VANDER WEIDE'S S&P UTILITIES EX-POST RISK PREMIUM ANALYSIS SUFFER FROM THE SAME RELIABILITY CONCERN?

A. Yes. As seen on Rebuttal Schedule TA-5, Witness Vander Weide's S&P utilities ex-post risk premium analysis resulted in a mean risk premium estimate of 4.6% with a standard deviation of 14.5%. Thus, it suffers from the same reliability issues that his S&P 500 ex-post risk premium analysis suffers from.

ROE & ROR Recommendations:

Q. WHAT IS WITNESS VANDER WEIDE'S ROE RECOMMENDATION FOR EMPIRE?

A. Witness Vander Weide recommends an 11.27% ROE for Empire.

Q. HOW DOES WITNESS VANDER WEIDE DEVELOP THIS RECOMMENDATION?

A. As discussed earlier, witness Vander Weide develops this recommendation by adopting his proxy groups weighted average cost of capital for Empire's weighted average cost of capital and backing into Empire's ROE.

Q. PLEASE ILLUSTRATE.

A. Witness Vander Weide solves the following algebraic equation for Empire's ROE.

(Empire's Common Equity %)*(Empire's ROE) + (Empire's Long-Term Debt %) * (Empire's Embedded Cost of Long-Term Debt) + (Empire's Preferred Stock %) * (Empire's Embedded Cost of Preferred Stock) = Mean Proxy Group Weighted Average Cost of Capital.

(49.81%) * (Empire's ROE) + (43.89%) * (4.42%) + (6.30%) * (5.44%) = 7.90%

ROE = 11.27%

Q. HOW DOES WITNESS VANDER WEIDE JUSTIFY THIS METHODOLOGY?

A. The following is an excerpt from page 50 of his direct testimony:

Q. You noted earlier that the cost of equity depends on a company's capital structure. Is there any way to adjust the 10.7% cost of equity for your proxy companies to reflect the higher leverage in Empire's capital structure?

A. Yes. Since my proxy groups are comparable in risk to Empire, Empire should have the same weighted average cost of capital as my proxy companies. It is a simple matter to determine what cost of equity Empire should have in order to have the same weighted average cost of capital as my proxy companies

Q. Have you performed such a calculation?

A. Yes. I adjusted the 10.71 percent average cost of equity for my proxy groups by recognizing that to attract capital, Empire must have the same weighted average cost of capital as my proxy group.

Q. IS THIS UNORTHODOX APPROACH APPROPRIATE?

A. Absolutely not. Witness Vander Weide's mean proxy group weighted average cost of capital is simply not comparable to Empire in this manner.

Q. WHY NOT?

A. Because as discussed above, witness Vander Weide neglects to inform this Commission that the mean proxy group weighted average cost of capital (the right hand side of the equation) is arbitrarily high because it is calculated using a market/book hybrid capital structure and the replacement cost of long-term debt and preferred stock however, Empire's capital structure and cost rates (the left hand side of the equation) are based solely on book value.

Q. PLEASE EXPLAIN.

A. As discussed earlier, witness Vander Weide implemented a flawed methodology in the development of his proxy group capital structures that resulted in artificially high common equity ratios and artificially low long-term debt ratios. This flawed methodology benefits Empire in two ways. First, as previously discussed, a blind comparison of Empire's **book value** capital structure to the contrived capital structures of witness Vander Weide's proxy groups would incorrectly indicate that Empire is more highly leveraged than the proxy groups and thus requires a higher ROE, all else equal.

Secondly, looking at Tables 3 & 4 on page 51 of witness Vander Weide's direct testimony, the artificially inflated common equity percentage results in a artificially higher weighted average cost of capital for his proxy groups because, as illustrated, equity is the most expensive form of capital.

Q. ARE THERE ANY OTHER PROBLEMS WITH THE WAY IN WHICH WITNESS VANDER WEIDE CALCULATED THE WEIGHTED AVERAGE COST OF CAPITAL FOR HIS PROXY GROUPS?

A. Yes. As discussed, witness Vander Weide calculates the percentage of long-term debt and preferred stock in the capital structure on book values. However, the cost rates that he attributes to long-term debt and preferred stock are the replacement (market) costs not the book costs. This is a fundamental mismatch that results in an incorrect cost of capital measurement.

