Exhibit No.
Issue: Rate of Return
Witness: James H. Vander Weide
Type of Exhibit: Rebuttal Testimony
Sponsoring Party: Empire District Electric
Case No. ER-2012-00345
Date Testimony Prepared: January 2013

Before the Public Service Commission of the State of Missouri

Rebuttal Testimony

of

James H. Vander Weide, Ph.D.

January 16, 2013

TABLE OF CONTENTS
OF
DR. JAMES H. VANDER WEIDE
ON BEHALF OF
THE EMPIRE DISTRICT GAS COMPANY
BEFORE THE
MISSOURI PUBLIC SERVICE COMMISSION

REBUTTAL TESTIMONY
OF
DR. JAMES H. VANDER WEIDE
ON BEHALF OF
THE EMPIRE DISTRICT ELECTRIC COMPANY
BEFORE THE
MISSOURI PUBLIC SERVICE COMMISSION
CASE NO. ER-2012-0345

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.

A. My name is James H. Vander Weide. I am Research Professor of Finance and Economics at Duke University, the Fuqua School of Business. I am also President of Financial Strategy Associates, a firm that provides strategic and financial consulting services to business clients. My business address is 3606 Stoneybrook Drive, Durham, North Carolina 27705.

Q. ARE YOU THE SAME JAMES H. VANDER WEIDE WHO PROVIDED DIRECT TESTIMONY BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION ("THE COMMISSION") IN THIS PROCEEDING?

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I have been asked by The Empire District Electric Company ("Empire" or "the Company") to review the Commission Staff Report Cost of Service in this proceeding and the direct testimony of Michael P. Gorman, and to evaluate Staff's and Mr. Gorman's recommended capital structure and costs of equity for Empire.

Q. IS THERE ANYTHING IN EITHER THE STAFF'S REPORT OR MR. GORMAN'S DIRECT TESTIMONY THAT WOULD CAUSE YOU TO CHANGE YOUR RECOMMENDED 10.6 PERCENT COST OF EQUITY FOR EMPIRE?

A. No. After reviewing the Staff Report and Mr. Gorman's testimony, I continue to recommend that Empire be allowed to earn a return on equity of 10.6 percent.

II. REBUTTAL OF STAFF'S RECOMMENDED RETURN ON EQUITY ("ROE")

Q. WHAT IS STAFF'S RECOMMENDED ROE FOR EMPIRE?

A. Staff recommends that Empire's rates be based on a 9.5 percent ROE.

Q. HOW DOES STAFF ESTIMATE EMPIRE'S REQUIRED ROE?

A. Staff estimates Empire's required ROE by applying both a single-stage annual and a multi-stage annual Discounted Cash Flow ("DCF") model to a proxy group of ten electric companies. From its single-stage DCF model analysis, Staff obtains an estimated ROE in the range 8.4 percent to 9.4 percent (Staff Report at 32). From its multi-stage DCF analysis, Staff obtains an estimated ROE in the range 7.62 percent to 8.38 percent (Staff Report at 33). Although Staff states that it places "primary weight" on its multi-stage DCF estimate of its proxy companies' required ROE (Staff Report at 32), Staff's recommended 8.50 percent to 9.50 percent ROE range appears to be more related to the results of its single-stage DCF analysis than to the results of its multi-stage DCF analysis.

Staff also recognizes that Empire is more risky than its proxy company group. Thus, Staff arrives at its final 9.5 percent recommended ROE by adding a fifty basis-point risk premium to the 9.0 percent midpoint result of the ROE estimates derived from its single-stage DCF model analysis.

In addition, Staff also applies the Capital Asset Pricing Model ("CAPM") to its proxy company group, obtaining results in the range 5.74 percent to 6.87 percent (Staff Report at 47); and a "rule of thumb" method, obtaining results in the range 7.63 percent to 9.22 percent (Staff Report at 48). However, since Staff recommends a 9.5 percent ROE, I conclude that Staff gives no weight to its CAPM results or "rule of thumb" results.

A. PROXY COMPANIES

Q. WHAT COMPANIES DOES STAFF INCLUDE IN ITS PROXY GROUP OF ELECTRIC COMPANIES?

A. Staff's proxy group includes ten companies: Alliant Energy, American Electric Power, Cleco Corp., Great Plains Energy, IDACORP, Pinnacle West Capital, Southern Company, Westar Energy, Wisconsin Energy, and Xcel Energy.

Q. HOW DOES STAFF SELECT COMPANIES FOR INCLUSION IN ITS PROXY GROUP?

A. Starting with an initial group of fifty-three electric utilities, Staff selects eleven companies that, in its opinion, satisfy the following criteria:

1. Classified as an electric utility company by Value Line (fifty-three companies);
2. Publicly traded stock--no companies eliminated.

3. Followed by the Edison Electric Institute ("EEI") and classified as a regulated utility—nineteen companies eliminated.
4. Followed by AUS and reporting at least seventy percent of revenues from electric operations—twelve companies eliminated.
5. Ten-years of Value Line historical growth data available—three companies eliminated.
6. No reduced dividend since 2009--two companies eliminated.
7. Projected growth available from Value Line and Reuters--no companies eliminated.
8. At least investment grade credit rating--two companies eliminated.
9. Rated an "Excellent" business risk profile by Standard & Poor's—four companies eliminated.
10. Company-owned generating assets—one company eliminated.
11. Significant merger or acquisition announced in the last three years—one company eliminated (Staff Report at 28).

Q. YOU NOTE ABOVE THAT STAFF'S ROE RANGE IS BASED ON ITS APPLICATION OF THE DCF MODEL TO A GROUP OF TEN ELECTRIC UTILITIES. WHY DOES STAFF BASE ITS RECOMMENDED ROE ON RESULTS FOR TEN ELECTRIC UTILITIES, WHEN THERE ARE ELEVEN ELECTRIC UTILITIES THAT SATISFY ITS SELECTION CRITERIA?

A. In addition to the forty-two companies eliminated by its proxy selection criteria, Staff also eliminated PNM Resources on the grounds that its projected five-year EPS growth rate is, in Staff's opinion, too high.

Q. WHAT IS THE PURPOSE OF PROXY SELECTION CRITERIA?

A. The purpose of proxy selection criteria is to identify the largest possible group of comparable risk companies that have sufficient data to reliably apply cost of equity methodologies such as the DCF, CAPM, and risk premium.

Q. IS IT DESIRABLE TO CHOOSE A RELATIVELY LARGE GROUP OF COMPARABLE RISK COMPANIES?

A. Yes.

Q. PLEASE EXPLAIN.

A. It is desirable to choose a relatively large group of comparable risk companies because the estimate of the cost of equity obtained from applying cost of equity methodologies to a single company is uncertain. Cost of equity methodologies such as the DCF, CAPM, and risk premium, require estimates of quantities such as growth rates, betas, and expected risk premiums that necessarily involve a degree of uncertainty. However, the uncertainty in estimating the cost of equity by applying cost of equity methods to a single company can be significantly reduced by applying cost of equity models to a relatively large group of comparable risk companies. Intuitively, any over- and under-estimate of the cost of equity that arises from the application of cost of equity methods to a single company is averaged out by applying the methods to a larger group of comparable risk companies.

In addition, the choice of a relatively small group of proxy companies requires a great deal of judgment. When the analyst applies judgment to select a small group of companies, the analyst may be tempted to choose a set of selection criteria that produce a desired result. The analyst can

eliminate the possibility of selection bias by starting with the largest possible group of comparable risk companies and eliminating only those companies with insufficient data to estimate the cost of equity.

Q. WHAT PROXY GROUP OF ELECTRIC UTILITIES DO YOU USE FOR THE PURPOSE OF ESTIMATING EMPIRE'S COST OF EQUITY?

A. I use the group of twenty-four electric utilities shown in Schedule JVW-1 of my direct testimony.

Q. WHAT CRITERIA DO YOU USE TO SELECT PROXY COMPANIES?

A. As described in my direct testimony, I select all the companies in Value Line's groups of electric companies that: (1) paid dividends during every quarter of the last two years; (2) did not decrease dividends during any quarter of the past two years; (3) have at least two analysts included in the I/B/E/S mean growth forecast; (4) have an investment grade bond rating and a Value Line Safety Rank of 1, 2, or 3; and (5) are not the subject of a merger offer that has not been completed (Vander Weide Direct at 34).

Q. HOW DOES THE AVERAGE INVESTMENT RISK OF STAFF'S SMALL GROUP OF TEN ELECTRIC UTILITIES COMPARE TO THE AVERAGE INVESTMENT RISK OF YOUR LARGER PROXY GROUP OF TWENTY-FOUR ELECTRIC UTILITIES?

A. Staff's proxy group of ten electric utilities has the same investment risk as my proxy group of twenty-four electric utilities. For example, the average S&P bond rating for both my large proxy electric group and Staff's smaller group of

electric utilities is BBB+, and the average Value Line Safety Rank for both groups is approximately 2.

Q. STAFF'S PROXY GROUP HAS SIMILAR AVERAGE INVESTMENT RISK AS YOUR PROXY GROUP, BUT STAFF USES A MUCH SMALLER PROXY GROUP. WHY IS STAFF'S PROXY GROUP SO MUCH SMALLER THAN YOUR PROXY GROUP?

A. Staff employs three proxy selection criteria that have little or no relationship to investment risk: (1) the requirement that a company must be classified as a regulated electric utility by EEI; (2) the requirement that, according to AUS, the company must have at least seventy percent of revenues from electric operations; and (3) the requirement that a company must have an "Excellent" Standard & Poor's business risk profile. Staff's use of these criteria reduces its sample size by thirty-five companies, without improving the risk comparability of its proxy group.

Q. HOW DOES EEI CLASSIFY ITS ELECTRIC UTILITY MEMBERS?

A. EEI classifies its electric utility members into three groups based on its estimate of the percentage of a company's total assets that are regulated. The three groups include: (1) "regulated"--regulated assets greater than eighty percent of total assets; (2) "mostly regulated"--regulated assets between fifty percent and eighty percent of total assets; and (3) "diversified"--regulated assets less than fifty percent of total assets.

Q. DOES STAFF PROVIDE ANY EVIDENCE THAT COMPANIES IN EEI'S "REGULATED" ASSET GROUP HAVE LESS RISK THAN COMPANIES IN EEI'S "MOSTLY REGULATED" AND "DIVERSIFIED" GROUPS?

A. No.

Q. DO YOU HAVE EVIDENCE THAT EEI'S "REGULATED" ASSET GROUP OF ELECTRIC UTILITIES HAS THE SAME INVESTMENT RISK AS THE COMPANIES IN ITS OTHER GROUPS?

A. Yes. My proxy companies include fourteen companies classified by EEI as "regulated," nine companies classified as "mostly regulated," and one company classified as "diversified." Yet the average risk ratings results for the companies classified as "regulated" utilities are the same as those for the companies classified as "mostly regulated" and "diversified" utilities. For example, the average Value Line Safety Rank for the companies classified as "regulated" is 2, and the average S&P bond rating is approximately BBB+, the same average Safety Rank and S&P bond rating as those in the other classifications. (See Vander Weide Rebuttal Schedule JVW-1.)

Q. DOES STAFF PROVIDE ANY EVIDENCE THAT THE PERCENT OF REVENUES FROM ELECTRIC OPERATIONS AS REPORTED IN AUS IS AN INDICATOR OF A COMPANY'S INVESTMENT RISK?

A. No.

Q. DO YOU HAVE EVIDENCE THAT THE PERCENTAGE OF REVENUES FROM ELECTRIC OPERATIONS, AS REPORTED BY AUS, IS NOT RELATED TO A COMPANY'S INVESTMENT RISK?

A. Yes. According to Staff's Schedule 8, Staff eliminates nine companies as a result of their failure to meet Staff's criterion that the percent of revenues from electric operations must be greater than seventy percent. The average Value Line Safety Rank for these companies is 2, and the average Standard & Poor's bond rating for these companies is BBB+, the same average Safety Rank and bond rating as Staff's selected companies (see Rebuttal Schedule JVW-2).

Q. ARE THERE ANY OTHER PROBLEMS WITH STAFF'S SELECTION CRITERIA?

A. Yes. First, Staff's criterion that a proxy company must have a certain percentage of regulated assets or revenues relates to a potential single dimension of risk rather than to an overall assessment of the company's equity risk. A problem with using a potential single dimension of risk, such as percent regulated electric assets or revenues, is that a company may be eliminated based on a single dimension of risk, even though the company's overall risk may be comparable to those included in the proxy group.