Q. DOES WITNESS VANDER WEIDE HAVE ANY SUPPORT FOR HIS UNORTHODOX ROE METHODOLOGY?

A. Apparently not. The following is an excerpt from OPC data request number 2082:

Information Requested: *In his direct testimony, witness Vander Weide backs into his return on equity (ROE) recommendation for Empire by setting Empire's book based capital structure and associated embedded costs of long-term debt and preferred stock equal to a market based weighted average cost of capital for a proxy group of companies and solving that equation for Empire's ROE. Please provide copies of any and all textbook chapters, journal articles, periodicals, etc. that either support or criticize developing an ROE recommendation for a regulated utility by setting that utility's book based capital structure and associated embedded costs of long-term debt and preferred stock equal to a market based weighted average cost of capital for a proxy group of companies and solving that equation for the regulated utility's ROE. Please provide a complete citation of all sources provided.*

Response: *... Dr. Vander Weide has not explored whether there are articles or textbook chapters that specifically discuss setting the required return for a regulated public utility in this manner. ...*

Q. WOULD THE ADOPTION OF WITNESS VANDER WEIDE'S METHODOLOGY BE CONSISTENT WITH THIS COMMISSIONS LONG STANDING HISTORY OF ORIGINAL COST RATEMAKING?

A. No.

Q. WHY NOT?

A. Because the average proxy group weighted average cost of capital that witness Vander Weide deems to be appropriate for Empire, 7.90%, is calculated using the replacement cost of preferred stock and long-term debt. Consequently, if the Commission adopts witness Vander Weide's recommendation, it will be abandoning original cost ratemaking.

REBUTTAL OF WITNESS BRAD P. BEECHER

INTERIM ENERGY CHARGE:

Q. HAS EMPIRE FILED TARIFFS FOR AN INTERIM ENERGY CHARGE?

A. Yes.

Q. HAS YOUR ANALYSIS CAPTURED THE EFFECT OF AN INTERIM ENERGY CHARGE ON EMPIRE'S COST OF EQUITY AND OVERALL COST OF CAPITAL?

A. No.

Q. HAVE ANY OF THE ANALYSES PRESENTED BY THE COST OF CAPITAL WITNESSES IN THIS CASE CAPTURED THE EFFECT OF AN INTERIM ENERGY CHARGE ON EMPIRE'S COST OF EQUITY AND OVERALL COST OF CAPITAL?

A. No.

Q. WHAT WOULD BE THE EFFECT ON EMPIRE'S OVERALL LEVEL OF RISK AND THEREFORE OVERALL COST OF CAPITAL IF THIS COMMISSION IMPLIMENTED AN INTERIM ENERGY CHARGE FOR EMPIRE?

A. All else equal, it would decrease Empire's overall level of risk and therefore decrease Empire's overall cost of capital.

Q. IS THIS SOMETHING THAT THIS COMMISSION SHOULD KEEP IN MIND WHEN MAKING ITS COST OF CAPITAL DECISION?

A. Yes.

CORRECTIONS TO ALLEN DIRECT

CAPITAL STRUCTURE:

Q. WAS THE LEVEL OF PREFERRED STOCK ILLUSTRATED ON SCHEDULE TA-1 OF YOU DIRECT TESTIMONY CORRECT?

A. No. A small correction should be made to that schedule. Instead of showing the actual amount of preferred stock issued ($50,000,000.00), it should show the actual amount issued less issuance costs, $48,115,245.00.

Q. WHAT EFFECT DOES THIS CHANGE HAVE ON YOUR RECOMMENDED CAPITAL STRUCTURE?

A. As illustrated on Corrected Direct Schedule TA-1, the corrected capital structure is as follows:

	Amount	Percent
Common Stock Equity	$ 379,625,363.00	49.61%
Preferred Stock	$ 48,115,245.00	6.29%
Long Term Debt	$ 337,427,748.00	44.10%
	$ 765,168,356.00	100.00%

Q. WHAT EFFECT DOES THIS CHANGE HAVE ON YOUR RECOMMENDED RATE OF RETURN RANGE AND YOUR ESTIMATED PRE-TAX INTEREST COVERAGE RATIOS?

A. As illustrated on Corrected Direct Schedule TA-13, this change increased the low end of my ROR recommendation from 8.19% to 8.20% and had no effect on the high end of my ROR recommendation. With respect to my pre-tax interest coverage ratios, Corrected Direct Schedule TA-13, illustrates that the ratio corresponding to the low end of my ROR recommendation decreased from 4.17x to 4.16x and the ratio corresponding to the high end of my ROR recommendation decreased from 4.29x to 4.28x.

PROXY GROUP SELECTION CRITERIA:

Q. DOES ''APPENDIX F'' IN YOU DIRECT TESTIMONY ILLUSTRATE YOUR PROXY GROUP SLECTION CRITERIA ACCURATELY?

A. No, the following selection criteria was inadvertently left off of Appendix F:

6) Covered by C.A. Turner Utility Reports.

Q. HAVE YOU ATTACHED A CORRECTED COPY OF ''APPENDIX F'' TO YOUR REBUTTAL TESTIMONY?

A. Yes, it is attached as Corrected Appendix F.

SUMMARY OF CONCERNS WITH WITNESS DONALD A. MURRY AND WITNESS JAMES H. VANDER WEIDE'S ANALYSES

Q. PLEASE SUMMARIZE YOUR CONCERNS WITH WITNESS DONALD A. MURRY'S ANALYSIS.

A. A summary of my concerns with witness Donald A. Murry's analysis is as follows:

1) Allowed equity returns in other jurisdictions are not appropriate benchmarks for determining what returns investors actually require.

2) Use of a 6.00% growth rate in DCF analysis drastically overstates investor expectations.

3) Used stale stock price data in DCF analysis.

4) Performed inappropriate size adjustment in first CAPM analysis.

5) Incorrectly used an inflated market return in second CAPM analysis.

6) Inappropriately used two proxies for the risk-free rate in second CAPM analysis.

Q. PLEASE SUMMARIZE YOU CONCERNS WITH WITNESS VANDER WEIDE'S ANALYSIS.

A. A summary of my concerns with witness Vander Weide's analysis is as follows:

1) Makes inappropriate apples to oranges capital structure comparison.

2) Neglects to perform a DCF analysis on the common equity of Empire.

3) Uses quarterly form of the DCF model.

4) Ex-ante risk premium analysis is performed over a short time horizon.

5) Ex-ante risk premium analysis is heavily reliant on accuracy of DCF estimate.

6) Neglects to adjust S&P 500 ex-post market risk premium estimate for Empire's beta.

7) The standard deviations of the S&P 500 ex-post risk premium analysis and the S&P Utility ex-post risk premium analysis are too large to put any reliance on the mean estimate.

8) Inappropriately backs into ROE estimate.

9) Resulting ROR recommendation for Empire is not consistent with original cost ratemaking.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes, it does.

Allen - Rebuttal
ER-2004-0570 Empire District Electric Company

Empire's DCF Return on Equity Using Witness Vander Weide's Methodology

S&P Consensus Growth:

Company Name	November 2003 High Trading Price	November 2003 Low Trading Price	December 2003 High Trading Price	December 2003 Low Trading Price	January 2003 High Trading Price	January 2003 Low Trading Price	Expected Dividend Qtr 1	Expected Dividend Qtr 2	Expected Dividend Qtr 3	Expected Dividend Qtr 4	Last Dividend Qtr 1	Last Dividend Qtr 2	Last Dividend Qtr 3	Last Dividend Qtr 4	3-Mo. Ave. Price	Dividend	Expected Growth (g)	Cost of Equity (k)	1+g	1+k
Empire	22.25	21.15	22.05	21	22	21.38	0.3264	0.3264	0.3264	0.3264	0.32	0.32	0.32	0.32	21.64	1.35	2.00%	**8.22%**	1.02	1.0822

Thomson Consensus Growth:

Company Name	November 2003 High Trading Price	November 2003 Low Trading Price	December 2003 High Trading Price	December 2003 Low Trading Price	January 2003 High Trading Price	January 2003 Low Trading Price	Expected Dividend Qtr 1	Expected Dividend Qtr 2	Expected Dividend Qtr 3	Expected Dividend Qtr 4	Last Dividend Qtr 1	Last Dividend Qtr 2	Last Dividend Qtr 3	Last Dividend Qtr 4	3-Mo. Ave. Price	Dividend	Expected Growth (g)	Cost of Equity (k)	1+g	1+k
Empire	22.25	21.15	22.05	21	22	21.38	0.3296	0.3296	0.3296	0.3296	0.32	0.32	0.32	0.32	21.64	1.36	3.00%	**9.30%**	1.03	1.0930