Second, Staff provides no justification for the cut-off values it uses for percent regulated assets and revenues. Staff's criterion requiring a proxy company to have at least seventy percent regulated revenues is arbitrary. Similarly, Staff provides no justification for limiting its proxy group to EEI's "regulated" classification, rather than including "regulated" and "mostly regulated."

Third, Staff fails to recognize that it is quite difficult to quantify the percentage of a company's business that is classified as "regulated." Ideally, one would measure percent regulated versus percent non-regulated based on the market values of a company's regulated and non-regulated businesses. However, since the individual business segments are not market traded, there is no market value for these business segments. Although an analyst might attempt to quantify "percent regulated" and "percent unregulated" using accounting variables such as assets or revenues as a substitute for market values, these accounting categories are imperfect because the accounting for regulated assets and revenues is likely not comparable from one company to another, and accounting values are imperfect indicators of market values.

Q. WHAT CONCLUSION DO YOU DRAW FROM YOUR ANALYSIS OF STAFF'S PROXY GROUP?

A. I conclude that the Commission should rely on my proxy group to estimate Empire's cost of equity. As I have demonstrated, my proxy group has similar investment risk, but includes a significantly larger sample of companies than Staff's proxy group. Since one can obtain more accurate estimates of the cost of equity by using a larger sample of comparable risk companies, the Commission should rely on my proxy companies to estimate Empire's cost of equity.

B. STAFF'S DCF MODELS

Q. WHAT DCF MODELS DOES STAFF USE TO ESTIMATE EMPIRE'S COST OF EQUITY?

A. Staff estimates Empire's cost of equity using both a single-stage annual DCF model and a multi-stage annual DCF model.

Q. PLEASE DESCRIBE STAFF'S SINGLE-STAGE ANNUAL DCF MODEL.

A. Staff's single-stage annual DCF model is of the form, $k = D_1/P_0 + g$, where k is the cost of equity, D_1 is the expected first period dividend, P_0 is the current stock price, and g is the average expected future growth in the company's earnings and dividends.

1. Staff's Single-Stage Annual DCF Model

Q. WHAT ARE THE BASIC ASSUMPTIONS OF STAFF'S SINGLE-STAGE ANNUAL DCF MODEL?

A. Staff's single-stage annual DCF model is based on the assumptions that: (1) a company's stock price is equal to the present value of the future dividends investors expect to receive from their investment in the company; (2) dividends are paid annually; (3) dividends, earnings, and book value are expected to grow at the same constant rate forever; and (4) the first dividend is received one year from the date of the analysis.

Q. YOU NOTE THAT ONE ASSUMPTION OF STAFF'S SINGLE-STAGE ANNUAL DCF MODEL IS THAT DIVIDENDS ARE PAID ANNUALLY. DO ANY OF STAFF'S PROXY COMPANIES, IN FACT, PAY DIVIDENDS ANNUALLY?

A. No. All of Staff's proxy companies pay dividends quarterly.

Q. CAN STAFF'S SINGLE-STAGE ANNUAL DCF MODEL BE MATHEMATICALLY DERIVED FROM THE ASSUMPTION THAT DIVIDENDS ARE PAID QUARTERLY?

A. No. Staff's single-stage annual DCF model can only be derived from the assumption that dividends are paid annually. When dividends are paid quarterly, the quarterly DCF model is the only model that can be mathematically derived from DCF assumptions. Since Staff's proxy companies pay dividends quarterly, Staff should have used a quarterly DCF model to estimate Empire's cost of equity.

Q. YOU ALSO MENTION THAT STAFF'S DCF MODEL REQUIRES AN ESTIMATE OF THE EXPECTED FIRST PERIOD DIVIDEND FOR EACH COMPANY. HOW DOES STAFF ESTIMATE THE EXPECTED FIRST PERIOD DIVIDEND FOR ITS SINGLE-STAGE ANNUAL DCF MODEL?

A. Staff uses the average of Value Line's estimate of each company's total 2012 and 2013 dividend per share as its estimate of the expected first period dividend in its single-stage annual DCF model.

Q. DO YOU AGREE WITH STAFF'S USE OF THE AVERAGE OF VALUE LINE'S ESTIMATE OF EACH COMPANY'S 2012 AND 2013 DIVIDEND PER SHARE AS THE ESTIMATE OF THE EXPECTED FIRST PERIOD DIVIDEND IN ITS APPLICATION OF THE DCF MODEL?

A. No. Staff's single-stage annual DCF model is based on the assumptions that dividends are paid annually and grow at the same constant rate forever. Under these assumptions, the cost of equity is given by the equation, $k = D_0$

(1 + g) / P_0 + g, where D_0 is the current annualized dividend, P_0 is the stock price, and *g* is the expected constant annual growth rate. Thus, the correct first period dividend in the single-stage annual DCF model is the current annualized dividend multiplied by the factor, (*1 + growth rate*).

Q. HOW DOES STAFF ESTIMATE THE GROWTH COMPONENT OF ITS DCF MODEL?

A. Staff reviews historical five- and ten-year growth rates in dividends per share ("DPS"), earnings per share ("EPS"), and book value per share ("BPS"), as reported in Value Line, along with Value Line's projected growth rates in DPS, EPS, and BPS, and forecasts of EPS growth obtained from Reuters and Value Line. From its review of these data, Staff obtains six growth indicators for its proxy companies (the following table reproduces the average growth rates reported on Staff's Schedule 10-5). Although Staff believes that most of these growth indicators are unsustainably high for electric utilities, Staff chooses to use a growth rate in the range 4.4 percent to 5.4 percent for its proxy electric companies in its constant growth DCF model (Staff Report at 32 and Schedule 10-5).

TABLE 1
AVERAGE ELECTRIC UTILITY GROWTH RATES REPORTED BY STAFF

GROWTH INDICATOR	RESULT
Average Historical 10-yr. Growth in DPS, EPS, and BPS	0.07%
Historical 5-yr Growth in DPS, EPS, and BPS	4.22%
Projected 5-yr. Growth in DPS, EPS, and BPS	5.20%
Reuters Projected 5-yr. EPS Growth	5.45%
Value Line Projected 3–5-yr. EPS Growth	5.25%
Average Projected EPS Growth	5.35%

Q. DO YOU AGREE WITH STAFF'S USE OF HISTORICAL GROWTH RATES TO ESTIMATE INVESTORS' EXPECTATIONS WHEN ANALYSTS' GROWTH EXPECTATIONS FOR STAFF'S PROXY COMPANIES ARE READILY AVAILABLE?

A. No. Historical growth rates are inherently inferior to analysts' forecasts because analysts' forecasts already incorporate all relevant information regarding historical growth rates and also incorporate the analysts' knowledge about current conditions and expectations regarding the future. My studies indicate that the correlation between analysts' growth forecasts and stock prices is significantly higher than the correlation between historical growth rates and stock prices.

Q. DO YOU AGREE WITH STAFF'S USE OF ANALYSTS' EARNINGS PER SHARE GROWTH FORECASTS TO ESTIMATE THE GROWTH COMPONENT OF ITS DCF MODEL?

A. Yes. Analysts' growth forecasts are superior to historical growth rates because they incorporate all relevant information regarding current and future economic conditions. In addition, as discussed in my direct testimony, my studies indicate that analysts' growth forecasts are more highly correlated

with stock prices than historical growth rates. This result is consistent with the hypothesis that investors use analysts' growth forecasts in making stock buy and sell decisions. Since the DCF model requires the growth estimates of investors, and investors use analysts' growth forecasts in making stock buy and sell decisions, analysts' growth forecasts are the best estimate of future growth in the DCF model.

Q. DOES THE DCF MODEL REQUIRE THE GROWTH FORECASTS OF INVESTORS OR THE GROWTH FORECASTS OF STAFF?

A. The DCF model requires the growth forecasts of investors because investors' growth forecasts are impounded in stock prices.

Q. DO YOU HAVE EVIDENCE THAT INVESTORS USE THE ANALYSTS' GROWTH FORECASTS RATHER THAN HISTORICAL GROWTH RATES?

A. Yes. I report such evidence in my direct testimony at pages 31 - 32.

Q. TO ASSESS THE REASONABLENESS OF STAFF'S RECOMMENDED ROE, HAVE YOU UPDATED YOUR ELECTRIC UTILITY DCF ANALYSIS USING DATA THROUGH DECEMBER 2012?

A. Yes. Using capital market data through December 2012, I obtain an average DCF result equal to 10.4 percent (see Rebuttal Schedule JVW-3).

2. Staff's Multi-Stage DCF Model

Q. WHAT ARE THE BASIC ASSUMPTIONS OF STAFF'S MULTI-STAGE DCF MODEL?

A. Staff's multi-stage DCF model is based on the assumptions that investors believe all electric utilities will grow at the average of the Reuters' and Value

Line EPS growth rate for five years, grow at a rate that steadily declines in years six through ten to Staff's three percent to four percent estimates of perpetual growth, and then grow at rates in the range three to four percent in perpetuity. Specifically, Staff calculates multi-stage DCF results using terminal growth rates of 3 percent, 3.5 percent, 4 percent, and 4.3 percent (Staff Schedules 14 -5, 14-6, 14-7, and 14-8).

Q. WHY DOES STAFF RECOMMEND THE USE OF A MULTI-STAGE DCF MODEL RATHER THAN THE USE OF ITS SINGLE-STAGE DCF MODEL TO ESTIMATE EMPIRE'S COST OF EQUITY IN THIS PROCEEDING?

A. Staff recommends using a multi-stage DCF model because Staff believes that the 4.4 percent to 5.4 percent growth rate it uses in its single-stage model is not sustainable in the long run:

> The constant-growth DCF model may not yield reliable results if industry and/or economic circumstances cause expected near-term growth rates to be inconsistent with sustainable perpetual growth rates. Staff believes this condition currently exists for the electric utility industry. Consequently, Staff has elected to use a multi-stage DCF method and will give this estimate primary weight in its estimated cost of equity for Empire. (Staff Report at 32.)

Q. DO YOU AGREE WITH STAFF'S OPINION THAT ANALYSTS' PROJECTED GROWTH RATES FOR ELECTRIC UTILITIES ARE NOT SUSTAINABLE IN THE LONG RUN?

A. No. First, I disagree with Staff's attempt to impose its view of "sustainability" on investors. The cost of equity is determined by investors in the marketplace, not by Staff. If investors use analysts' growth forecasts in making stock buy and sell decisions—and my studies indicate that they do—the analysts'

growth forecasts should be used to estimate the growth component of the DCF model, whether or not Staff believes these growth forecasts are "sustainable."

Second, Staff fails to recognize that investor growth forecasts affect stock prices. If Staff believes that investors' growth forecasts are irrational, Staff should adjust the stock prices for the companies in its DCF analyses as well as the growth forecasts. Making such an adjustment to the stock price would significantly increase the results of Staff's multi-stage DCF analysis.

Q. HAVE YOU DONE ANY STUDIES ON THE GROWTH RATES THAT INVESTORS USE TO VALUE STOCKS IN THE MARKETPLACE?

A. Yes. As discussed in my direct testimony, my studies indicate that investors use analysts' forecasted EPS growth rates to value stocks in the marketplace.

Q. YOU NOTE THAT STAFF ASSUMES THAT ELECTRIC UTILITIES WILL GROW AT A CONSTANT RATE OF THREE PERCENT TO FOUR PERCENT IN THE LONG RUN. HOW DOES STAFF ARRIVE AT ITS THREE TO FOUR PERCENT ESTIMATE OF LONG-TERM GROWTH?

A. Staff arrives at its 3 percent to 4 percent estimate of long-term growth by examining data on the rolling ten-year average growth rates in DPS, EPS, and BPS for Central region electric utilities from 1968 through 1999 (Staff Report at 34 – 36).

Q. DO YOU AGREE WITH STAFF'S USE OF AVERAGE HISTORICAL GROWTH IN DPS, EPS, AND BPS TO FORECAST LONG-RUN FUTURE GROWTH IN THE DCF MODEL?

A. No. As discussed above and in my direct testimony, the DCF model requires the growth forecasts of investors, and my studies indicate that investors use the analysts' EPS growth forecasts to forecast long-run future growth in the DCF model. In addition, historical growth rates are strongly influenced by accounting adjustments and one-time write-offs that do not relate to a company's expected future growth.

Q. STAFF RECOGNIZES THAT MULTI-STAGE MODEL RESULTS ARE "EXTREMELY SENSITIVE" TO THE ASSUMED LONG-TERM GROWTH RATE (STAFF REPORT AT 34). DID THE COMMISSION ACCEPT THE STAFF'S LONG-TERM GROWTH ASSUMPTION IN THE AMEREN CASE, ER-2010-0036?