Allen - Rebuttal
ER-2004-0570 Empire District Electric Company

Witness Vander Weide's Electric
Proxy Group ROE with Semi-Annual
DCF Model

Company Name	November 2003 High Trading Price	November 2003 Low Trading Price	December 2003 High Trading Price	December 2003 Low Trading Price	January 2003 High Trading Price	January 2003 Low Trading Price	Last Dividend Qtr 1	Last Dividend Qtr 2	Last Dividend Qtr 3	Last Dividend Qtr 4	3-Mo. Ave. Price	Dividend	January 2004 I/B/E/S	Cost of Equity
ALLETE	30.90	29.11	30.83	29.53	33.92	30.00	0.2830	0.2830	0.2830	0.2830	30.72	1.132	9.17%	13.02%
Ameren Corp.	45.09	42.55	46.17	44.05	48.34	44.91	0.6350	0.6350	0.6350	0.6350	45.19	2.540	3.00%	8.71%
Avista Corp.	17.93	16.70	18.70	17.18	18.57	17.60	0.1200	0.1250	0.1250	0.1250	17.78	0.495	4.33%	7.17%
Black Hills	32.50	30.98	33.15	27.76	30.75	29.37	0.3000	0.3000	0.3000	0.3100	30.75	1.210	5.57%	9.61%
Cinergy Corp.	36.97	35.19	38.86	36.47	39.23	37.48	0.4500	0.4600	0.4600	0.4700	37.37	1.840	3.80%	8.82%
Consol. Edison	41.31	38.80	43.48	40.05	44.10	42.21	0.5600	0.5600	0.5600	0.5600	41.66	2.240	2.90%	8.36%
Dominion Resources	61.74	59.27	64.45	60.18	64.70	61.20	0.6450	0.6450	0.6450	0.6450	61.92	2.580	5.48%	9.76%
DPL Inc.	19.96	18.20	21.35	19.24	20.97	19.66	0.2350	0.2350	0.2350	0.2400	19.90	0.945	4.33%	9.18%
DTE Energy	37.71	35.12	39.76	37.24	39.99	38.27	0.5150	0.5150	0.5150	0.5150	38.02	2.060	3.87%	9.39%
Duke Energy	18.28	17.08	20.89	17.68	22.15	19.90	0.2750	0.2750	0.2750	0.2750	19.33	1.100	4.02%	9.83%
Energy East Corp.	23.13	21.64	23.20	22.00	23.75	22.29	0.2500	0.2500	0.2500	0.2600	22.67	1.010	4.50%	9.06%
Entergy Corp.	55.13	51.06	57.24	52.88	58.51	56.01	0.3500	0.4500	0.4500	0.4500	55.14	1.700	5.92%	9.09%
FirstEnergy Corp.	34.88	32.70	35.95	34.05	37.85	35.24	0.3750	0.3750	0.3750	0.3750	35.11	1.500	4.33%	8.69%
FPL Group	65.44	62.72	65.98	63.00	66.94	63.34	0.6000	0.6000	0.6000	0.6000	64.57	2.400	4.47%	8.27%
G't Plains Energy	32.57	31.02	32.78	31.19	33.29	31.55	0.4150	0.4150	0.4150	0.4150	32.07	1.660	4.00%	9.28%
Hawaiian Elec.	46.25	44.47	48.00	45.59	50.99	47.10	0.6200	0.6200	0.6200	0.6200	47.07	2.480	2.88%	8.22%
MDU Resources	23.82	22.23	24.35	23.15	24.34	23.55	0.1600	0.1600	0.1700	0.1700	23.57	0.660	7.07%	9.97%
NSTAR	48.57	46.36	48.96	47.00	49.98	48.00	0.5400	0.5400	0.5400	0.5550	48.15	2.175	4.00%	8.61%
OGE Energy	23.94	22.77	24.34	23.45	24.50	23.03	0.3330	0.3330	0.3330	0.3330	23.67	1.332	3.33%	9.05%
Otter Tail Corp.	27.52	26.00	27.65	26.40	27.49	26.36	0.2700	0.2700	0.2700	0.2700	26.90	1.080	5.00%	9.11%
Pinnacle West Capital	39.65	36.21	40.48	38.59	40.81	38.07	0.4250	0.4250	0.4500	0.4500	38.97	1.750	4.17%	8.75%
PPL Corp.	41.37	39.67	43.89	39.95	46.28	42.74	0.3850	0.3850	0.3850	0.3850	42.32	1.540	4.71%	8.43%
Progress Energy	43.86	41.60	45.72	43.40	46.12	43.02	0.5600	0.5600	0.5600	0.5750	43.95	2.255	4.04%	9.27%
Public Serv. Enterprise	41.40	39.40	44.20	40.58	45.95	42.85	0.5400	0.5400	0.5400	0.5400	42.40	2.160	4.27%	9.47%
Southern Co.	30.17	28.55	30.41	29.10	30.56	29.11	0.3430	0.3500	0.3500	0.3500	29.65	1.393	3.94%	8.73%
Vectren Corp.	24.15	22.97	24.85	23.76	25.05	24.28	0.2750	0.2750	0.2850	0.2850	24.18	1.120	6.83%	11.62%
WPS Resources	45.31	43.19	46.80	43.87	48.12	44.99	0.5350	0.5450	0.5450	0.5450	45.38	2.170	4.00%	8.88%
													Average Cost of Equity	**9.20%**