A. No. In its Report and Order the Commission stated a preference to use historical GDP growth from 1929 through 2008 to derive an expected growth rate of 6.0 percent for the economy.

Q. HOW DOES THE COMMISSION'S SIX PERCENT ESTIMATE OF EXPECTED LONG-TERM GROWTH COMPARE TO THE AVERAGE ANALYSTS' EPS GROWTH FORECAST FOR STAFF'S PROXY COMPANIES?

A. As discussed above, the average analysts' EPS growth forecast for Staff's proxy companies is 5.35 percent. Thus, the average analysts' EPS growth forecast is slightly less than the six percent long-term growth forecast the Commission accepted in the Ameren Order.

C. STAFF CAPM ANALYSIS

Q. WHAT IS THE CAPM?

A. The CAPM is an equilibrium model in which the expected rate of return on an investment in a company is equal to a risk-free rate of interest, plus an expected risk premium, where the expected risk premium is the product of a company-specific risk factor, or beta, and the expected risk premium on the market portfolio of all securities.

Q. HOW DOES STAFF USE THE CAPM TO ESTIMATE EMPIRE'S COST OF EQUITY?

A. The CAPM requires estimates of the risk-free rate, the company-specific risk factor, or beta, and the risk premium on the market portfolio. As its estimate of the risk-free rate, Staff uses the average yield to maturity on 30-year Treasury bonds for the most recent three months, August 2012 through October 2012 (2.85 percent). As its estimate of the company-specific risk factor or beta, Staff uses Value Line's average estimated beta for its proxy companies (0.68). As its estimate of the risk premium on the market portfolio, Staff uses: (1) the arithmetic mean risk premium on the S&P 500 compared to the return on long-term Treasury bonds for the period 1926 – 2011 (5.70 percent); and (2) the geometric mean risk premium on the S&P 500 compared to the return on long-term Treasury bonds for the period 1926 – 2011 (4.1 percent). Staff obtains its risk premium data from the *Ibbotson® SBBI® 2012 Yearbook Stocks, Bonds, Bills, and Inflation* ("SBBI"). (Staff Report at 47.)

Q. WHAT IS SBBI'S CURRENT ESTIMATE OF THE REQUIRED MARKET RISK PREMIUM ON STOCK INVESTMENTS COMPARED TO INVESTMENTS IN 20-YEAR U.S. TREASURY BONDS?

A. SBBI's current estimate of the required market risk premium is 6.62 percent.

Q. HOW DOES SBBI ARRIVE AT ITS 6.62 PERCENT ESTIMATE OF THE REQUIRED MARKET RISK PREMIUM?

A. SBBI arrives at its estimate of the required market risk premium by calculating the arithmetic mean return on the S&P 500 and the arithmetic mean income return on 20-year U.S. Treasury bonds over the period 1926 through 2011. SBBI then uses the difference between these two arithmetic mean returns as its estimate of the forward-looking market risk premium.

Q. WHY DOES SBBI RECOMMEND USING THE ARITHMETIC MEAN RETURN ON THE S&P 500 RATHER THAN THE GEOMETRIC MEAN RETURN ON THIS INDEX IN ORDER TO ESTIMATE THE MARKET RISK PREMIUM?

A. SBBI recommends using the arithmetic mean return rather than the geometric mean return in order to estimate the cost of equity because a cost of equity based on the arithmetic mean return is the only cost of equity that will discount the investors' expected future wealth to the current price of the stock (see *Ibbotson® SBBI® Valuation 2012 Yearbook* at 56 – 57 and Schedule 6 in my direct testimony). In addition, the arithmetic mean is most appropriate for use in the CAPM because the CAPM is based on the assumption that the return is obtained from an additive process, and the arithmetic mean return is

additive, whereas the geometric mean return is not. Because the arithmetic mean provides the best estimate of the required market risk premium, the Commission should ignore Staff's CAPM result based on the geometric mean risk premium.

Q. WHAT IS THE DIFFERENCE BETWEEN THE INCOME RETURN ON U.S. TREASURY SECURITIES AND THE TOTAL RETURN ON THESE SECURITIES?

A. The income return considers only the income an investor receives from owning a debt instrument such as U.S. Treasury securities, whereas the total return considers both the income and the capital gain or loss on the investment.

Q. WHY DOES SBBI RECOMMEND USING THE INCOME RETURN ON U.S. TREASURY SECURITIES RATHER THAN THE TOTAL RETURN IN ITS RISK PREMIUM ESTIMATE?

A. SBBI recommends using the income return rather than the total return on Treasury securities to estimate the risk-free rate component of the equity risk premium because the income return is the only return that is risk free. Since the total return includes capital gains and losses, and capital gains and losses are highly uncertain, the total return is definitely not risk free.

Q. DO YOU HAVE OTHER CRITICISMS OF STAFF'S USE OF THE CAPM TO ESTIMATE EMPIRE'S COST OF EQUITY?

A. Yes. Staff fails to recognize that the CAPM underestimates the cost of equity for companies with betas less than 1.0 and that the CAPM must be adjusted

to include an additional risk premium for small capitalization companies such as Empire District.

Q. WHAT EVIDENCE DO YOU HAVE THAT THE CAPM TENDS TO UNDERESTIMATE THE COST OF EQUITY FOR COMPANIES WITH BETAS LESS THAN 1.0?

A. As described in my direct testimony at page 51 – 54, the original evidence that the unadjusted CAPM tends to underestimate the cost of equity for companies whose equity beta is less than 1.0 and to overestimate the cost of equity for companies whose equity beta is greater than 1.0 was presented in a paper by Black, Jensen, and Scholes, "The Capital Asset Pricing Model: Some Empirical Tests." Numerous subsequent papers have validated the Black, Jensen, and Scholes findings, including those by Litzenberger and Ramaswamy, Banz, Fama and French, and Fama and MacBeth.[1]

Q. DO YOU HAVE ANY EVIDENCE THAT INVESTORS EXPECT TO EARN A HIGHER RATE OF RETURN ON SMALL CAPITALIZATION COMPANIES SUCH AS EMPIRE THAN WOULD BE PREDICTED FROM THE BASIC CAPM EQUATION USED BY STAFF?

[1] Fischer Black, Michael C. Jensen, and Myron Scholes, "The Capital Asset Pricing Model: Some Empirical Tests," in Studies in the Theory of Capital Markets, M. Jensen, ed. New York: Praeger, 1972; Eugene Fama and James MacBeth, "Risk, Return, and Equilibrium: Empirical Tests," Journal of Political Economy 81 (1973), pp. 607-36; Robert Litzenberger and Krishna Ramaswamy, "The Effect of Personal Taxes and Dividends on Capital Asset Prices: Theory and Empirical Evidence." Journal of Financial Economics 7 (1979), pp. 163-95.; Rolf Banz, "The Relationship between Return and Market Value of Common Stocks," Journal of Financial Economics (March 1981), pp. 3-18; and Eugene Fama and Kenneth French, "The Cross-Section of Expected Returns," Journal of Finance (June 1992), pp. 427-465.

A. Yes. SBBI provides evidence that investors require a higher rate of return for investments in low capitalization companies, such as Empire, than is indicated by Staff's CAPM equation. SBBI's most recent estimates of the risk premium required to be added to the basic CAPM cost of equity are shown below in TABLE 2.

TABLE 2
IBBOTSON ESTIMATES OF CAPM
SMALL COMPANY SIZE PREMIA[2]

DECILE	SMALLEST COMPANY	LARGEST COMPANY	SIZE PREMIUM RETURN IN EXCESS OF CAPM
Mid-Cap (3-5)	1,621.096	6,896.389	1.14%
Low-Cap (6-8)	422.999	1,620.860	1.88%
Micro-Cap (9-10)	1.028	422.811	3.89%

Because Empire is a low-capitalization company, the appropriate size premium is 1.88 percent.

Q. WHAT CONCLUSION DO YOU DRAW FROM THE EVIDENCE THAT THE CAPM TENDS TO UNDERESTIMATE THE COST OF EQUITY FOR SMALL CAPITALIZATION COMPANIES SUCH AS EMPIRE AND COMPANIES SUCH AS ELECTRIC UTILITIES WITH BETAS LESS THAN 1.0?

A. I agree with Staff's recommendation that the Commission give little or no weight to the results of its CAPM analysis in this proceeding.

[2] Ibbotson® SBBI® 2012.

D. STAFF'S TESTS OF REASONABLENESS

Q. HOW DOES STAFF ARRIVE AT ITS RECOMMENDED 9.5 PERCENT RETURN ON EQUITY FOR EMPIRE?

A. As noted above, Staff arrives at its recommended 9.5 percent return on equity estimate by adding a fifty basis-point Empire-specific risk premium to its 9.0 percent midpoint DCF estimate of the required ROE for its proxy companies.

Q. WHY DOES STAFF RECOMMEND A FIFTY BASIS-POINT RISK PREMIUM FOR EMPIRE?

A. Staff recommends a fifty basis-point risk premium because Staff recognizes that Empire is significantly more risky than the average company in Staff's proxy group of electric utilities, as indicated by Empire's lower BBB- bond rating compared to the average BBB+ bond rating for the companies in Staff's proxy group of electric utilities.

Q. DOES STAFF COMPARE ITS RECOMMENDED 9.5 PERCENT ROE FOR EMPIRE TO RECENT ALLOWED RATES OF RETURN ON EQUITY FOR ELECTRIC UTILITIES ACROSS THE COUNTRY?

A. Yes. Staff reports that the average authorized return on equity for electric utilities for the first three quarters of 2012 is 10.22 percent (Staff Report at 48).

Q. DOES THIS 10.22 PERCENT AVERAGE AUTHORIZED RETURN ON EQUITY FOR ELECTRIC UTILITIES INCLUDE AUTHORIZED RETURNS ON EQUITY FOR WIRES-ONLY ELECTRIC UTILITIES?

A. Yes, it does.

Q. WHAT IS THE AVERAGE AUTHORIZED RETURN ON EQUITY IN 2012 FOR INTEGRATED ELECTRIC UTILITIES SUCH AS EMPIRE?

A. The average authorized return on equity in 2012 for integrated electric utilities such as Empire is 10.3 percent (see Rebuttal Schedule JVW-4).

Q. DOES THIS AVERAGE AUTHORIZED RETURN ON EQUITY PERTAIN TO ELECTRIC UTILITIES OF AVERAGE INVESTMENT RISK?

A. Yes, by definition, the 10.3 percent authorized return on equity applies to all integrated electric utilities who received allowed rates of return in 2012. Since there were forty-two integrated electric utilities whose returns were authorized in 2012, it is reasonable to assume that the average allowed return represents a return for an average risk integrated electric utility.

Q. IF ONE ACCEPTS THE STAFF'S OPINION THAT EMPIRE REQUIRES AT LEAST A FIFTY BASIS-POINT RISK PREMIUM TO REFLECT ITS HIGHER THAN AVERAGE INVESTMENT RISK, WHAT DOES THE 10.3 PERCENT AVERAGE ALLOWED RETURN FOR INTEGRATED ELECTRIC UTILITIES IN 2012 IMPLY ABOUT THE REASONABLENESS OF STAFF'S RECOMMENDED 9.5 PERCENT RETURN ON EQUITY FOR EMPIRE IN THIS PROCEEDING?

A. The average allowed return on equity evidence implies that Staff's 9.5 percent midpoint recommended rate of return for Empire is unreasonably low. Adding Staff's fifty basis-point risk premium to the 10.3 percent average authorized

rate of return for integrated electric utilities suggests that regulators in other states would likely assess Empire's cost of equity to be at least 10.8 percent.

Q. WHAT IS YOUR RECOMMENDED COST OF EQUITY FOR EMPIRE IN THIS PROCEEDING?

A. I continue to recommend that Empire be allowed to earn a return on equity of at least 10.6 percent.

Q. PLEASE SUMMARIZE YOUR EVIDENCE ON THE REASONABLENESS OF THE STAFF'S 9.5 PERCENT RECOMMENDED ROE IN THIS PROCEEDING?

A. I find that the Staff's 9.5 percent recommended ROE in this proceeding is not only less than my recommended 10.6 percent cost of equity, but is also less than: (1) the 10.2 percent average allowed return on equity for all electric utilities in 2012; (3) the 10.3 percent average allowed return on equity for all integrated electric utilities in 2012; (4) the 10.8 percent return on equity one would obtain by adding fifty-basis points to the 10.3 percent average allowed return on equity for all integrated electric utilities in 2012; and (5) the 10.4 percent DCF result I obtain applying my DCF Model to a large proxy group of electric utiltiies using data through December 2012. These comparisons suggest that Staff's recommended 9.5 percent return on equity understates Empire's cost of equity by 70 to 130 basis points.