Allen - Rebuttal
ER-2004-0570 Empire District Electric Company

Witness Vander Weide's Natural Gas Proxy Group ROE with Semi-Annual DCF Model

Company Name	November 2003 High Trading Price	November 2003 Low Trading Price	December 2003 High Trading Price	December 2003 Low Trading Price	January 2003 High Trading Price	January 2003 Low Trading Price	Last Dividend Qtr 1	Last Dividend Qtr 2	Last Dividend Qtr 3	Last Dividend Qtr 4	3-Mo. Ave. Price	Dividend	January 2004 I/B/E/S	Cost of Equity
AGL Resources	$ 28.72	$ 27.50	$ 29.35	$ 28.25	$ 30.63	$ 28.60	$ 0.2700	$ 0.2800	$ 0.2800	$ 0.2800	$ 28.84	$ 1.11	4.71%	8.65%
Atmos Energy	$ 24.89	$ 24.27	$ 25.00	$ 23.92	$ 25.96	$ 24.30	$ 0.3000	$ 0.3000	$ 0.3000	$ 0.3050	$ 24.72	$ 1.21	5.67%	10.68%
Energen Corp.	$ 39.04	$ 36.62	$ 42.00	$ 38.55	$ 44.72	$ 40.72	$ 0.1800	$ 0.1800	$ 0.1850	$ 0.1850	$ 40.28	$ 0.73	7.00%	8.88%
Equitable Resources	$ 41.60	$ 39.95	$ 43.42	$ 41.34	$ 44.92	$ 42.34	$ 0.1700	$ 0.2000	$ 0.3000	$ 0.3000	$ 42.26	$ 0.97	9.75%	12.16%
KeySpan Corp.	$ 35.45	$ 33.64	$ 37.09	$ 34.86	$ 37.26	$ 35.72	$ 0.4450	$ 0.4450	$ 0.4450	$ 0.4450	$ 35.67	$ 1.78	5.86%	11.00%
New Jersey Resources	$ 39.25	$ 36.45	$ 39.54	$ 37.55	$ 39.49	$ 37.75	$ 0.3100	$ 0.3100	$ 0.3250	$ 0.3250	$ 38.34	$ 1.27	6.00%	9.41%
NICOR Inc.	$ 34.45	$ 32.03	$ 34.65	$ 32.86	$ 34.24	$ 32.49	$ 0.4650	$ 0.4650	$ 0.4650	$ 0.4650	$ 33.45	$ 1.86	3.83%	9.50%
Northwest Nat. Gas	$ 30.85	$ 28.91	$ 31.30	$ 29.50	$ 31.97	$ 29.95	$ 0.3150	$ 0.3150	$ 0.3250	$ 0.3250	$ 30.41	$ 1.28	4.17%	8.47%
Peoples Energy	$ 40.90	$ 38.82	$ 42.64	$ 40.06	$ 43.26	$ 41.37	$ 0.5300	$ 0.5300	$ 0.5300	$ 0.5300	$ 41.18	$ 2.12	5.00%	10.28%
Southwest Gas	$ 23.15	$ 22.01	$ 23.18	$ 22.05	$ 24.05	$ 22.39	$ 0.2050	$ 0.2050	$ 0.2050	$ 0.2050	$ 22.81	$ 0.82	5.33%	9.02%
UGI Corp.	$ 32.69	$ 30.57	$ 34.20	$ 32.10	$ 34.35	$ 31.40	$ 0.2850	$ 0.2850	$ 0.2850	$ 0.2850	$ 32.55	$ 1.14	6.33%	9.94%
WGL Holdings Inc.	$ 28.16	$ 26.20	$ 28.55	$ 26.63	$ 28.70	$ 27.15	$ 0.3200	$ 0.3200	$ 0.3200	$ 0.3200	$ 27.57	$ 1.28	3.86%	8.59%
													Average Cost of Equity	9.71%

Allen - Rebuttal
ER-2004-0570 Empire District Electric Company

Witness Vander Weide's S&P 500
Ex-Post Risk Premium Analysis

Year	S&P 500 Stock Price	Stock Dividend Yield	Stock Return	A-rated Bond Price	Bond Return	Risk Premium
2003	895.84	0.0180		$62.26		
2002	1,140.21	0.0138	-20.05%	$57.44	15.35%	-35.40%
2001	1,335.63	0.0116	-13.47%	$56.40	8.93%	-22.40%
2000	1,425.59	0.0118	-5.13%	$52.60	14.82%	-19.95%
1999	1,248.77	0.0130	15.46%	$63.03	-10.20%	25.66%
1998	963.35	0.0162	31.25%	$62.43	7.38%	23.87%
1997	766.22	0.0195	27.68%	$56.62	17.32%	10.36%
1996	614.42	0.0231	27.02%	$60.91	-0.48%	27.49%
1995	465.25	0.0287	34.93%	$50.22	29.26%	5.68%
1994	472.99	0.0269	1.05%	$60.01	-9.65%	10.71%
1993	435.23	0.0288	11.56%	$53.13	20.48%	-8.93%
1992	416.08	0.0290	7.50%	$49.56	15.27%	-7.77%
1991	325.49	0.0382	31.65%	$44.84	19.44%	12.21%
1990	339.97	0.0341	-0.85%	$45.60	7.11%	-7.96%
1989	285.41	0.0364	22.76%	$43.06	15.18%	7.58%
1988	250.48	0.0366	17.61%	$40.10	17.36%	0.25%
1987	264.51	0.0317	-2.13%	$48.92	-9.84%	7.71%
1986	208.19	0.0390	30.95%	$39.98	32.36%	-1.41%
1985	171.61	0.0451	25.83%	$32.57	35.05%	-9.22%
1984	166.39	0.0427	7.41%	$31.49	16.12%	-8.72%
1983	144.27	0.0479	20.12%	$29.41	20.65%	-0.53%
1982	117.28	0.0595	28.96%	$24.48	36.48%	-7.51%
1981	132.97	0.0480	-7.00%	$29.37	-3.01%	-3.99%
1980	110.87	0.0541	25.34%	$34.69	-3.81%	29.16%
1979	99.71	0.0533	16.52%	$43.91	-11.89%	28.41%
1978	90.25	0.0532	15.80%	$49.09	-2.40%	18.20%
1977	103.80	0.0399	-9.06%	$50.95	4.20%	-13.27%
1976	96.86	0.0380	10.96%	$43.91	25.13%	-14.17%
1975	72.56	0.0507	38.56%	$41.76	14.75%	23.81%
1974	96.11	0.0364	-20.86%	$52.54	-12.91%	-7.96%
1973	118.40	0.0269	-16.14%	$58.51	-3.37%	-12.77%
1972	103.30	0.0296	17.58%	$56.47	10.69%	6.89%
1971	93.49	0.0332	13.81%	$53.93	12.13%	1.69%
1970	90.31	0.0356	7.08%	$50.46	14.81%	-7.73%
1969	102.00	0.0306	-8.40%	$62.43	-12.76%	4.36%
1968	95.04	0.0313	10.45%	$66.97	-0.81%	11.26%
1967	84.45	0.0351	16.05%	$78.69	-9.81%	25.86%
1966	93.32	0.0302	-6.48%	$86.57	-4.48%	-2.00%
1965	86.12	0.0299	11.35%	$91.40	-0.91%	12.26%
1964	76.45	0.0305	15.70%	$92.01	3.68%	12.02%
1963	65.06	0.0331	20.82%	$93.56	2.61%	18.20%

1962	69.07	0.0297	-2.84%	$89.60	8.89%	-11.73%
1961	59.72	0.0328	18.94%	$89.74	4.29%	14.64%
1960	58.03	0.0327	6.18%	$84.36	11.13%	-4.95%
1959	55.62	0.0324	7.57%	$91.55	-3.49%	11.06%
1958	41.12	0.0448	39.74%	$101.22	-5.60%	45.35%
1957	45.43	0.0431	-5.18%	$100.70	4.49%	-9.67%
1956	44.15	0.0424	7.14%	$113.00	-7.35%	14.49%
1955	35.60	0.0438	28.40%	$116.77	0.20%	28.20%
1954	25.46	0.0569	45.52%	$112.79	7.07%	38.45%
1953	26.18	0.0545	2.70%	$114.24	2.24%	0.46%
1952	24.19	0.0582	14.05%	$113.41	4.26%	9.79%
1951	21.21	0.0634	20.39%	$123.44	-4.89%	25.28%
1950	16.88	0.0665	32.30%	$125.08	1.89%	30.41%
1949	15.36	0.0620	16.10%	$119.82	7.72%	8.37%
1948	14.83	0.0571	9.28%	$118.50	4.49%	4.79%
1947	15.21	0.0449	1.99%	$126.02	-2.79%	4.79%
1946	18.02	0.0356	-12.03%	$126.74	2.59%	-14.63%
1945	13.49	0.0460	38.18%	$119.82	9.11%	29.07%
1944	11.85	0.0495	18.79%	$119.82	3.34%	15.45%
1943	10.09	0.0554	22.98%	$118.50	4.49%	18.49%
1942	8.93	0.0788	20.87%	$117.63	4.14%	16.73%
1941	10.55	0.0638	-8.98%	$116.34	4.55%	-13.52%
1940	12.30	0.0458	-9.65%	$112.39	7.08%	-16.73%
1939	12.50	0.0349	1.89%	$105.75	10.05%	-8.16%
1938	11.31	0.0784	18.36%	$99.83	9.94%	8.42%
1937	17.59	0.0434	-31.36%	$103.18	0.63%	-31.99%
					Mean	**5.22%**
					St. Dev.	**16.85%**