III. REBUTTAL OF MR. GORMAN

Q. WHAT IS MR. GORMAN'S RECOMMENDED RATE MAKING CAPITAL STRUCTURE FOR EMPIRE?

A. Mr. Gorman recommends a rate making capital structure containing 51.2 percent long-term debt and 48.8 percent equity.

Q. WHAT IS MR. GORMAN'S RECOMMENDED COST OF EQUITY FOR EMPIRE?

A. Mr. Gorman recommends a 9.5 percent cost of equity for Empire.

Q. HOW DOES MR. GORMAN ESTIMATE EMPIRE'S COST OF EQUITY?

A. Mr. Gorman estimates Empire's cost of equity by applying several cost of equity methodologies to the same groups of electric companies that I present in my direct testimony. His cost of equity methodologies include: (1) the DCF model; (2) a risk premium method; and (3) a Capital Asset Pricing Model ("CAPM").

Q. DOES MR. GORMAN GIVE EQUAL WEIGHT TO HIS THREE COST OF EQUITY METHODS?

A. No. Mr. Gorman's recommended 9.5 percent cost of equity is based entirely on the results of his DCF and risk premium analyses (Gorman at 39).

Q. WHAT AREAS OF MR. GORMAN'S TESTIMONY WILL YOU ADDRESS IN YOUR REBUTTAL TESTIMONY?

A. I will address Mr. Gorman's capital structure analysis and recommendation, DCF analysis, risk premium analysis, and his comments on my direct testimony.

A. MR. GORMAN'S CAPITAL STRUCTURE ANALYSIS AND RECOMMENDATION

Q. WHAT RATE MAKING CAPITAL STRUCTURE IS EMPIRE REQUESTING IN THIS PROCEEDING?

A. Empire is requesting a rate making capital structure containing 49.0 percent long-term debt and 51.0 percent common equity (Sager at 2-3).

Q. IS STAFF'S RECOMMENDED CAPITAL STRUCTURE ESSENTIALLY THE SAME AS THAT WHICH EMPIRE IS RECOMMENDING?

A. Yes (Staff report at 16).

Q. WHAT RATE MAKING CAPITAL STRUCTURE DOES MR. GORMAN RECOMMEND FOR EMPIRE?

A. Mr. Gorman recommends a rate making capital structure containing 51.2 percent debt and 48.8 percent equity.

Q. HOW DOES MR. GORMAN ARRIVE AT HIS RECOMMENDED RATE MAKING CAPITAL STRUCTURE FOR EMPIRE?

A. Mr. Gorman arrives at his recommended rate making capital structure by "removing capital supporting goodwill and non-utility investments" from "the Company's consolidated capital structure at March 31, 2012."

Q. DOES MR. GORMAN DEFINE WHAT HE MEANS BY THE PHRASE "CAPITAL SUPPORTING GOODWILL AND NON-UTILITY INVESTMENTS"?

A. No.

Q. IS IT REASONABLE FROM EITHER AN ECONOMIC OR AN ACCOUNTING POINT OF VIEW TO IDENTIFY SPECIFIC LONG-TERM

CAPITAL SOURCES THAT "SUPPORT" SPECIFIC LONG-TERM ASSETS SUCH AS GOODWILL AND NONUTILITY INVESTMENTS?

A. No. From both an economic and an accounting standpoint, Empire's assets cannot be traced to particular capital sources. Rather, Empire's entire base of assets is supported or financed by the debt and equity shown on its balance sheet.

Q. HOW DOES MR. GORMAN REMOVE THE "CAPITAL SUPPORTING GOODWILL" FROM EMPIRE'S MARCH 31, 2012 CAPITAL STRUCTURE?

A. Mr. Gorman removes this capital by reducing Empire's common equity balance by the amount of the goodwill shown on Empire's balance sheet.

Q. WHY DOES MR. GORMAN ATTEMPT TO REMOVE EMPIRE'S GOODWILL BALANCE BY REDUCING EMPIRE'S COMMON EQUITY, WITHOUT ALSO REDUCING EMPIRE'S LONG-TERM DEBT?

A. Mr. Gorman attempts to remove Empire's goodwill balance only by reducing Empire's common equity because he mistakenly believes that the premium or goodwill associated with Empire's acquisition of Aquila's gas properties in Missouri was financed entirely with equity:

> The premium or goodwill increased Empire's assets and common equity capital. The non-premium value of the gas utility assets are reflected as plant in-service and capital supporting this level of investment. The capital supporting plant in-service is included in the ratemaking capital structure. However, common equity capital supporting the premium paid for these assets does not represent the capital that was used to make direct investments in utility plant and equipment, and therefore is not a component of regulated cost of service. (Gorman at 11)

Q. HOW DID EMPIRE, IN FACT, FINANCE ITS ACQUISITION OF AQUILA'S GAS PROPERTIES IN MISSOURI?

A. According to Value Line's June 30, 2006, report on Empire, Empire "paid $102.1 million in cash for Aquila's gas properties in the state" and "financed the purchase with $55 million of long-term debt and some of the proceeds from a sale of over three million common shares." Empire describes the financing of the acquisition in its Form 10-K for the year ending 2006:

> On September 21, 2005, we announced that we had entered into an Asset Purchase Agreement pursuant to which we agreed to acquire the Missouri natural gas distribution operations of Aquila, Inc. (Missouri Gas). The base purchase price was $85 million in cash, plus working capital and subject to net plant adjustments. This transaction was subject to the approval of the Missouri Public Service Commission (MPSC). On March 1, 2006, we, Aquila, Inc., the MPSC staff, the Office of the Public Counsel (OPC) and three intervenors filed a unanimous stipulation and agreement with the MPSC, requesting it approve the proposed transaction. On April 18, 2006, the MPSC issued an Order Approving Unanimous Stipulation and Agreement and Granting a Certificate of Public Convenience and Necessity, effective May 1, 2006. We announced the completion of this acquisition on June 1, 2006. The total purchase price paid to Aquila, Inc., including working capital and net plant adjustments of $17.1 million, was $102.1 million, not including acquisition costs. As of December 31, 2006, the $102.1 million has been increased to $102.5 million for additional true-up items. The acquisition was initially financed by $55 million of privately placed 6.82% First Mortgage Bonds due 2036 issued by EDG, and with short-term debt issued by EDE. This short-term debt was repaid with the proceeds of the sale of our common stock on June 21, 2006. (Empire 2006 Form 10-K at 5)

Q. DO YOU AGREE WITH MR. GORMAN'S STATEMENT THAT "THE PREMIUM OR GOODWILL INCREASED EMPIRE'S ASSETS AND COMMON EQUITY CAPITAL"?

A. No. Although the premium or goodwill definitely increased Empire's assets, it *did not* have any direct impact on Empire's common equity. Empire's long-term debt and common equity only increased to the extent that Empire financed the acquisition with long-term debt and equity. As discussed above, Empire financed the acquisition with $55 million in long-term debt and approximately $47.5 million in equity.

Q. ASIDE FROM THE SPECIFIC FACTS OF EMPIRE'S FINANCING OF ITS 2006 ACQUISITION OF AQUILA'S MISSOURI GAS PROPERTIES, IS IT POSSIBLE, IN GENERAL, TO TRACE SPECIFIC LONG-TERM ASSETS TO SPECIFIC LONG-TERM FINANCING SOURCES?

A. No. As discussed above, Empire's total long-term assets are financed by Empire's total long-term debt plus equity. It is not meaningful from either an economic or accounting point of view to trace specific long-term assets to specific long-term financing sources.

Q. DOES MR. GORMAN OFFER ANY OTHER REASONS FOR REDUCING EMPIRE'S COMMON EQUITY BY THE AMOUNT OF ITS GOODWILL?

A. Yes. Mr. Gorman argues that: (1) "goodwill is an accounting asset that does not create cash flows and therefore cannot be supported by utility debt"; and (2) "to the extent the asset is impaired, the asset value would be written down, and the common equity would be written down to correspond to the reduction in impaired asset value."

Q. DO YOU AGREE WITH MR. GORMAN'S ARGUMENT THAT GOODWILL CANNOT BE SUPPORTED BY UTILITY DEBT?

A. Again, it is unclear what Mr. Gorman means by the word "supported." However, if Mr. Gorman means that goodwill cannot be financed by utility debt, he is undoubtedly wrong, because Empire did finance its acquisition of gas assets, including goodwill, with both long-term debt and equity.

Q. DO YOU AGREE WITH MR. GORMAN'S ARGUMENT THAT THE EQUITY WOULD BE WRITTEN DOWN IF THE GOODWILL ASSET WERE IMPAIRED?

A. Yes. However, this argument is irrelevant because Empire is required to periodically test for goodwill impairment; and its tests have repeatedly demonstrated that the goodwill asset is not impaired.

Q. HOW DOES MR. GORMAN REMOVE THE CAPITAL SUPPORTING NON-UTILITY INVESTMENTS FROM EMPIRE'S MARCH 31, 2012 CAPITAL STRUCTURE?

A. Mr. Gorman states that he:

> started with the net nonutility investment of $23.9 million and reduced that by capital lease obligations of $4.7 million. The net difference here then was subtracted from the common equity balance on the consolidated capital structure. (Gorman at 12)

Q. DO YOU AGREE WITH MR. GORMAN'S ASSESSMENT THAT EMPIRE'S $23.9 MILLION OF NONUTILITY INVESTMENTS ARE SUPPORTED BY $4.7 MILLION IN CAPITAL LEASE OBLIGATIONS AND $19.2 MILLION IN COMMON EQUITY?

A. No. As discussed above, it is not possible to trace specific investments to specific financing sources. Empire's assets, including its net nonutility

investment of $23.9 million, are all supported or financed by the long-term debt and equity shown on its consolidated balance sheet.

Q. WHAT IS YOUR CONCLUSION REGARDING MR. GORMAN'S CAPITAL STRUCTURE ANALYSIS?

A. I conclude that Mr. Gorman's recommendation to reduce the equity in Empire's capital structure for the amount of goodwill and nonutility investments is inconsistent with both economic and accounting theory and should be rejected by the Commission.

B. MR. GORMAN'S DCF ANALYSIS

Q. WHAT DCF MODEL DOES MR. GORMAN USE TO ESTIMATE EMPIRE'S COST OF EQUITY?

A. Mr. Gorman uses an annual DCF model to estimate Empire's cost of equity.

Q. DO YOU AGREE WITH MR. GORMAN'S USE OF AN ANNUAL DCF MODEL TO ESTIMATE EMPIRE'S COST OF EQUITY?

A. No. The DCF model is based on the assumption that a company's stock price reflects the present value of the dividends investors expect to receive from their ownership of the stock. Since the companies in Mr. Gorman's analysis all pay dividends quarterly, these companies' stock prices reflect the present value of a quarterly stream of dividends. Hence, the quarterly DCF model is the only DCF model that is consistent with the basic assumption that stock prices are equal to the expected present value of future dividends.

Q. HOW DOES MR. GORMAN ESTIMATE THE GROWTH COMPONENT OF HIS DCF MODEL?

A. Mr. Gorman estimates the growth component of his DCF model by using analyst growth forecasts, a "sustainable" growth forecast, and a three-stage growth forecast.

Q. WHAT DCF RESULT DOES MR. GORMAN OBTAIN WHEN HE USES ANALYSTS' GROWTH FORECASTS IN HIS DCF MODEL?

A. Mr. Gorman obtains an average DCF result equal to 9.66 percent and a median result equal to 9.21 percent.

Q. DO YOU AGREE WITH MR. GORMAN'S USE OF ANALYSTS' GROWTH FORECASTS AS A PROXY FOR INVESTORS' GROWTH EXPECTATIONS IN THE DCF MODEL?

A. Yes. Mr. Gorman's use of analysts' growth forecasts is consistent with the results of studies, including my own, that demonstrate that analysts' growth forecasts are more highly correlated with stock prices than are other growth forecasts such as historical growth forecasts and sustainable growth forecasts.

Q. DOES MR. GORMAN OFFER ANY COMMENTS ON THE USE OF ANALYSTS' GROWTH FORECASTS AS A PROXY FOR INVESTORS' GROWTH EXPECTATIONS IN THE DCF MODEL?