Allen - Rebuttal
ER-2004-0570 Empire District Electric Company

Witness Vander Weide's S&P Utility Index Ex-Post Risk Premium Analysis

Year	Utility Stock Price	Stock Dividend Yield	Stock Return	A-rated Bond Price	Bond Rate of Return	Risk Premium
2003	160.67			$62.26		
2002	142.14	0.0475	17.79%	$57.44	15.35%	2.44%
2002	243.79	0.0362		$57.44		
2001	307.70	0.0287	-17.90%	$56.40	8.93%	-26.83%
2000	239.17	0.0413	32.78%	$52.60	14.82%	17.96%
1999	253.52	0.0394	-1.72%	$63.03	-10.20%	8.48%
1998	228.61	0.0457	15.47%	$62.43	7.38%	8.09%
1997	201.14	0.0492	18.58%	$56.62	17.32%	1.26%
1996	202.57	0.0454	3.83%	$60.91	-0.48%	4.31%
1995	153.87	0.0584	37.49%	$50.22	29.26%	8.23%
1994	168.70	0.0496	-3.83%	$60.01	-9.65%	5.82%
1993	159.79	0.0537	10.95%	$53.13	20.48%	-9.54%
1992	149.70	0.0572	12.46%	$49.56	15.27%	-2.81%
1991	138.38	0.0607	14.25%	$44.84	19.44%	-5.19%
1990	146.04	0.0558	0.33%	$45.60	7.11%	-6.78%
1989	114.37	0.0699	34.68%	$43.06	15.18%	19.51%
1988	106.13	0.0704	14.80%	$40.10	17.36%	-2.55%
1987	120.09	0.0588	-5.74%	$48.92	-9.84%	4.10%
1986	92.06	0.0742	37.87%	$39.98	32.36%	5.51%
1985	75.83	0.0860	30.00%	$32.57	35.05%	-5.04%
1984	68.50	0.0925	19.95%	$31.49	16.12%	3.83%
1983	61.89	0.0948	20.16%	$29.41	20.65%	-0.49%
1982	51.81	0.1074	30.20%	$24.48	36.48%	-6.28%
1981	52.01	0.0978	9.40%	$29.37	-3.01%	12.41%
1980	50.26	0.0953	13.01%	$34.69	-3.81%	16.83%
1979	50.33	0.0893	8.79%	$43.91	-11.89%	20.68%
1978	52.40	0.0791	3.96%	$49.09	-2.40%	6.36%
1977	54.01	0.0714	4.16%	$50.95	4.20%	-0.04%
1976	46.99	0.0776	22.70%	$43.91	25.13%	-2.43%
1975	38.19	0.0920	32.24%	$41.76	14.75%	17.49%
1974	48.60	0.0713	-14.29%	$52.54	-12.91%	-1.38%
1973	60.01	0.0556	-13.45%	$58.51	-3.37%	-10.08%
1972	60.19	0.0542	5.12%	$56.47	10.69%	-5.57%
1971	63.43	0.0504	-0.07%	$53.93	12.13%	-12.19%
1970	55.72	0.0561	19.45%	$50.46	14.81%	4.64%
1969	68.65	0.0445	-14.38%	$62.43	-12.76%	-1.62%
1968	68.02	0.0435	5.28%	$66.97	-0.81%	6.08%
1967	70.63	0.0392	0.22%	$78.69	-9.81%	10.03%
1966	74.50	0.0347	-1.72%	$86.57	-4.48%	2.76%
1965	75.87	0.0315	1.34%	$91.40	-0.91%	2.25%
1964	67.26	0.0331	16.11%	$92.01	3.68%	12.43%
1963	63.35	0.0330	9.47%	$93.56	2.61%	6.86%

1962	62.69	0.0320	4.25%	$89.60	8.89%	-4.64%
1961	52.73	0.0358	22.47%	$89.74	4.29%	18.18%
1960	44.50	0.0403	22.52%	$84.36	11.13%	11.39%
1959	43.96	0.0377	5.00%	$91.55	-3.49%	8.49%
1958	33.30	0.0487	36.88%	$101.22	-5.60%	42.48%
1957	32.32	0.0487	7.90%	$100.70	4.49%	3.41%
1956	31.55	0.0472	7.16%	$113.00	-7.35%	14.51%
1955	29.89	0.0461	10.16%	$116.77	0.20%	9.97%
1954	25.51	0.0520	22.37%	$112.79	7.07%	15.30%
1953	24.41	0.0511	9.62%	$114.24	2.24%	7.38%
1952	22.22	0.0550	15.36%	$113.41	4.26%	11.10%
1951	20.01	0.0606	17.10%	$123.44	-4.89%	21.99%
1950	20.20	0.0554	4.60%	$125.08	1.89%	2.71%
1949	16.54	0.0570	27.83%	$119.82	7.72%	20.10%
1948	16.53	0.0535	5.41%	$118.50	4.49%	0.92%
1947	19.21	0.0354	-10.41%	$126.02	-2.79%	-7.62%
1946	21.34	0.0298	-7.00%	$126.74	2.59%	-9.59%
1945	13.91	0.0448	57.89%	$119.82	9.11%	48.79%
1944	12.10	0.0569	20.65%	$119.82	3.34%	17.31%
1943	9.22	0.0621	37.45%	$118.50	4.49%	32.96%
1942	8.54	0.0940	17.36%	$117.63	4.14%	13.22%
1941	13.25	0.0717	-28.38%	$116.34	4.55%	-32.92%
1940	16.97	0.0540	-16.52%	$112.39	7.08%	-23.60%
1939	16.05	0.0553	11.26%	$105.75	10.05%	1.21%
1938	14.30	0.0730	19.54%	$99.83	9.94%	9.59%
1937	24.34	0.0432	-36.93%	$103.18	0.63%	-37.55%
					Mean	**4.61%**
					St. Dev.	**14.51%**

S&P Utilities Index discontinued December 2001.
Return for 2002 based on new electric utilities index.
S&P Replaced Utilities stock index in December 2001 with separate indices for electric and natural gas utilities.
Returns for 2002 and following based on electric utilities index.

Allen - Rebuttal
ER-2004-0570 Empire District Electric Company

Capital Structure - June 30, 2004

		Amount	Percent
Common Stock Equity	$	379,625,363.00	49.61%
Preferred Stock	$	48,115,245.00	6.29%
Long Term Debt	$	337,427,748.00	44.10%
	$	765,168,356.00	100.00%

Sources: Company response to OPC DR2001 and DR2005

Allen - Rebuttal
ER-2004-0570 Empire District Electric Company

Weighted Average Cost of Capital

	Amount	Percent	Cost Rate	Weighted Cost Rate 8.96% ROE
Common Stock Equity	$ 379,625,363.00	49.61%	8.96%	4.45%
Preferred Stock	$ 48,115,245.00	6.29%	8.83%	0.56%
Long Term Debt	$ 337,427,748.00	44.10%	7.23%	3.19%
	$ 765,168,356.00	100.00%		
				8.20%

	Amount	Percent	Cost Rate	Weighted Cost Rate 9.41% ROE
Common Stock Equity	$ 379,625,363.00	49.61%	9.41%	4.67%
Preferred Stock	$ 48,115,245.00	6.29%	8.83%	0.56%
Long Term Debt	$ 337,427,748.00	44.10%	7.23%	3.19%
	$ 765,168,356.00	100.00%		
				8.42%

Pre-Tax Interest Coverage **Tax Factor = 1.62**

	Weighted Cost	Pre-Tax Weighted Cost
Common Stock Equity (Based on 8.96% ROE)	4.45%	7.21%
Preferred Stock	0.56%	0.91%
Long Term Debt	3.19%	5.17%
Total	8.20%	13.28%
Pre-Tax Weighted Cost	13.28%	
Cost of Debt	3.19%	
Pre-Tax Interest Coverage	**4.16x**	

	Weighted Cost	Pre-Tax Weighted Cost
Common Stock Equity (Based on 9.41% ROE)	4.67%	7.57%
Preferred Stock	0.56%	0.91%
Long Term Debt	3.19%	5.17%
Total	8.42%	13.64%
Pre-Tax Weighted Cost	13.64%	
Cost of Debt	3.19%	
Pre-Tax Interest Coverage	**4.28x**	

CORRECTED APPENDIX F

DEVELOPMENT OF A proxy GROUP

Q. PLEASE EXPLAIN HOW YOU DEVELOPED A GROUP OF Electric utilities WITH RISK CHARACTERISTICS SIMILAR TO Empire.

A. The following selection criteria have been used to develop a group of comparable electric utilities:

1). Publicly traded company;

2). Greater than 60% of total revenues from regulated electricity sales;

3). Dividend Paying;

4). Covered by Value Line;

5). Standard & Poor's Bond Rating of at least (BBB-) or a Moody's Bond Rating of at least Baa3;

6). Covered by C.A. Turner Utility Reports;

The following companies met the selection criteria: 1) American Electric Power; 2) Central Vermont Public Services Corp.; 3) Cleco Corp.; 4) Duquesne Light; 5) First Energy; 6) FPL Group, Inc.; 7) Green Mountain Power Corp; 8) Hawaiian Electric 9) Idacorp, Inc. 10) Pinnacle West 11) Progress Energy 12) Southern Co. 13) UIL Holdings.

Q. HAVE YOU MADE ANY RISK evaluations for the industry GROUP?

A. Yes. As shown on Schedule TA-4, I have examined several measures that typically act as indicators of relative risk.

The beta coefficient;

Fixed charge coverage;

Value Line Safety rating;

Bond Rating from Standard & Poor's;

Average common equity ratio;

Value Line Financial Strength.

Q. WHAT CONCLUSIONS CAN BE DRAWN FROM THIS ANALYSIS?

A. Generally, the level of overall, or total, risk for the industry companies is representative of the risks faced by Empire as a regulated electric utility.