A. Yes. Mr. Gorman claims that analysts' growth forecasts overstate investors' long-run growth expectations because they exceed economists' projections of the long-run growth in the economy:

> The three- to five-year growth rate of the proxy group exceeds the growth rate of the overall U.S. economy. As developed below, the consensus of published economists projects that the U.S. Gross Domestic Product ("GDP") will grow at a rate of no

> more than 5.1% and 4.7% over the next 5 and 10 years, respectively. A company cannot grow, indefinitely, at a faster rate than the market in which it sells its products. Therefore, I have considered alternative DCF models to capture sustainable growth and changing growth outlooks. (Gorman at 20)

Q. MR. GORMAN SEEMS TO BELIEVE THAT INVESTORS' GROWTH EXPECTATIONS MUST BE "RATIONAL." ARE INVESTORS' GROWTH EXPECTATIONS ALWAYS "RATIONAL"?

A. No. In hindsight, most economists would agree that investors' growth expectations during the tech stock boom of the late 1990s and early 2000 were irrational. Yet, it was these "irrational" growth expectations that caused stock prices to rise by so much during that time.

Q. DOES THE DCF MODEL ONLY REQUIRE THE USE OF INVESTORS' GROWTH EXPECTATIONS WHEN INVESTORS' GROWTH EXPECTATIONS ARE "RATIONAL"?

A. No. The DCF model requires the use of investors' growth expectations, whether rational or irrational.

Q. IS IT APPROPRIATE FOR MR. GORMAN TO ADJUST THE GROWTH TERM IN HIS DCF MODEL, WITHOUT ALSO ADJUSTING THE STOCK PRICE TERM IN HIS MODEL?

A. No. If Mr. Gorman believes that investors' growth expectations are irrational, he should recognize that "irrational" growth expectations are likely to be accompanied by "irrational" stock prices. To be consistent in applying his own definition of "rational," Mr. Gorman would need to adjust not only his growth

estimates to reflect the long-run growth in the economy, but also his stock prices to reflect a "rational" estimate of the value of the company.

Q. DO YOU AGREE WITH MR. GORMAN'S USE OF THE "SUSTAINABLE GROWTH" METHOD OF ESTIMATING INVESTORS' GROWTH EXPECTATIONS?

A. No. I have two objections to Mr. Gorman's use of the "sustainable growth" method of estimating investors' growth expectations. First, the DCF model requires the growth forecasts of investors, and my studies, along with those of others, provide strong evidence that analysts' growth forecasts are a better proxy for investors' growth expectations than the sustainable growth rate used by Mr. Gorman. Second, the sustainable growth method is logically circular in that each company's rate of return on equity must be known in order to estimate the sustainable growth rate at the same time that the sustainable growth rate must be known to estimate the rate of return on equity through the DCF model. It is not possible for the rate of return on equity to be known before the sustainable growth rate, and, at the same time, the sustainable growth rate to be known before the rate of return on equity.

Q. WHAT DCF RESULTS DOES MR. GORMAN OBTAIN FROM HIS SUSTAINABLE GROWTH DCF MODEL?

A. Mr. Gorman obtains an average DCF result of 9.44 percent and a median result 8.92 percent, results that are slightly lower than the results he obtains from his use of analysts' growth forecasts in his DCF model.

Q. WHAT IS THE BASIC ASSUMPTION OF MR. GORMAN'S THREE-STAGE DCF MODEL?

A. Mr. Gorman's three-stage DCF model is based on the assumption that investors believe his proxy companies will grow at the average analyst growth rates for five years, then decline to the long-run growth in the economy in years six through ten, and then beginning in the eleventh year grow at the rate of 4.9 percent forever. (Gorman at 25)

Q. DOES MR. GORMAN PROVIDE ANY EVIDENCE TO SUPPORT HIS BASIC ASSUMPTION THAT UTILITIES WILL GROW AT ANALYSTS' GROWTH RATES FOR THE FIRST FIVE YEARS, DECLINE IN GROWTH FOR THE NEXT FIVE YEARS, AND BEGINNING IN YEAR ELEVEN GROW AT THE ESTIMATED GDP GROWTH RATE IN PERPETUITY?

A. No. He simply assumes that rational investors would make this assumption.

Q. WHY DOES MR. GORMAN PREFER THE RESULTS OF HIS THREE-STAGE DCF MODEL OVER THE RESULTS OF HIS CONSTANT GROWTH DCF MODEL?

A. As discussed above, Mr. Gorman prefers the results of his three-stage model because, in his opinion, analysts' growth rates generally exceed the projected growth of the economy, and companies cannot grow forever at a rate in excess of the expected growth of the economy.

Q. DO YOU AGREE WITH MR. GORMAN'S OPINION THAT COMPANIES CANNOT GROW FOREVER AT A RATE IN EXCESS OF THE EXPECTED GROWTH IN THE U.S. ECONOMY?

A. Yes. As Mr. Gorman implies, if a company grew forever at a rate in excess of the rate of growth of the U.S. economy, it would eventually take over the economy. This is not a reasonable expectation.

Q. DOES THE OPINION THAT A COMPANY CANNOT GROW AT A RATE GREATER THAN THE RATE OF GROWTH IN THE GNP FOREVER IMPLY THAT A SINGLE-STAGE DCF MODEL CANNOT BE USED TO ESTIMATE THE COST OF EQUITY?

A. No. Mr. Gorman fails to recognize that the DCF model requires the growth expectations of investors, not the growth expectations of Mr. Gorman. If investors use analysts' growth rates to value stocks in the marketplace, Mr. Gorman should use analysts' growth rates to estimate the growth component of the DCF model. Mr. Gorman also fails to recognize that companies do not have to grow at the same rate forever for the single-stage DCF Model to be a reasonable approximation of how prices are determined in capital markets.

Q. HAVE YOU DONE ANY STUDIES ON THE GROWTH RATES THAT INVESTORS USE TO VALUE STOCKS IN THE MARKETPLACE?

A. Yes. As discussed in my direct testimony, my studies indicate that investors use analysts' forecasted growth rates to value stocks in the marketplace.

Q. DOES THE OPINION THAT A COMPANY CANNOT GROW AT A RATE OF GROWTH GREATER THAN THE GROWTH IN GNP FOREVER IMPLY THAT MR. GORMAN'S ASSUMPTION THAT COMPANIES CAN ONLY GROW AT RATES FASTER THAN THE ECONOMY FOR FIVE YEARS IS CORRECT?

A. No. The opinion that a company's earnings cannot grow at a rate greater than the rate of growth in the GNP forever does not imply that companies can only grow faster than the rate of growth in the economy for five years. Mr. Gorman's assumption that companies must grow at the same rate as the economy after year five is completely arbitrary.

C. MR. GORMAN'S RISK PREMIUM ANALYSIS

Q. HOW DOES MR. GORMAN ESTIMATE THE REQUIRED RISK PREMIUM FOR INVESTING IN HIS ELECTRIC COMPANY PROXY GROUP?

A. Mr. Gorman estimates the required risk premium for investing in his proxy electric utilities from data on the average authorized electric utility rates of return on equity for each year from 1986 to September 2012. Mr. Gorman finds that the average authorized rate of return on equity for electric utilities over this period was 5.30 percent higher than the yield to maturity on long-term Treasury bonds and 3.89 percent higher than the yield to maturity on A-rated utility bonds.

Q. DO YOU AGREE WITH MR. GORMAN'S METHOD OF ESTIMATING THE REQUIRED RISK PREMIUM ON ELECTRIC UTILITY STOCKS?

A. No. Mr. Gorman fails to recognize that the Commission has a responsibility to make an independent assessment of the required return on equity for Empire in this proceeding. In addition, Mr. Gorman fails to recognize that the indicated risk premium in his data base tends to increase as interest rates decline (see MPG-11 and MPG-12). Mr. Gorman should have adjusted his average risk premiums to account for the relationship between the allowed

risk premium on equity and the level of interest rates on long-term Treasury bonds and A-rated utility bonds.

Q. HAVE YOU STUDIED THE RELATIONSHIP BETWEEN THE ALLOWED RATES OF RETURN ON EQUITY BY REGULATORY COMMISSIONS AND THE INTEREST RATES ON LONG-TERM TREASURY BONDS AND A-RATED UTILITY BONDS?

A. Yes. Using the data found in Mr. Gorman's Exhibits MPG-11 and MPG-12, I perform a regression analysis of the relationship between the risk premium implied by the allowed rates of return on equity issued by regulatory commissions and the interest rates on long-term Treasury bonds and A-rated utility bonds. I find that the risk premium implied by allowed rates of return compared to the yield on long-term Treasury bonds is given by the relationship:

$$RP_{AUTHORIZED} = \underset{(24.88)}{8.010} - \underset{(8.71)}{0.444 \times T_B}$$

where:

$RP_{AUTHORIZED}$ = the risk premium implied by utility commission authorized rates of return on equity,

8.01 and 0.444 = estimated regression coefficients with t-statistics shown in parentheses; and

T_B = the yield on long-term Treasury bonds.

Similarly, I find that the risk premium implied by allowed rates of return compared to the yield on A-rated utility bonds is given by the relationship:

$$RP_{AUTHORIZED} = 7.150 - 0.435 \times A_B$$

(19.40) (9.06)

where:

$RP_{AUTHORIZED}$ = the risk premium implied by utility commission authorized rates of return on equity,

7.15 and 0.435 = estimated regression coefficients with t-statistics shown in parentheses; and

A_B = the yield on Moody's A-rated utility bonds.

Q. DO THESE REGRESSION EQUATIONS SUPPORT THE CONCLUSION THAT THE RISK PREMIUM TENDS TO INCREASE WHEN INTEREST RATES DECLINE?

A. Yes. The negative coefficients associated with the interest rate variables, T_B and A_B, indicate that the risk premium moves in the opposite direction as interest rates, thus verifying the conclusion that the risk premium increases when interest rates decline.

Q. WHAT RISK PREMIUM DO YOU OBTAIN FROM YOUR STATISTICAL ANALYSIS OF THE RELATIONSHIP BETWEEN ALLOWED RATES OF RETURN AND THE INTEREST RATE ON LONG-TERM TREASURY BONDS?

A. Using Mr. Gorman's Blue Chip forecasted 3.4 percent interest rate on long-term Treasury bonds (Gorman at 33), I obtain a risk premium of 6.50 percent over the forecasted yield to maturity on long-term Treasury bonds. This risk premium estimate is 120 basis points higher than the 5.30 percent average risk premium on U. S. Treasury bonds shown on Mr. Gorman's Exhibit MPG-11, page 1 of 1, and thirty-two basis points higher than the 6.18 percent risk

premium Mr. Gorman used to estimate Empire's risk premium cost of equity.

Q. WHY IS THE ESTIMATED RISK PREMIUM FROM YOUR TREASURY BOND REGRESSION ANALYSIS SO MUCH HIGHER THAN THE AVERAGE TREASURY BOND RISK PREMIUM OVER THE 1986 – 2012 PERIOD THAT MR. GORMAN USES?

A. The risk premium from my regression analysis is higher than the average Treasury bond risk premium over the period of Mr. Gorman's study because, as my regression analysis demonstrates, risk premiums generally increase when interest rates decline, and interest rates have declined over the period of Mr. Gorman's study.

Q. WHAT RISK PREMIUM DO YOU OBTAIN FROM YOUR STATISTICAL ANALYSIS OF THE RELATIONSHIP BETWEEN ALLOWED RATES OF RETURN AND THE INTEREST RATE ON A-RATED UTILITY BONDS?

A. Using Blue Chip's forecasted interest rate on Baa-rated corporate bonds (as a proxy for the forecasted interest rate on Baa-rated utility bonds) equal to 5.3 percent, I obtain a risk premium of 4.85 percent over the forecasted yield to maturity. This risk premium estimate is approximately 100 basis points higher than the average 3.89 percent risk premium shown on Mr. Gorman's Exhibit MPG-12, page 1 of 1.

Q. WHY IS THE ESTIMATED RISK PREMIUM FROM YOUR REGRESSION ANALYSIS HIGHER THAN THE AVERAGE RISK PREMIUM OVER THE PERIOD 1986 – 2012 SHOWN ON MR. GORMAN'S EXHIBIT MPG-12?

A. The risk premium from my regression analysis is higher than the average risk

premium over the period of Mr. Gorman's study because, as discussed above, risk premiums generally increase when interest rates decline, and interest rates have declined over the period of Mr. Gorman's study. My regression analyses correctly take into account the inverse relationship between risk premiums and interest rates.

Q. WHAT COST OF EQUITY ESTIMATES WOULD MR. GORMAN HAVE OBTAINED FROM HIS RISK PREMIUM ANALYSES IF HE HAD CORRECTLY RECOGNIZED THAT RISK PREMIUMS INCREASE WHEN INTEREST RATES DECLINE, AS YOU DESCRIBE ABOVE?

A. Using Mr. Gorman's Blue Chip forecasted 3.4 percent yield on long-term Treasury bonds and Blue Chip's forecasted yield of 5.3 percent on Baa-rated bonds, Mr. Gorman would have obtained estimated risk premiums of 6.50 percent over Treasury bonds and 4.85 percent over Baa-rated bonds. Adding these risk premium estimates to the forecasted interest rates, Mr. Gorman would have obtained an average risk premium cost of equity estimate of 10 percent (the average of 9.9 percent and 10.2 percent), fifty basis points higher than his recommended cost of equity.

D. RESPONSE TO MR. GORMAN'S COMMENTS ON DR. VANDER WEIDE'S TESTIMONY

Q. DOES MR. GORMAN AGREE WITH YOUR COST OF EQUITY ESTIMATE FOR EMPIRE?

A. Mr. Gorman disagrees with my: (i) DCF analysis (Gorman at 44 – 51); (ii) risk premium analysis (Gorman at 52 – 54); and (iii) CAPM analysis (Gorman at 55 – 56).

1. DCF Analysis

Q. WHAT ISSUES DOES MR. GORMAN HAVE WITH REGARD TO YOUR DCF ANALYSIS?

A. Mr. Gorman addresses my: (i) use of a quarterly DCF model; and (ii) reliance on analysts' growth forecasts.

Q. WHY DOES MR. GORMAN DISAGREE WITH YOUR USE OF A QUARTERLY DCF MODEL?

A. Mr. Gorman claims that my use of a quarterly DCF model is inappropriate because "the quarterly compounding component of the return is not a cost to the utility" (Gorman at 47).

Q. DOES MR. GORMAN ATTEMPT TO EXPLAIN HIS POSITION ON THE QUARTERLY COMPOUNDING RETURN THROUGH AN EXAMPLE?

A. Yes. Mr. Gorman provides an example where he assumes that Empire has issued a bond with a face value of $1,000, at an interest rate of six percent paid in two semi-annual $30 installments. He asserts that Empire's cost of this bond is only six percent, whereas the bond investor expects to earn a 6.1 percent return because of the compounding effect of semi-annual coupon payments. (Gorman at 48)

Q. DO YOU AGREE WITH MR. GORMAN'S ASSERTION THAT THE COST OF THE BOND TO EMPIRE IN HIS EXAMPLE IS ONLY SIX PERCENT?

A. No. The cost of the bond to Empire is calculated by solving for the value of the discount rate that equates the present value of the stream of interest and principal payments to the face value of the bond. In Mr. Gorman's example, the cost of the bond is 6.11 percent because:

$$\$1{,}000 = \frac{\$30}{(1.0611)^{.5}} + \frac{\$1{,}030}{(1.0611)}$$

Q. MR. GORMAN CLAIMS IN HIS EXAMPLE THAT THE COST OF A $1,000 BOND WITH A SIX PERCENT INTEREST RATE IS THE SAME WHEN A COMPANY MAKES TWO SEMI-ANNUAL COUPON PAYMENTS AS IT IS WHEN THE COMPANY MAKES A SINGLE, END-OF-YEAR PAYMENT OF $60. IS MR. GORMAN CORRECT?

A. No. The cost of a $1,000 bond is greater when the company makes two semi-annual coupon payments of $30 than when it makes a single coupon payment of $60 at the end of the year. It can be easily demonstrated that the cost of the $1,000 bond with a single end-of-year interest payment of $60 is 6.02 percent, whereas, as shown above, the cost of the $1,000 bond with semi-annual interest payments equal to $30 is 6.11 percent.

Q. WHY IS THE COMPANY'S COST OF DEBT GREATER WHEN IT MAKES TWO SEMI-ANNUAL PAYMENTS THAN WHEN IT MAKES A SINGLE END-OF-YEAR PAYMENT?

A. The company's cost of debt is greater when it makes two semi-annual interest payments of $30 than it is when it makes a single $60 payment at the end of

the year because the interest payments are made sooner on average when interest is paid semi-annually than when the company makes a single payment at the end of the year. Because of the time value of money, earlier payments are more costly to the issuing company than later payments of an equal dollar amount. In Mr. Gorman's discussion, he simply fails to recognize the time value of money.

Q. DOES MR. GORMAN ATTEMPT TO EXTEND HIS EXAMPLE TO INVESTMENTS IN STOCKS?

A. Yes. Mr. Gorman provides a stock example where an investor purchases Empire stock for $100 and expects to receive four quarterly dividends equal to $1.50 each, or six percent per year. In his discussion of this example, Mr. Gorman asserts that the cost of the company's dividend payment is only six percent, whereas the return to the investor would be 6.13 percent (Gorman at 49- 50).

Q. DO YOU AGREE WITH MR. GORMAN'S ASSERTION THAT THE COST TO THE COMPANY OF THE QUARTERLY DIVIDEND PAYMENTS IN HIS EXAMPLE IS ONLY SIX PERCENT?

A. No. Assuming for simplicity that the value of the investment is the same at the end of the year as it is at the beginning of the year, the cost of the quarterly dividend payments to the company can be calculated by solving for the value of the discount rate that equates the present value of the stream of quarterly dividend payments and capital value at the end of the year to the $100 price

of the stock. In Mr. Gorman's example, the cost to the company of the dividend payments is 6.16 percent because:

$$\$100 = \frac{\$1.50}{(1.0616)^{.25}} + \frac{1.50}{(1.0616)^{.5}} + \frac{1.50}{(1.0616)^{.75}} + \frac{\$101.50}{(1.0616)}$$

Q. IN HIS STOCK EXAMPLE, MR. GORMAN CLAIMS THAT THE COST OF EQUITY TO THE COMPANY IS THE SAME WHEN THE COMPANY MAKES FOUR QUARTERLY DIVIDEND PAYMENTS EQUAL TO $1.50 EACH AS IT IS WHEN THE COMPANY MAKES A SINGLE, YEAR-END DIVIDEND PAYMENT EQUAL TO $6. IS HE CORRECT?

A. No. The cost of equity is greater when the company makes four quarterly $1.50 dividend payments than when it makes a single six dollar dividend payment at the end of the year because the quarterly payment of dividends requires the company to make dividend payments sooner on average than the annual payment, and sooner payments are always more costly than later payments.

Q. HAVE YOU DISCUSSED THE REASONS FOR USING ANALYSTS' FORECASTS IN YOUR REBUTTAL RELATING TO STAFF'S AND MR. GORMAN'S DCF GROWTH ESTIMATES?

A. Yes.

2. Risk Premium Analysis

Q. WHAT ISSUE DOES MR. GORMAN HAVE WITH REGARD TO YOUR RISK PREMIUM ANALYSIS?

A. Mr. Gorman objects to my use of a forecasted, rather than a current interest rate, in my risk premium analysis (Gorman at 52 – 53).

Q. WHY DO YOU USE A FORECASTED RATHER THAN A CURRENT INTEREST RATE IN YOUR RISK PREMIUM ANALYSIS?

A. I use a forecasted interest rate because the fair rate of return standard requires that Empire have an opportunity to earn its cost of equity during the period when rates are in effect, and the rates approved in this case will not come into effect until a time in 2013 and will likely continue in effect in 2014.

Q. DOES MR. GORMAN ALSO USE FORECASTED INTEREST RATES IN ESTIMATING EMPIRE'S COST OF EQUITY IN HIS RISK PREMIUM APPROACH?

A. Yes. Mr. Gorman uses forecasted, rather than current interest rates in his risk premium analysis comparing the average allowed return on equity for electric utilities to interest rates on 30- year Treasury bonds (Gorman at 33).

Q. DOES MR. GORMAN ATTEMPT TO ESTIMATE THE COST OF EQUITY YOU WOULD HAVE OBTAINED FROM YOUR EX ANTE RISK PREMIUM ANALYSIS IF YOU HAD USED CURRENT BOND YIELDS RATHER THAN FORECASTED BOND YIELDS?

A. Yes. Mr. Gorman claims that my ex ante risk premium analysis using utility bonds yields would have produced a cost of equity equal to 8.0 percent if I were to use a current interest rate on A-rated utility bonds equal to 3.99 percent (Gorman at 53).

Q. DO YOU AGREE WITH MR. GORMAN'S CLAIM THAT YOUR EX ANTE RISK PREMIUM ANALYSIS USING A-RATED UTILITY BONDS YIELDS WOULD PRODUCE A COST OF EQUITY RESULT EQUAL TO 8.0 PERCENT IF YOU WERE TO USE A 3.99 PERCENT INTEREST RATE?

A. No. Mr. Gorman obtains his 8.0 percent result by adding the estimated 4.4 percent equity risk premium reported in my direct testimony to a 3.99 percent yield on A-rated utility bonds. However, Mr. Gorman fails to recognize first that adding 3.99 percent to a 4.4 percent equity risk premium would produce a result equal to 8.4 percent, not 8.0 percent. Second, Mr. Gorman fails to recognize that my estimated ex ante risk premium depends on the value of the interest rate on A-rated utility bonds through the estimated regression equation described in EDE Appendix 3 of my direct testimony. Although 4.4 percent is the correct ex ante risk premium estimate when the interest rate is 6.47 percent, the correct ex ante risk premium estimate when the interest rate is 3.99 percent is 5.9 percent (5.9 = 8.22 – 0.586 x 3.99). Thus, adding the 5.9 percent estimated ex ante risk premium to the interest rate of 4.0 percent would produce a result of 9.9 percent, not the 8.0 percent incorrectly calculated by Mr. Gorman.

Q. HAVE YOU UPDATED YOUR EX ANTE RISK PREMIUM ANALYSIS USING DATA THROUGH DECEMBER 2012?

A. Yes, I have. Using the same methods as described in my direct testimony and data through December 2012, my updated ex ante risk premium analysis

produces a cost of equity estimate equal to 10.94 percent. (See Rebuttal Schedule JVW-5)

Q. WHAT IS MR. GORMAN'S CONCERN WITH YOUR EX POST RISK PREMIUM ANALYSIS?

A. Mr. Gorman is concerned that I used forecasted rather than current interest rates in my ex post risk premium cost of estimate (Gorman at 54).

Q. HAVE YOU ADDRESSED MR. GORMAN'S CONCERNS WITH YOUR USE OF FORECASTED INTEREST RATES IN YOUR RESPONSE TO MR. GORMAN'S COMMENTS ON YOUR EX ANTE RISK PREMIUM ANALYSIS OF THE COST OF EQUITY?

A. Yes.

Q. DID MR. GORMAN ALSO USE FORECASTED INTEREST RATES IN HIS RISK PREMIUM AND CAPM ANALYSES OF EMPIRE'S COST OF EQUITY?

A. Yes. Mr. Gorman uses forecasted interest rates on long-term Treasury bonds in his risk premium and CAPM analyses.

3. CAPM Analysis

Q. DID YOU CONDUCT A CAPM ANALYSIS OF EMPIRE'S COST OF EQUITY IN YOUR DIRECT TESTIMONY?

A. Yes. My CAPM analysis is described on pages 47 – 55 of my direct testimony.

Q. DID YOU GIVE ANY WEIGHT TO YOUR CAPM RESULTS IN ARRIVING AT YOUR RECOMMENDED 10.6 PERCENT COST OF EQUITY FOR EMPIRE?

A. No. For the reasons discussed on pages 51 – 55 of my direct testimony, I believe the CAPM significantly underestimates Empire's cost of equity. Hence, I did not give any weight to my CAPM results in arriving at my recommended cost of equity.

Q. DOES MR. GORMAN GIVE ANY WEIGHT TO HIS CAPM RESULTS IN ARRIVING AT HIS RECOMMENDED COST OF EQUITY IN THIS PROCEEDING?

A. No. Mr. Gorman's recommended cost of equity is based entirely on the results of his DCF and risk premium analyses (Gorman at 39). Because Mr. Gorman's CAPM cost of equity estimates are approximately 120 basis points below his recommendation, Mr. Gorman clearly agrees with my opinion that the CAPM underestimates the cost of equity for Empire. In this regard, Mr. Gorman's recommendation to give no weight to the CAPM is consistent with both my recommendation and that of Staff to give no weight to the CAPM.

Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

A. Yes, it does.

REBUTTAL SCHEDULE JVW-1
COMPARISON OF AVERAGE VALUE LINE SAFETY RANK
AND STANDARD & POOR'S BOND RATING
FOR VANDER WEIDE PROXY COMPANIES GROUPED ACCORDING TO
EDISON ELECTRIC INSTITUTE CLASSIFICATIONS

LINE NO.	COMPANY	EEI STATUS	SAFETY RANK	S&P BOND RATING	S&P BOND RATING (NUMERICAL)
1	Amer. Elec. Power	R	3	BBB	7
2	CenterPoint Energy	MR	3	BBB+	6
3	CMS Energy Corp.	R	3	BBB-	8
4	Consol. Edison	R	1	A-	5
5	Dominion Resources	MR	2	A-	5
6	DTE Energy	R	3	BBB+	6
7	Duke Energy	MR	2	A-	5
8	FirstEnergy Corp.	MR	2	BBB-	8
9	G't Plains Energy	R	3	BBB	7
10	Hawaiian Elec.	D	3	BBB-	8
11	NextEra Energy	MR	2	A-	5
12	Northeast Utilities	R	3	A-	5
13	OGE Energy	MR	2	BBB+	6
14	Pepco Holdings	MR	3	BBB+	6
15	Pinnacle West Capital	R	2	BBB	7
16	PNM Resources	R	3	BBB-	8
17	Portland General	R	3	BBB	7
18	SCANA Corp.	MR	2	BBB+	6
19	Sempra Energy	MR	2	BBB+	6
20	Southern Co.	R	1	A	4
21	TECO Energy	R	2	BBB+	6
22	Westar Energy	R	2	BBB	7
23	Wisconsin Energy	R	1	A-	5
24	Xcel Energy Inc.	R	2	A-	5
25	Average		2	BBB+	6
26	Average MR, D		2	BBB+	6
27	Average R		2	BBB+	6

Cost of equity results from Vander Weide direct testimony, Schedule 1. EEI designation from EEI website: (1) "R" or "regulated" utilities--regulated assets greater than 80 percent of total assets; (2) "MR" or "mostly regulated"--regulated assets between 50 percent and 80 percent of total assets; and (3) "D" or "diversified"--regulated assets less than 50 percent of total assets. Value Line Safety Rank from The Value Line Investment Analyzer and Standard & Poor's bond ratings from Standard & Poor's website at time of filing.

REBUTTAL SCHEDULE JVW-2
COMPARISON OF AVERAGE VALUE LINE SAFETY RANK AND
STANDARD & POOR'S BOND RATING FOR
COMPANIES STAFF ELIMINATED
DUE TO <70 PERCENT ELECTRIC REVENUE CRITERION
TO STAFF SELECTED PROXY COMPANIES

LINE	STAFF SELECTED COMPANIES	EEI STATUS	SAFETY RANK	S&P BOND RATING	S&P BOND RATING (NUMERICAL)
1	Alliant Energy	R	2	BBB+	6
2	Amer. Elec. Power	R	3	BBB	7
3	Cleco Corp.	R	2	BBB	7
4	G't Plains Energy	R	3	BBB	7
5	IDACORP Inc.	R	3	BBB	7
6	Pinnacle West Capital	R	2	BBB	7
7	Southern Co.	R	1	A	4
8	Westar Energy	R	2	BBB	7
9	Wisconsin Energy	R	1	A-	5
10	Xcel Energy Inc.	R	2	A-	5
11	Average		2	BBB+	6
LINE	STAFF ELIMINATED COMPANIES	EEI STATUS	SAFETY RANK	S&P BOND RATING	S&P BOND RATING (NUMERICAL)
1	Avista Corp.	R	2	BBB	7
2	CH Energy Group	R	1	A	4
3	CMS Energy Corp.	R	3	BBB-	8
4	DTE Energy	R	3	BBB+	6
5	Integrys Energy	R	2	A-	5
6	TECO Energy	R	2	BBB+	6
7	UIL Holdings	R	2	BBB	7
8	UNITIL Corp.	R	2	NA	NA
9	Vectren Corp.	R	2	A-	5
	Average		2	BBB+	6

REBUTTAL SCHEDULE JVW-3
2012 AUTHORIZED RETURNS ON EQUITY
ELECTRIC UTILITIES[3]

COMPANY	DOCKET	DATE OF ORDER	RETURN ON EQUITY	
Ameren Illinois	D-11-0279 (elec)	1/5/2012	NA	Wires
Commonwealth Edison Co.	D-11-0721	5/29/2012	10.05	Wires
Orange & Rockland Utlts Inc.	C-11-E-0408	6/14/2012	9.40	Wires
Delmarva Power & Light Co.	C-9285	7/20/2012	9.81	Wires
Potomac Electric Power Co.	C-9286	7/20/2012	9.31	Wires
Entergy Texas Inc.	D-39896	9/13/2012	9.80	Wires
Ameren Illinois	D-12-0001	9/19/2012	10.05	Wires
Potomac Electric Power Co.	FC-1087	9/26/2012	9.50	Wires
Lone Star Transmission LLC	D-40020	10/12/2012	9.60	Wires
Atlantic City Electric Co.	D-ER-11080469	10/23/2012	9.75	Wires
Delmarva Power & Light Co.	D-11-528	11/29/2012	9.75	Wires
Ameren Illinois	D-12-0293	12/5/2012	9.71	Wires
PPL Electric Utilities Corp.	D-R-2012-2290597	12/5/2012	10.40	Wires
Commonwealth Edison Co.	D-12-0321	12/19/2012	9.71	Wires
Narragansett Electric Co.	D-4323 (electric)	12/20/2012	9.50	Wires
Appalachian Power Co.	C-PUE-2011-00036	1/3/2012	11.40	
PacifiCorp	C-PAC-E-11-12	1/10/2012	NA	
Duke Energy Carolinas LLC	D-2011-271-E	1/25/2012	10.50	
Duke Energy Carolinas LLC	D-E-7, Sub 989	1/27/2012	10.50	
Virginia Electric & Power Co.	C-PUE-2011-00042	2/2/2012	11.40	
Indiana Michigan Power Co.	C-U-16801	2/15/2012	10.20	
Florida Power Corp.	D-120022-EI	2/22/2012	NA	
Idaho Power Co.	D-UE-233	2/23/2012	9.90	
Gulf Power Co.	D-110138-EI	2/27/2012	10.25	
Northern States Power Co. – MN	C-PU-10-657	2/29/2012	10.40	
Virginia Electric & Power Co.	C-PUE-2011-00073	3/16/2012	12.40	
Virginia Electric & Power Co.	C-PUE-2011-00066	3/20/2012	11.40	
NorthWestern Corp.	D-D2008.8.95	3/21/2012	NA	
Virginia Electric & Power Co.	C-PUE-2011-00067	3/23/2012	11.40	
Northern States Power Co. – MN	D-E-002/GR-10-971	3/29/2012	10.37	
PacifiCorp	D-UE-111190	3/30/2012	NA	
Hawaii Electric Light Co	D-2009-0164	4/4/2012	10.00	
Westar Energy Inc.	D-12-WSEE-112-RTS	4/18/2012	NA	
Public Service Co. of CO	D-11AL-947E	4/26/2012	10.00	
Maui Electric Company Ltd	D-2009-0163	5/2/2012	10.00	
Puget Sound Energy Inc.	D-UE-111048	5/7/2012	9.80	
Arizona Public Service Co.	D-E-01345A-11-0224	5/15/2012	10.00	
El Paso Electric Co.	D-40094	5/18/2012	NA	
Consumers Energy Co.	C-U-16794	6/7/2012	10.30	
Wisconsin Power and Light Co	D-6680-UR-118 (elec)	6/15/2012	10.40	
Cheyenne Light Fuel Power Co.	D-20003-114-ER-11 (elec)	6/18/2012	9.60	
Northern States Power Co. – MN	D-EL11-019	6/19/2012	9.25	
Wisconsin Electric Power Co.	C-U-16830	6/26/2012	10.10	
Hawaiian Electric Co.	D-2010-0080	6/29/2012	10.00	
Idaho Power Co.	C-IPC-E-12-14	6/29/2012	NA	
Oklahoma Gas and Electric Co.	Ca-PUD201100087	7/9/2012	10.20	

3 Regulatory Research Associates, SNL Financial, download January 8, 2013.

COMPANY	DOCKET	DATE OF ORDER	RETURN ON EQUITY	
PacifiCorp	D-20000-405-ER-11	7/16/2012	9.80	
PacifiCorp	D-11-035-200	9/19/2012	9.80	
Idaho Power Co.	D-UE-248	9/20/2012	NA	
South Carolina Electric & Gas	D-2012-186-E	9/26/2012	NA	
Wisconsin Public Service Corp.	D-6690-UR-121 (Elec)	10/24/2012	10.30	
Madison Gas and Electric Co.	D-3270-UR-118 (elec)	11/9/2012	10.30	
Wisconsin Electric Power Co.	D-05-UR-106 (WEP-Elec)	11/28/2012	10.40	
California Pacific Electric Co	A-12-02-014	11/29/2012	9.88	
Southern California Edison Co.	AP-10-11-015	11/29/2012	NA	
Union Electric Co.	C-ER-2012-0166	12/12/2012	9.80	
Florida Power & Light Co.	D-120015-EI	12/13/2012	10.50	
Kansas City Power & Light	D-12-KCPE-764-RTS	12/13/2012	9.50	
Northern States Power Co – WI	D-4220-UR-118 (elec)	12/14/2012	10.40	
South Carolina Electric & Gas	D-2012-218-E	12/19/2012	10.25	
Pacific Gas and Electric Co.	Ap-12-04-018 (Elec)	12/20/2012	10.40	
San Diego Gas & Electric Co.	Ap-12-04-016 (Elec)	12/20/2012	10.30	
Southern California Edison Co.	Ap-12-04-015	12/20/2012	10.45	
Kentucky Utilities Co.	C-2012-00221	12/20/2012	10.25	
Louisville Gas & Electric Co.	C-2012-00222 (elec.)	12/20/2012	10.25	
PacifiCorp	D-UE-246	12/20/2012	NA	
Virginia Electric & Power Co.	D-E-22, Sub 479	12/21/2012	10.20	
Avista Corp.	D-UE-120436	12/26/2012	9.80	
Average All			**10.2**	
Average Distribution Only			**9.7**	
Average Integrated			**10.3**	

REBUTTAL SCHEDULE JVW-4
SUMMARY OF DISCOUNTED CASH FLOW ANALYSIS
FOR ELECTRIC UTILITIES

LINE	COMPANY	TICKER	D_0	P_0	GROWTH	MODEL RESULT
1	ALLETE	ALE	0.460	40.360	6.00%	11.0%
2	Alliant Energy	LNT	0.450	44.063	4.60%	9.0%
3	CenterPoint Energy	CNP	0.203	20.387	5.53%	9.9%
4	CMS Energy Corp.	CMS	0.240	23.922	6.19%	10.6%
5	Dominion Resources	D	0.528	51.587	5.15%	9.6%
6	DTE Energy	DTE	0.620	60.557	5.04%	9.4%
7	Duke Energy	DUK	0.765	63.922	2.95%	8.0%
8	FirstEnergy Corp.	FE	0.550	43.342	4.00%	9.5%
9	G't Plains Energy	GXP	0.217	21.319	9.40%	14.0%
10	Hawaiian Elec.	HE	0.310	25.423	7.70%	13.2%
11	Integrys Energy	TEG	0.680	53.402	5.50%	11.1%
12	NextEra Energy	NEE	0.600	69.402	5.92%	9.7%
13	Northeast Utilities	NU	0.343	39.001	5.90%	9.6%
14	NorthWestern Corp.	NWE	0.370	35.065	6.67%	11.4%
15	OGE Energy	OGE	0.393	56.703	5.37%	8.4%
16	Otter Tail Corp.	OTTR	0.298	24.182	5.00%	10.4%
17	Pepco Holdings	POM	0.270	19.465	5.23%	11.3%
18	Pinnacle West Capital	PNW	0.545	51.869	6.30%	10.8%
19	PNM Resources	PNM	0.145	21.148	9.30%	12.3%
20	SCANA Corp.	SCG	0.495	47.168	5.60%	10.2%
21	Sempra Energy	SRE	0.600	68.366	7.00%	10.9%
22	Southern Co.	SO	0.490	44.505	4.94%	9.7%
23	TECO Energy	TE	0.220	17.195	4.00%	9.5%
24	Vectren Corp.	VVC	0.355	29.065	5.00%	10.3%
25	Westar Energy	WR	0.330	29.038	6.80%	11.9%
26	Wisconsin Energy	WEC	0.300	37.549	5.70%	9.2%
27	Xcel Energy Inc.	XEL	0.270	27.277	4.88%	9.1%
28	Average					10.4%

Notes:

d_0 = Most recent quarterly dividend from Yahoo.

d_1,d_2,d_3,d_4 = Next four quarterly dividends, calculated by multiplying the last four quarterly dividends per Value Line by the factor (1 + g).

P_0 = Average of the monthly high and low stock prices during the three months ending December 2012 per Thomson Reuters.

g = I/B/E/S forecast of future earnings growth December 2012 from Thomson Reuters.

k = Cost of equity using the quarterly version of the DCF model.

$$k = \frac{d_1(1+k)^{.75} + d_2(1+k)^{.50} + d_3(1+k)^{.25} + d_4}{P_0} + g$$

REBUTTAL SCHEDULE JVW-5
COMPARISON OF DCF EXPECTED RETURN
ON AN INVESTMENT IN ELECTRIC ENERGY COMPANIES
TO THE INTEREST RATE ON MOODY'S A-RATED UTILITY BONDS

Line	Date	DCF	Bond Yield	Risk Premium
1	Sep-99	0.1124	0.0793	0.0331
2	Oct-99	0.1128	0.0806	0.0322
3	Nov-99	0.1158	0.0794	0.0364
4	Dec-99	0.1200	0.0814	0.0386
5	Jan-00	0.1186	0.0835	0.0351
6	Feb-00	0.1232	0.0825	0.0407
7	Mar-00	0.1274	0.0828	0.0446
8	Apr-00	0.1203	0.0829	0.0374
9	May-00	0.1194	0.0870	0.0324
10	Jun-00	0.1209	0.0836	0.0373
11	Jul-00	0.1213	0.0825	0.0388
12	Aug-00	0.1197	0.0813	0.0384
13	Sep-00	0.1137	0.0823	0.0314
14	Oct-00	0.1143	0.0814	0.0329
15	Nov-00	0.1164	0.0811	0.0353
16	Dec-00	0.1140	0.0784	0.0356
17	Jan-01	0.1167	0.0780	0.0387
18	Feb-01	0.1176	0.0774	0.0402
19	Mar-01	0.1180	0.0768	0.0412
20	Apr-01	0.1208	0.0794	0.0414
21	May-01	0.1254	0.0799	0.0455
22	Jun-01	0.1261	0.0785	0.0476
23	Jul-01	0.1269	0.0778	0.0491
24	Aug-01	0.1275	0.0759	0.0516
25	Sep-01	0.1294	0.0775	0.0519
26	Oct-01	0.1286	0.0763	0.0523
27	Nov-01	0.1268	0.0757	0.0511
28	Dec-01	0.1264	0.0783	0.0481
29	Jan-02	0.1246	0.0766	0.0480
30	Feb-02	0.1256	0.0754	0.0502
31	Mar-02	0.1221	0.0776	0.0445
32	Apr-02	0.1201	0.0757	0.0444
33	May-02	0.1208	0.0752	0.0456
34	Jun-02	0.1225	0.0741	0.0484
35	Jul-02	0.1305	0.0731	0.0574
36	Aug-02	0.1269	0.0717	0.0552
37	Sep-02	0.1241	0.0708	0.0533
38	Oct-02	0.1258	0.0723	0.0535
39	Nov-02	0.1210	0.0714	0.0496
40	Dec-02	0.1195	0.0707	0.0488
41	Jan-03	0.1166	0.0706	0.0460
42	Feb-03	0.1200	0.0693	0.0507
43	Mar-03	0.1179	0.0679	0.0500
44	Apr-03	0.1138	0.0664	0.0474
45	May-03	0.1066	0.0636	0.0430
46	Jun-03	0.1019	0.0621	0.0398
47	Jul-03	0.1043	0.0657	0.0386
48	Aug-03	0.1034	0.0678	0.0356
49	Sep-03	0.1000	0.0656	0.0344
50	Oct-03	0.0981	0.0643	0.0338
51	Nov-03	0.0957	0.0637	0.0320
52	Dec-03	0.0919	0.0627	0.0292
53	Jan-04	0.0896	0.0615	0.0281

Line	Date	DCF	Bond Yield	Risk Premium
54	Feb-04	0.0892	0.0615	0.0277
55	Mar-04	0.0888	0.0597	0.0291
56	Apr-04	0.0900	0.0635	0.0265
57	May-04	0.0935	0.0662	0.0273
58	Jun-04	0.0934	0.0646	0.0288
59	Jul-04	0.0927	0.0627	0.0300
60	Aug-04	0.0940	0.0614	0.0326
61	Sep-04	0.0925	0.0598	0.0327
62	Oct-04	0.0928	0.0594	0.0334
63	Nov-04	0.0894	0.0597	0.0297
64	Dec-04	0.0896	0.0592	0.0304
65	Jan-05	0.0900	0.0578	0.0322
66	Feb-05	0.0893	0.0561	0.0332
67	Mar-05	0.0894	0.0583	0.0311
68	Apr-05	0.0899	0.0564	0.0335
69	May-05	0.0886	0.0553	0.0333
70	Jun-05	0.0888	0.0540	0.0348
71	Jul-05	0.0877	0.0551	0.0326
72	Aug-05	0.0878	0.0550	0.0328
73	Sep-05	0.0901	0.0552	0.0349
74	Oct-05	0.0911	0.0579	0.0332
75	Nov-05	0.0957	0.0588	0.0369
76	Dec-05	0.0956	0.0580	0.0376
77	Jan-06	0.0957	0.0575	0.0382
78	Feb-06	0.1048	0.0582	0.0466
79	Mar-06	0.1031	0.0598	0.0433
80	Apr-06	0.1050	0.0629	0.0421
81	May-06	0.1063	0.0642	0.0421
82	Jun-06	0.1093	0.0640	0.0453
83	Jul-06	0.1087	0.0637	0.0450
84	Aug-06	0.1050	0.0620	0.0430
85	Sep-06	0.1088	0.0600	0.0488
86	Oct-06	0.1052	0.0598	0.0454
87	Nov-06	0.1057	0.0580	0.0477
88	Dec-06	0.1050	0.0581	0.0469
89	Jan-07	0.1075	0.0596	0.0479
90	Feb-07	0.1065	0.0590	0.0475
91	Mar-07	0.1073	0.0585	0.0488
92	Apr-07	0.1021	0.0597	0.0424
93	May-07	0.1047	0.0599	0.0448
94	Jun-07	0.1101	0.0630	0.0471
95	Jul-07	0.1108	0.0625	0.0483
96	Aug-07	0.1083	0.0624	0.0459
97	Sep-07	0.1056	0.0618	0.0438
98	Oct-07	0.1061	0.0611	0.0450
99	Nov-07	0.1093	0.0597	0.0496
100	Dec-07	0.1110	0.0616	0.0494
101	Jan-08	0.1171	0.0602	0.0569
102	Feb-08	0.1109	0.0621	0.0488
103	Mar-08	0.1144	0.0621	0.0523
104	Apr-08	0.1133	0.0629	0.0504
105	May-08	0.1138	0.0627	0.0511
106	Jun-08	0.1112	0.0638	0.0474
107	Jul-08	0.1147	0.0640	0.0507
108	Aug-08	0.1165	0.0637	0.0528
109	Sep-08	0.1159	0.0649	0.0510
110	Oct-08	0.1249	0.0756	0.0494
111	Nov-08	0.1280	0.0760	0.0520
112	Dec-08	0.1270	0.0654	0.0616
113	Jan-09	0.1211	0.0639	0.0572
114	Feb-09	0.1237	0.0630	0.0607
115	Mar-09	0.1250	0.0642	0.0607
116	Apr-09	0.1230	0.0648	0.0582

Line	Date	DCF	Bond Yield	Risk Premium
117	May-09	0.1206	0.0649	0.0557
118	Jun-09	0.1185	0.0620	0.0565
119	Jul-09	0.1142	0.0597	0.0544
120	Aug-09	0.1127	0.0571	0.0556
121	Sep-09	0.1122	0.0553	0.0569
122	Oct-09	0.1122	0.0555	0.0568
123	Nov-09	0.1166	0.0564	0.0602
124	Dec-09	0.1065	0.0579	0.0486
125	Jan-10	0.1082	0.0577	0.0505
126	Feb-10	0.1060	0.0587	0.0473
127	Mar-10	0.1045	0.0584	0.0461
128	Apr-10	0.1081	0.0582	0.0499
129	May-10	0.1062	0.0552	0.0510
130	Jun-10	0.1059	0.0546	0.0512
131	Jul-10	0.1049	0.0526	0.0522
132	Aug-10	0.1029	0.0501	0.0528
133	Sep-10	0.1031	0.0501	0.0530
134	Oct-10	0.1017	0.0510	0.0507
135	Nov-10	0.1023	0.0536	0.0487
136	Dec-10	0.1026	0.0557	0.0469
137	Jan-11	0.1018	0.0557	0.0461
138	Feb-11	0.1014	0.0568	0.0446
139	Mar-11	0.1017	0.0556	0.0461
140	Apr-11	0.0994	0.0555	0.0439
141	May-11	0.0969	0.0532	0.0437
142	Jun-11	0.1017	0.0526	0.0491
143	Jul-11	0.0993	0.0527	0.0466
144	Aug-11	0.1023	0.0469	0.0554
145	Sep-11	0.0991	0.0448	0.0543
146	Oct-11	0.1006	0.0452	0.0554
147	Nov-11	0.0989	0.0425	0.0564
148	Dec-11	0.1000	0.0435	0.0565
149	Jan-12	0.0991	0.0434	0.0557
150	Feb-12	0.0963	0.0436	0.0527
151	Mar-12	0.0960	0.0448	0.0512
152	Apr-12	0.0968	0.0440	0.0528
153	May-12	0.0967	0.0420	0.0547
154	Jun-12	0.0930	0.0408	0.0522
155	Jul-12	0.0938	0.0393	0.0545
156	Aug-12	0.0948	0.0400	0.0548
157	Sep-12	0.0963	0.0402	0.0561
158	Oct-12	0.0954	0.0391	0.0563
159	Nov-12	0.0954	0.0384	0.0570
160	Dec-12	0.0957	0.0400	0.0557

Utility bond yield information from *Mergent Bond Record* (formerly Moody's). Please see my Ex Ante Risk Premium Appendix in my Direct Testimony for a description of my ex ante risk premium approach. DCF results are calculated using a quarterly DCF model as follows:

d_0 = Latest quarterly dividend per Value Line, Thomson Reuters
P_0 = Average of the monthly high and low stock prices for each month per Thomson Reuters
g = I/B/E/S forecast of future earnings growth for each month.
k = Cost of equity using the quarterly version of the DCF model.

$$k = \left[\frac{d_0 (1+g)^{\frac{1}{4}}}{P_0} + (1+g)^{\frac{1}{4}} \right]^4 - 1$$

My estimate of the ex ante risk premium on an investment in my proxy electric company group as compared to an investment in A-rated utility bonds using data through December 2012 is given by the equation:

8.19-(.5831x6.6)=4.34

$$RP_{PROXY} = \underset{(11.25)}{8.19} - \underset{(-5.36)\ [4]}{.583 \times I_A}.$$

Using the 6.6 percent forecasted yield to maturity on A-rated utility bonds,[5] the regression equation produces an ex ante risk premium equal to 4.34 percent (8.19 – 0.583 x 6.6 = 4.34).

To estimate the cost of equity using the ex ante risk premium method, one may add the estimated risk premium over the forecasted yield on A-rated utility bonds to the yield to maturity on A-rated utility bonds. My analyses produce an estimated risk premium over the yield on A-rated utility bonds equal to 4.34 percent. Adding an estimated risk premium of 4.3 percent to the 6.6 percent forecasted yield to maturity on A-rated utility bonds produces a cost of equity estimate of 10.9 percent for the electric company proxy group using the ex ante risk premium method.

[4] The t-statistics are shown in parentheses.

[5] Forecasted A-rated utility bond yield determined from forecast data in Value Line Selection & Opinion, November 23, 2012, and EIA 2012.

AFFIDAVIT OF JAMES H. VANDER WEIDE

STATE OF NORTH CAROLINA)
) ss
COUNTY OF DURHAM)

On the 7th day of January, 2013, before me appeared James H. Vander Weide, to me personally known, who, being by me first duly sworn, states that he is Research Professor of Finance and Economics at the Fuqua School of Business of Duke University and also President of Financial Strategy Associates and acknowledges that he has read the above and foregoing document and believes that the statements therein are true and correct to the best of his information, knowledge and belief.

James H. Vander Weide
James H. Vander Weide

Subscribed and sworn to before me this 7th day of January, 2013.

Sandra W. Burnpass
Notary Public

My commission expires: 08-11-2013